

Annex 6. Variable Descriptions and Data

This section contains complete variable descriptions along with the original data used to produce the 2002 Environmental Sustainability Index. The variables are listed in alphabetical order by variable code (Table A6.1 shows where variables are found within the overall ESI structure). Each page contains the following:

- The variable code.
- The variable name.
- The units in which the variable is measured.
- The reference year (MRYA = Most Recent Year Available for the stated range).
- Data source.
- The logic for including the variable in the ESI.
- The methodology used to produce the variable (in cases where the ESI team did additional

processing of the data beyond that of the data providers).

- The mean and median values for the countries in the data list.
- The minimum (min) and maximum (max) values for the countries in the data list.
- The 2.5 and 97.5 percentile cut-off values. In calculating the ESI, we truncated extreme values that fell outside the ranges of these values.
- The original data. Note that where data for a given variable were imputed, the estimated values are shown in brackets.

Annex 1 evaluates the data in along a number of dimensions, and is recommended for readers desiring more information on data quality.

Table A6.1 Variables Grouped by ESI Indicator

Variable No.	Variable Code	Variable Name	Indicator
1	SO2	Urban SO ₂ concentration	Air Quality
2	NO2	Urban NO ₂ concentration	
3	TSP	Urban TSP concentration	
4	WATCAP	Internal renewable water per capita	Water Quantity
5	WATINC	Per capita water inflow from other countries	
6	GMS_DO	Dissolved oxygen concentration	Water Quality
7	GMS_PH	Phosphorus concentration	
8	GMS_SS	Suspended solids	
9	GMS_EC	Electrical conductivity	Biodiversity
10	PRTMAM	Percentage of mammals threatened	
11	PRTBRD	Percentage of breeding birds threatened	
12	ANTH10	Percent of land area having very low anthropogenic impact	Land
13	ANTH40	Percent of land area having high anthropogenic impact	
14	NOXKM	NO _x emissions per populated land area	Reducing Air Pollution
15	SO2KM	SO ₂ emissions per populated land area	
16	VOCKM	VOCs emissions per populated land area	
17	COALKM	Coal consumption per populated land area	
18	CARSKM	Vehicles per populated land area	
19	FERTHA	Fertilizer consumption per hectare of arable land	Reducing Water Stress
20	PESTHA	Pesticide use per hectare of crop land	
21	BODWAT	Industrial organic pollutants per available fresh water	
22	WATSTR	Percentage of country's territory under severe water stress	
23	FOREST	Percentage change in forest cover 1990-95	Reducing Ecosystem Stress
24	AC_EXC	Percentage of county with acidification exceedence	

Variable No.	Variable Code	Variable Name	Indicator
25	EFPC	Ecological footprint per capita	Reducing Waste and Consumption Pressures
26	NUKE	Radioactive waste	
27	TFR	Total fertility rate	Reducing Population Growth
28	GR2050	Percentage change in projected population between 2000 & 2050	
29	UND_NO	Proportion of Undernourished in Total Population	Basic Human Sustenance
30	WATSUP	Percent of population with access to improved drinking-water supply	
31	DISRES	Child death rate from respiratory diseases	Environmental Health
32	DISINT	Death rate from intestinal infectious diseases	
33	U5MORT	Under-5 mortality rate	
34	INNOV	Innovation Index	Science/Technology
35	TAI	Technology achievement index	
36	SCHOOL	Mean years of schooling (age 15 and above)	
37	IUCN	IUCN member organizations per million population	Capacity for Debate
38	CIVLIB	Civil & Political liberties	
39	POLITY	Democratic institutions	
40	ESIMIS	Percentage of ESI variables in publicly available data sets	Environmental Governance
41	WEFGOV	WEF Survey Questions on Environmental Governance	
42	PRAREA	Percentage of land area under protected status	
43	EIA	Number of sectoral EIA guidelines	
44	FSC	FSC accredited forest area as a percent of total forest area	
45	GRAFT	Reducing corruption	
46	GASPR	Ratio of gasoline price to international average	
47	WEFSUB	WEF subsidies survey question	
48	SUBFSH	WWF Subsidy measure	Private Sector Responsiveness
49	ISO14	Number of ISO14001 certified companies per million \$ GDP	
50	DJSGI	Dow Jones sustainability group index	
51	ECOVAL	Average Innovest EcoValue rating of firms	
52	WBCSD	World Business Council for Sustainable Development members	
53	WEFPRI	WEF Survey Questions on Private Sector Environmental Innovation	Eco-efficiency
54	ENEFF	Energy efficiency (total energy consumption per unit GDP)	
55	RENPC	Renewable energy prod. as a percent of total energy consumption	Participation in International Cooperative Efforts
56	EIONUM	Number of memberships in environmental intergovernmental orgs.	
57	CITES	Percentage of CITES reporting requirements met	
58	VIENNA	Levels of participation in the Vienna Convention/Montreal Protocol	
59	FCCC	Levels of participation in the Climate Change Convention	
60	MONFUN	Montreal protocol multilateral fund participation	
61	GEF	Global environmental facility participation	
62	WEFAGR	Compliance with International Agreements	
63	CO2PC	Carbon lifestyle efficiency (CO2 emissions per capita)	Reducing Greenhouse Gas Emissions
64	CO2GDP	Carbon economic efficiency (CO2 emissions per dollar GDP)	
65	CFC	CFC consumption (total times per capita)	Reducing Transboundary Environmental Pressures
66	SO2EXP	SO2 exports	
67	FSHCAT	Total marine fish catch	
68	FSHCON	Seafood consumption per capita	

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Variable Data

Variable: AC_EXC
Name: Percentage of country with acidification exceedance
Units: Percent of Land Area **Reference Year:** 1990
Source: Stockholm Environment Institute at York, Acidification in Developing Countries: Ecosystem Sensitivity and the Critical Loads Approach at the Global scale, 2000
Logic: Exceedance of critical SO₂ loading represents an indicator for ecosystems under stress due to acidification from anthropogenic sulphur deposition. Since it takes into account both the deposition and the ability of the ecosystem to respond to stress, it is a good indicator of the ecosystems' "sustainability".

Methodology: From a map of acidification exceedance, the areas at risk were summed within each country and then the percentage of a country at risk of exceedance was calculated. See pages 21-22 of the 2001 ESI report for more details on how the acidification exceedance map was produced.

Mean	7.72	Max	97.48	97.5 percentile cut-off value:	66.1
Median	0	Min	0	2.5 percentile cut-off value:	0

Albania	2.54	Egypt	0.00	Liberia	0.00	Saudi Arabia	0.00
Algeria	0.00	El Salvador	0.00	Libya	0.00	Senegal	0.00
Angola	1.83	Estonia	0.00	Lithuania	0.00	Sierra Leone	0.00
Argentina	0.00	Ethiopia	0.00	Macedonia	97.48	Slovakia	27.23
Armenia	0.00	Finland	1.19	Madagascar	0.00	Slovenia	40.11
Australia	0.00	France	18.84	Malawi	0.00	Somalia	0.00
Austria	50.81	Gabon	0.00	Malaysia	0.00	South Africa	0.00
Azerbaijan	0.00	Gambia	0.00	Mali	0.00	South Korea	58.90
Bangladesh	0.00	Germany	51.88	Mauritania	0.00	Spain	3.65
Belgium	75.83	Ghana	0.00	Mexico	0.68	Sri Lanka	0.00
Benin	0.00	Greece	2.77	Moldova	0.00	Sudan	0.00
Bhutan	0.00	Guatemala	0.00	Mongolia	0.00	Sweden	34.37
Bolivia	0.00	Guinea	0.00	Morocco	0.00	Switzerland	36.90
Bosnia and H.	34.07	Guinea-Bissau	0.00	Mozambique	0.00	Syria	0.00
Botswana	0.00	Haiti	0.00	Myanmar	0.77	Tajikistan	0.00
Brazil	0.00	Honduras	0.00	Namibia	0.00	Tanzania	0.00
Bulgaria	14.10	Hungary	4.93	Nepal	0.00	Thailand	0.27
Burkina Faso	0.00	Iceland	0.00	Netherlands	43.81	Togo	0.00
Burundi	0.00	India	0.00	New Zealand	0.00	Trin. and Tob.	0.00
Byelarus	4.91	Indonesia	8.15	Nicaragua	0.00	Tunisia	0.00
Cambodia	0.00	Iran	0.00	Niger	0.00	Turkey	0.02
Cameroon	0.00	Iraq	0.00	Nigeria	0.00	Turkmenistan	0.00
Canada	5.39	Ireland	54.16	North Korea	2.43	Uganda	0.00
Central Af. R.	0.00	Israel	0.00	Norway	15.96	Ukraine	4.27
Chad	0.00	Italy	17.94	Oman	0.00	United Ar. Em.	0.00
Chile	0.00	Ivory Coast	0.00	Pakistan	0.00	United King.	45.75
China	15.66	Jamaica	0.00	Panama	0.00	United States	13.74
Colombia	0.00	Japan	10.99	Papua N.G.	0.00	Uruguay	0.00
Congo	0.00	Jordan	0.00	Paraguay	0.00	Uzbekistan	0.00
Costa Rica	0.00	Kazakhstan	0.00	Peru	0.00	Venezuela	0.00
Croatia	4.69	Kenya	0.00	Philippines	0.00	Vietnam	32.17
Cuba	0.00	Kuwait	0.00	Poland	53.45	Zaire	0.43
Czech Rep.	89.22	Kyrgyzstan	0.00	Portugal	3.24	Zambia	5.13
Denmark	54.88	Laos	29.22	Romania	19.27	Zimbabwe	0.00
Dom. Rep.	0.00	Latvia	1.95	Russia	0.33		
Ecuador	0.00	Lebanon	0.00	Rwanda	0.00		

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Variable Data

Variable: ANTH10

Name: Percent of land area having very low anthropogenic impact

Units: Percent of Land Area

Reference Year: mid 1990s

Source: Wild Areas Project (WAP), joint Wildlife Conservation Society (WCS) and CIESIN project to map the last wild places on the earth's surface.

Logic: Agricultural activities and the built environment have high impacts on the natural environment. The conversion of natural vegetation for anthropogenic activity has important ecological implications.

Methodology: Global grids for population (GPW), land use (USGS AVHRR based classification from EROS data center), VMAP roads, VMAP railways, VMAP coastlines, VMAP major rivers and the statble lights data were all scored for "wildness". The scores were aggregated and normalized.

Mean	18.64	Max	89.9	97.5 percentile cut-off value:	80.39
Median	3.555	Min	0	2.5 percentile cut-off value:	0

Albania	0.32	Egypt	70.06	Liberia	8.96	Saudi Arabia	44.34
Algeria	80.82	El Salvador	0.00	Libya	89.90	Senegal	4.13
Angola	43.63	Estonia	2.86	Lithuania	0.00	Sierra Leone	0.00
Argentina	35.99	Ethiopia	14.91	Macedonia	0.70	Slovakia	0.00
Armenia	2.50	Finland	30.04	Madagascar	17.48	Slovenia	0.00
Australia	74.00	France	0.04	Malawi	16.10	Somalia	17.70
Austria	0.04	Gabon	72.79	Malaysia	27.45	South Africa	19.78
Azerbaijan	0.28	Gambia	0.00	Mali	59.81	South Korea	0.00
Bangladesh	0.06	Germany	0.02	Mauritania	79.46	Spain	3.43
Belgium	0.00	Ghana	0.58	Mexico	17.65	Sri Lanka	0.00
Benin	3.08	Greece	0.01	Moldova	0.00	Sudan	41.36
Bhutan	1.76	Guatemala	15.10	Mongolia	69.99	Sweden	31.41
Bolivia	60.93	Guinea	0.02	Morocco	17.54	Switzerland	2.43
Bosnia and H.	0.00	Guinea-Bissau	0.65	Mozambique	21.79	Syria	0.11
Botswana	67.41	Haiti	0.00	Myanmar	15.66	Tajikistan	25.63
Brazil	50.41	Honduras	10.65	Namibia	66.23	Tanzania	9.30
Bulgaria	0.00	Hungary	0.07	Nepal	2.62	Thailand	0.90
Burkina Faso	1.81	Iceland	80.08	Netherlands	0.00	Togo	0.00
Burundi	5.13	India	1.94	New Zealand	31.51	Trin. and Tob.	0.00
Byelarus	0.00	Indonesia	15.95	Nicaragua	12.90	Tunisia	26.20
Cambodia	12.16	Iran	2.53	Niger	73.54	Turkey	0.64
Cameroon	10.46	Iraq	3.68	Nigeria	0.55	Turkmenistan	22.28
Canada	81.87	Ireland	0.01	North Korea	0.00	Uganda	12.55
Central Af. R.	51.50	Israel	0.61	Norway	28.71	Ukraine	0.00
Chad	59.45	Italy	0.04	Oman	53.97	United Ar. Em.	0.16
Chile	40.46	Ivory Coast	4.38	Pakistan	2.51	United King.	0.21
China	31.49	Jamaica	0.00	Panama	14.83	United States	35.89
Colombia	48.26	Japan	0.06	Papua N.G.	35.28	Uruguay	2.39
Congo	71.62	Jordan	2.08	Paraguay	44.12	Uzbekistan	34.40
Costa Rica	0.02	Kazakhstan	39.45	Peru	45.56	Venezuela	50.77
Croatia	0.00	Kenya	39.01	Philippines	0.52	Vietnam	1.05
Cuba	0.91	Kuwait	0.11	Poland	0.00	Zaire	19.71
Czech Rep.	0.00	Kyrgyzstan	14.97	Portugal	0.78	Zambia	23.98
Denmark	0.00	Laos	6.21	Romania	0.00	Zimbabwe	1.04
Dom. Rep.	0.01	Latvia	0.02	Russia	65.80		
Ecuador	24.93	Lebanon	0.00	Rwanda	2.42		

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Variable Data

Variable: ANTH40

Name: Percent of land area having very high anthropogenic impact

Units: Percent of Land Area

Reference Year: mid 1990s

Source: Wild Areas Project (WAP), joint Wildlife Conservation Society (WCS) and CIESIN project to map the last wild places on the earth's surface.

Logic: Agricultural activities and the built environment have high impacts on the natural environment. The conversion of natural vegetation for anthropogenic activity has important ecological implications.

Methodology: Global grids for population (GPW), land use (USGS AVHRR based classification from EROS data center), VMAP roads, VMAP railways, VMAP coastlines, VMAP major rivers and the statble lights data were all scored for "wildness". The scores were aggregated and normalized.

Mean	7.26	Max	43.93	97.5 percentile cut-off value:	35.65
Median	2.895	Min	0.01	2.5 percentile cut-off value:	0.03

Albania	6.09	Egypt	2.37	Liberia	1.78	Saudi Arabia	0.43
Algeria	0.50	El Salvador	12.17	Libya	0.12	Senegal	2.21
Angola	0.22	Estonia	13.63	Lithuania	13.99	Sierra Leone	4.70
Argentina	2.86	Ethiopia	0.31	Macedonia	12.73	Slovakia	21.44
Armenia	3.73	Finland	3.70	Madagascar	0.92	Slovenia	14.55
Australia	0.48	France	24.26	Malawi	0.85	Somalia	0.07
Austria	16.76	Gabon	0.15	Malaysia	3.72	South Africa	2.92
Azerbaijan	7.31	Gambia	13.37	Mali	0.18	South Korea	20.92
Bangladesh	16.34	Germany	32.84	Mauritania	0.03	Spain	10.33
Belgium	43.93	Ghana	1.89	Mexico	2.77	Sri Lanka	16.90
Benin	0.79	Greece	12.28	Moldova	10.92	Sudan	0.19
Bhutan	0.06	Guatemala	3.93	Mongolia	0.02	Sweden	7.48
Bolivia	0.19	Guinea	1.18	Morocco	1.48	Switzerland	27.34
Bosnia and H.	6.99	Guinea-Bissau	3.37	Mozambique	0.95	Syria	1.95
Botswana	0.15	Haiti	7.22	Myanmar	1.73	Tajikistan	3.74
Brazil	1.53	Honduras	4.09	Namibia	0.04	Tanzania	0.62
Bulgaria	15.47	Hungary	26.38	Nepal	2.00	Thailand	2.68
Burkina Faso	0.63	Iceland	0.15	Netherlands	43.79	Togo	1.99
Burundi	0.77	India	10.24	New Zealand	3.43	Trin. and Tob.	18.61
Byelarus	10.95	Indonesia	3.34	Nicaragua	3.66	Tunisia	4.31
Cambodia	0.83	Iran	1.10	Niger	0.03	Turkey	2.87
Cameroon	1.09	Iraq	1.20	Nigeria	1.60	Turkmenistan	0.78
Canada	1.03	Ireland	17.95	North Korea	13.31	Uganda	1.66
Central Af. R.	0.21	Israel	14.79	Norway	3.89	Ukraine	14.36
Chad	0.01	Italy	23.85	Oman	0.79	United Ar. Em.	2.64
Chile	2.35	Ivory Coast	0.80	Pakistan	4.23	United King.	32.05
China	3.76	Jamaica	18.17	Panama	6.07	United States	6.59
Colombia	1.33	Japan	30.22	Papua N.G.	0.19	Uruguay	4.24
Congo	0.25	Jordan	1.03	Paraguay	0.54	Uzbekistan	3.90
Costa Rica	8.41	Kazakhstan	0.70	Peru	0.53	Venezuela	0.75
Croatia	16.23	Kenya	0.93	Philippines	9.01	Vietnam	3.77
Cuba	21.04	Kuwait	7.02	Poland	23.20	Zaire	0.62
Czech Rep.	26.11	Kyrgyzstan	1.66	Portugal	10.85	Zambia	0.51
Denmark	39.45	Laos	0.01	Romania	15.68	Zimbabwe	2.01
Dom. Rep.	5.93	Latvia	16.24	Russia	1.46		
Ecuador	2.66	Lebanon	14.47	Rwanda	0.18		

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Variable Data

Variable: BODWAT
Name: Industrial organic pollutants per available freshwater
Units: Metric Tons of BOD Emissions per Cubic Km of Water **Reference Year:** MRYA 1996-1998
Source: World Bank, World Development Indicators 2001, Washington, DC: World Bank, 2001 (for BOD emissions) and Center for Environmental Systems Research, University of Kassel, WaterGap 2.1, 2000 (for data on water quantity).

Logic: Emission of organic pollutants from industrial activities cause water quality degradation. Given these considerations, the Biochemical Oxygen Demand (BOD) emissions have been normalized per amount of freshwater availability (internal water availability + inflows from other countries).

Methodology: Emissions of organic water pollutants are measured by biochemical oxygen demand, which refers to the amount of oxygen that bacteria in water will consume in breaking down waste. This is a standard water-treatment test for the presence of organic pollutants. The data from the World Bank, which represented BOD emissions (kilograms per day) were normalized by the combination of water availability per capita and water inflow availability per capita from the WaterGap2.1 model. In calculating the ESI, the base-10 logarithm of this variable was used.

Mean 118614145 **Max** 8302990000 **97.5 percentile cut-off value:** 501855091.2
Median 0.79 **Min** 0 **2.5 percentile cut-off value:** 0.03

Albania	0.27	Egypt	3.58	Liberia	--	Saudi Arabia	--
Algeria	8.58	El Salvador	1.21	Libya	--	Senegal	0.48
Angola	--	Estonia	--	Lithuania	1.29	Sierra Leone	--
Argentina	--	Ethiopia	0.16	Macedonia	4.70	Slovakia	0.76
Armenia	2.14	Finland	0.61	Madagascar	--	Slovenia	1.32
Australia	--	France	2.49	Malawi	--	Somalia	--
Austria	0.88	Gabon	--	Malaysia	0.40	South Africa	4.74
Azerbaijan	--	Gambia	--	Mali	--	South Korea	5.68
Bangladesh	--	Germany	--	Mauritania	--	Spain	3.70
Belgium	--	Ghana	--	Mexico	0.42	Sri Lanka	--
Benin	--	Greece	1.32	Moldova	--	Sudan	--
Bhutan	--	Guatemala	0.12	Mongolia	--	Sweden	0.62
Bolivia	--	Guinea	--	Morocco	7.85	Switzerland	3.02
Bosnia and H.	0.16	Guinea-Bissau	--	Mozambique	0.00	Syria	--
Botswana	0.18	Haiti	--	Myanmar	0.00	Tajikistan	--
Brazil	--	Honduras	--	Namibia	--	Tanzania	--
Bulgaria	0.51	Hungary	1.17	Nepal	0.17	Thailand	--
Burkina Faso	--	Iceland	0.08	Netherlands	1.29	Togo	--
Burundi	--	India	0.97	New Zealand	0.17	Trin. and Tob.	--
Byelarus	--	Indonesia	0.16	Nicaragua	--	Tunisia	11.40
Cambodia	--	Iran	--	Niger	--	Turkey	1.10
Cameroon	0.05	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	0.11	Ireland	0.68	North Korea	--	Uganda	--
Central Af. R.	--	Israel	27.07	Norway	0.20	Ukraine	5.52
Chad	--	Italy	--	Oman	2.30	United Ar. Em.	--
Chile	0.25	Ivory Coast	0.11	Pakistan	--	United King.	3.34
China	3.78	Jamaica	2.19	Panama	0.15	United States	1.14
Colombia	0.03	Japan	4.27	Papua N.G.	--	Uruguay	0.03
Congo	--	Jordan	11.53	Paraguay	--	Uzbekistan	--
Costa Rica	0.36	Kazakhstan	--	Peru	--	Venezuela	0.07
Croatia	0.32	Kenya	0.78	Philippines	0.69	Vietnam	--
Cuba	--	Kuwait	8302990000.00	Poland	5.85	Zaire	--
Czech Rep.	7.90	Kyrgyzstan	--	Portugal	2.50	Zambia	--
Denmark	7.13	Laos	--	Romania	--	Zimbabwe	0.42
Dom. Rep.	--	Latvia	0.80	Russia	0.43		
Ecuador	0.09	Lebanon	--	Rwanda	--		

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Variable Data

Variable: CARSKM
Name: Vehicles per populated land area
Units: Vehicles/Populated Land Area (in km2) **Reference Year:** MRYA 1996-1999
Source: World Bank, World Development Indicators 2001, Washington, DC: World Bank, 2001.
Logic: This is a proxy measure of air pollution from the transportation sector, which is the fastest growing sector in terms of energy use.

Methodology: Air pollution is generally greatest in densely populated areas. To take this into account, we used the Gridded Population of the World dataset available from CIESIN and calculated the total land area in each country inhabited with a population density of greater than 5 persons per sq. km. We then utilized this land area as the denominator for the vehicles data.

Mean	19.19	Max	196.48	97.5 percentile cut-off value:	136.62
Median	4.565	Min	0.01	2.5 percentile cut-off value:	0.05

Albania	4.99	Egypt	17.23	Liberia	0.37	Saudi Arabia	3.68
Algeria	4.20	El Salvador	17.49	Libya	33.24	Senegal	0.64
Angola	0.45	Estonia	12.96	Lithuania	18.46	Sierra Leone	0.35
Argentina	4.67	Ethiopia	0.09	Macedonia	11.95	Slovakia	29.10
Armenia	0.19	Finland	15.67	Madagascar	0.23	Slovenia	45.12
Australia	47.91	France	60.00	Malawi	0.60	Somalia	0.01
Austria	52.48	Gabon	0.43	Malaysia	12.81	South Africa	9.14
Azerbaijan	4.36	Gambia	1.83	Mali	0.10	South Korea	110.36
Bangladesh	0.97	Germany	124.34	Mauritania	0.23	Spain	37.42
Belgium	153.24	Ghana	0.66	Mexico	10.91	Sri Lanka	9.59
Benin	0.41	Greece	28.50	Moldova	9.25	Sudan	0.26
Bhutan	0.71	Guatemala	7.00	Mongolia	0.91	Sweden	18.84
Bolivia	0.82	Guinea	0.15	Morocco	4.46	Switzerland	96.52
Bosnia and H.	2.09	Guinea-Bissau	0.46	Mozambique	0.02	Syria	2.43
Botswana	2.43	Haiti	2.05	Myanmar	0.12	Tajikistan	0.11
Brazil	4.06	Honduras	3.92	Namibia	2.16	Tanzania	0.16
Bulgaria	20.17	Hungary	29.97	Nepal	[18.17]	Thailand	12.36
Burkina Faso	0.22	Iceland	113.84	Netherlands	196.48	Togo	2.12
Burundi	[7.04]	India	2.50	New Zealand	25.26	Trin. and Tob.	28.61
Byelarus	6.78	Indonesia	3.26	Nicaragua	0.41	Tunisia	5.99
Cambodia	0.44	Iran	1.66	Niger	0.20	Turkey	7.01
Cameroon	0.42	Iraq	2.54	Nigeria	2.69	Turkmenistan	[14.16]
Canada	34.91	Ireland	16.21	North Korea	[69.45]	Uganda	0.55
Central Af. R.	0.01	Israel	78.41	Norway	19.42	Ukraine	8.17
Chad	0.08	Italy	115.31	Oman	1.54	United Ar. Em.	3.40
Chile	6.39	Ivory Coast	1.41	Pakistan	1.58	United King.	101.40
China	1.77	Jamaica	11.54	Panama	5.59	United States	46.56
Colombia	3.43	Japan	187.53	Papua N.G.	0.27	Uruguay	4.40
Congo	0.59	Jordan	7.99	Paraguay	0.78	Uzbekistan	[14.15]
Costa Rica	10.15	Kazakhstan	1.11	Peru	1.42	Venezuela	5.17
Croatia	[18.52]	Kenya	1.24	Philippines	7.42	Vietnam	[10.93]
Cuba	3.26	Kuwait	39.69	Poland	36.32	Zaire	[10.42]
Czech Rep.	48.33	Kyrgyzstan	0.93	Portugal	37.74	Zambia	0.61
Denmark	50.91	Laos	0.10	Romania	15.12	Zimbabwe	0.99
Dom. Rep.	7.88	Latvia	10.24	Russia	5.66		
Ecuador	3.68	Lebanon	104.90	Rwanda	1.10		

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Variable Data

Variable: CFC
Name: CFC consumption
Units: Ozone Depletion Potential (ODP) Tons (Metric Tons x ODP) **Reference Year:** MRYA 1996-98
Source: UNEP, Production and Consumption of Ozone Depleting Substances, 1986-1998, October 1999.
Logic: Emissions of CFCs contribute to the breakdown of the Earth's protective ozone layer and to global climate change. By combining total and per capita emissions we created a measure that goes beyond the debate over which measure best captures global responsibility.

Methodology: The indicator was obtained by multiplying the Total CFCs emissions (metric tons per ozone depletion potential) with the Per capita CFCs emissions (obtained by dividing the total CFCs emissions by the population in 1997). In calculating the ESI, the base-10 logarithm of this variable was used.

Mean 87709.34 **Max** 2096731.55 **97.5 percentile cut-off value:** 1129831
Median 2451.7 **Min** 0 **2.5 percentile cut-off value:** 0

Albania	--	Egypt	36637.74	Liberia	--	Saudi Arabia	142831.18
Algeria	81627.89	El Salvador	6433.23	Libya	80339.88	Senegal	1867.71
Angola	--	Estonia	3385.93	Lithuania	2919.55	Sierra Leone	--
Argentina	31916.38	Ethiopia	24.80	Macedonia	1997.95	Slovakia	0.19
Armenia	--	Finland	--	Madagascar	739.80	Slovenia	0.00
Australia	0.22	France	--	Malawi	322.74	Somalia	--
Austria	--	Gabon	126.65	Malaysia	259617.88	South Africa	619.83
Azerbaijan	5286.64	Gambia	101.72	Mali	1180.63	South Korea	1858868.33
Bangladesh	5643.89	Germany	--	Mauritania	19.91	Spain	--
Belgium	--	Ghana	134.00	Mexico	128672.29	Sri Lanka	3420.18
Benin	34.82	Greece	--	Moldova	365.59	Sudan	3378.16
Bhutan	--	Guatemala	2225.37	Mongolia	157.67	Sweden	--
Bolivia	272.19	Guinea	--	Morocco	29193.18	Switzerland	231.85
Bosnia and H.	--	Guinea-Bissau	240.81	Mozambique	26.24	Syria	279497.02
Botswana	31.81	Haiti	--	Myanmar	61.54	Tajikistan	--
Brazil	588838.63	Honduras	1638.72	Namibia	222.59	Tanzania	1125.00
Bulgaria	0.00	Hungary	0.10	Nepal	37.69	Thailand	239571.46
Burkina Faso	124.44	Iceland	0.00	Netherlands	--	Togo	--
Burundi	643.81	India	46502.34	New Zealand	0.00	Trin. and Tob.	19060.25
Byelarus	6331.14	Indonesia	88310.73	Nicaragua	292.60	Tunisia	67931.19
Cambodia	--	Iran	480228.61	Niger	356.53	Turkey	236217.77
Cameroon	4855.01	Iraq	--	Nigeria	218257.67	Turkmenistan	212.63
Canada	58.29	Ireland	--	North Korea	2382.66	Uganda	6.05
Central Af. R.	0.00	Israel	0.00	Norway	58.24	Ukraine	23739.77
Chad	203.79	Italy	--	Oman	--	United Ar. Em.	137378.49
Chile	37241.22	Ivory Coast	1474.40	Pakistan	11091.52	United King.	--
China	2096731.55	Jamaica	15736.64	Panama	43976.07	United States	23385.16
Colombia	37414.36	Japan	101.31	Papua N.G.	288.08	Uruguay	11525.63
Congo	--	Jordan	119897.02	Paraguay	2509.55	Uzbekistan	121.02
Costa Rica	11103.16	Kazakhstan	--	Peru	4388.27	Venezuela	602347.63
Croatia	1649.37	Kenya	2214.78	Philippines	105641.32	Vietnam	3272.79
Cuba	39953.99	Kuwait	135805.16	Poland	2451.70	Zaire	--
Czech Rep.	11.75	Kyrgyzstan	--	Portugal	--	Zambia	97.96
Denmark	--	Laos	--	Romania	15021.65	Zimbabwe	16872.89
Dom. Rep.	11944.58	Latvia	214.94	Russia	817386.43		
Ecuador	6197.71	Lebanon	71790.14	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: CITES

Name: Percent of CITES reporting requirements met

Units: Percent of Requirements Met

Reference Year: 2000

Source: Convention on International Trade in Endangered Species of Wild Fauna and Flora, Report on National Reports Required Under Article VIII, Paragraph 7(a), of the Convention, Eleventh Meeting of the Conference of the Parties, Gigiri, Kenya, April 2000, available at <http://www.unep-wcmc.org/CITES/eng/cop/11/docs/19.pdf>

Logic: Preparing and submitting national reports is a fundamental responsibility under CITES. The degree to which a country fulfills this responsibility is an indication of how seriously it takes its commitment to protection of endangered species.

Methodology: Countries that have not ratified the CITES convention are recorded as having zero percent of their requirements met.

Mean	56.99	Max	100	97.5 percentile cut-off value:	100
Median	69.8	Min	0	2.5 percentile cut-off value:	0

Albania	0.00	Egypt	19.00	Liberia	44.40	Saudi Arabia	0.00
Algeria	60.00	El Salvador	33.30	Libya	0.00	Senegal	81.80
Angola	0.00	Estonia	85.70	Lithuania	0.00	Sierra Leone	25.00
Argentina	88.90	Ethiopia	90.00	Macedonia	0.00	Slovakia	100.00
Armenia	0.00	Finland	82.60	Madagascar	87.50	Slovenia	0.00
Australia	100.00	France	100.00	Malawi	77.80	Somalia	7.70
Austria	100.00	Gabon	70.00	Malaysia	85.70	South Africa	95.80
Azerbaijan	0.00	Gambia	40.90	Mali	100.00	South Korea	100.00
Bangladesh	70.60	Germany	100.00	Mauritania	0.00	Spain	100.00
Belgium	100.00	Ghana	87.00	Mexico	87.50	Sri Lanka	70.00
Benin	26.70	Greece	100.00	Moldova	0.00	Sudan	56.30
Bhutan	0.00	Guatemala	89.50	Mongolia	100.00	Sweden	100.00
Bolivia	60.00	Guinea	0.00	Morocco	60.90	Switzerland	100.00
Bosnia and H.	0.00	Guinea-Bissau	55.60	Mozambique	77.80	Syria	0.00
Botswana	90.50	Haiti	0.00	Myanmar	0.00	Tajikistan	0.00
Brazil	54.20	Honduras	21.40	Namibia	87.50	Tanzania	84.20
Bulgaria	62.50	Hungary	85.70	Nepal	75.00	Thailand	68.80
Burkina Faso	55.60	Iceland	0.00	Netherlands	100.00	Togo	75.00
Burundi	27.30	India	100.00	New Zealand	100.00	Trin. and Tob.	66.70
Byelarus	50.00	Indonesia	95.00	Nicaragua	90.90	Tunisia	100.00
Cambodia	0.00	Iran	69.60	Niger	50.00	Turkey	66.70
Cameroon	72.20	Iraq	0.00	Nigeria	45.80	Turkmenistan	0.00
Canada	95.80	Ireland	0.00	North Korea	0.00	Uganda	50.00
Central Af. R.	47.40	Israel	52.60	Norway	87.00	Ukraine	0.00
Chad	50.00	Italy	100.00	Oman	0.00	United Ar. Em.	66.70
Chile	75.00	Ivory Coast	0.00	Pakistan	78.30	United King.	100.00
China	100.00	Jamaica	50.00	Panama	81.00	United States	87.50
Colombia	83.30	Japan	89.50	Papua N.G.	73.90	Uruguay	62.50
Congo	87.50	Jordan	35.00	Paraguay	68.20	Uzbekistan	50.00
Costa Rica	83.30	Kazakhstan	0.00	Peru	75.00	Venezuela	76.20
Croatia	0.00	Kenya	65.00	Philippines	83.30	Vietnam	40.00
Cuba	88.90	Kuwait	0.00	Poland	88.90	Zaire	73.90
Czech Rep.	100.00	Kyrgyzstan	0.00	Portugal	72.20	Zambia	72.20
Denmark	95.50	Laos	0.00	Romania	40.00	Zimbabwe	88.90
Dom. Rep.	100.00	Latvia	100.00	Russia	78.30		
Ecuador	70.80	Lebanon	0.00	Rwanda	16.70		

2002 ESI: Annex 6

Variable Data

Variable: CIVLIB

Name: Civil and political liberties

Units: Index Ranging from 1 (High Levels of Liberties) to 7 (Low **Reference Year:** 2001

Source: Freedom House, Freedom in the World 2000-2001, New York: Freedom House, 2001, <http://www.freedomhouse.org/>, accessed 26 October 2001.

Logic: In countries that guarantee freedom of expression, rights to organize, rule of law, economic rights, and multi-party elections, there is more likely to be a vigorous public debate about values and issues relevant to environmental quality, and legal safeguards that encourage innovation.

Methodology: This is the average of two indicators - civil liberties and political liberties.

Mean	3.7	Max	7	97.5 percentile cut-off value:	7
Median	3.5	Min	1	2.5 percentile cut-off value:	1

Albania	4.50	Egypt	5.50	Liberia	5.50	Saudi Arabia	7.00
Algeria	5.50	El Salvador	2.50	Libya	7.00	Senegal	3.50
Angola	--	Estonia	1.50	Lithuania	1.50	Sierra Leone	4.50
Argentina	1.50	Ethiopia	5.00	Macedonia	3.50	Slovakia	1.50
Armenia	4.00	Finland	1.00	Madagascar	3.00	Slovenia	1.50
Australia	1.00	France	1.50	Malawi	3.00	Somalia	6.50
Austria	1.00	Gabon	4.50	Malaysia	5.00	South Africa	1.50
Azerbaijan	5.50	Gambia	6.00	Mali	2.50	South Korea	2.00
Bangladesh	3.50	Germany	1.50	Mauritania	5.50	Spain	1.50
Belgium	1.50	Ghana	2.50	Mexico	2.50	Sri Lanka	3.50
Benin	2.00	Greece	2.00	Moldova	3.00	Sudan	7.00
Bhutan	6.50	Guatemala	3.50	Mongolia	2.50	Sweden	1.00
Bolivia	2.00	Guinea	5.50	Morocco	4.50	Switzerland	1.00
Bosnia and H.	4.50	Guinea-Bissau	4.50	Mozambique	3.50	Syria	7.00
Botswana	2.00	Haiti	5.50	Myanmar	7.00	Tajikistan	6.00
Brazil	3.00	Honduras	3.00	Namibia	2.50	Tanzania	4.00
Bulgaria	2.50	Hungary	1.50	Nepal	3.50	Thailand	2.50
Burkina Faso	4.00	Iceland	1.00	Netherlands	1.00	Togo	5.00
Burundi	6.00	India	2.50	New Zealand	1.00	Trin. and Tob.	2.00
Byelarus	6.00	Indonesia	3.50	Nicaragua	3.00	Tunisia	5.50
Cambodia	6.00	Iran	6.00	Niger	4.00	Turkey	4.50
Cameroon	6.50	Iraq	7.00	Nigeria	4.00	Turkmenistan	7.00
Canada	1.00	Ireland	1.00	North Korea	7.00	Uganda	5.50
Central Af. R.	3.50	Israel	2.00	Norway	1.00	Ukraine	4.00
Chad	5.50	Italy	1.50	Oman	5.50	United Ar. Em.	5.50
Chile	2.00	Ivory Coast	5.50	Pakistan	5.50	United King.	1.50
China	6.50	Jamaica	2.00	Panama	1.50	United States	1.00
Colombia	4.00	Japan	1.50	Papua N.G.	2.50	Uruguay	1.00
Congo	5.00	Jordan	4.00	Paraguay	3.50	Uzbekistan	6.50
Costa Rica	1.50	Kazakhstan	5.50	Peru	3.50	Venezuela	4.00
Croatia	2.50	Kenya	5.50	Philippines	2.50	Vietnam	6.50
Cuba	7.00	Kuwait	4.50	Poland	1.50	Zaire	6.50
Czech Rep.	1.50	Kyrgyzstan	5.50	Portugal	1.00	Zambia	4.50
Denmark	1.00	Laos	6.50	Romania	2.00	Zimbabwe	5.50
Dom. Rep.	2.00	Latvia	1.50	Russia	5.00		
Ecuador	3.00	Lebanon	5.50	Rwanda	6.50		

2002 ESI: Annex 6

Variable Data

Variable: CO2GDP

Name: Carbon economic efficiency (CO₂ emissions per dollar GDP)

Units: Metric Tons/US Dollar GDP

Reference Year: 1998

Source: Carbon Dioxide Information Analysis Center at http://cdiac.esd.ornl.gov/pns/pns_main.html

Logic: Emissions of carbon dioxide are not immediately harmful to any given country, but contribute to global climate change. Every country emits some carbon dioxide. However, the amount of emissions per unit economic activity varies widely, with some countries being far more efficient than others.

Methodology:

Mean	1.52	Max	6.29	97.5 percentile cut-off value:	5.72
Median	1.125	Min	0	2.5 percentile cut-off value:	0.09

Albania	0.44	Egypt	1.45	Liberia	[0.99]	Saudi Arabia	3.60
Algeria	2.02	El Salvador	0.65	Libya	2.78	Senegal	0.73
Angola	0.54	Estonia	3.89	Lithuania	1.68	Sierra Leone	0.60
Argentina	0.82	Ethiopia	0.15	Macedonia	3.74	Slovakia	1.89
Armenia	1.11	Finland	1.28	Madagascar	0.30	Slovenia	1.33
Australia	2.07	France	0.78	Malawi	0.36	Somalia	0.00
Austria	0.90	Gabon	1.01	Malaysia	1.92	South Africa	2.56
Azerbaijan	5.94	Gambia	0.34	Mali	0.18	South Korea	1.51
Bangladesh	0.36	Germany	1.19	Mauritania	2.00	Spain	1.00
Belgium	1.10	Ghana	0.36	Mexico	1.33	Sri Lanka	0.38
Benin	0.37	Greece	1.51	Moldova	2.91	Sudan	0.25
Bhutan	1.09	Guatemala	0.68	Mongolia	5.45	Sweden	0.70
Bolivia	1.76	Guinea	0.25	Morocco	0.91	Switzerland	0.61
Bosnia and H.	[2.04]	Guinea-Bissau	0.86	Mozambique	0.28	Syria	2.68
Botswana	1.02	Haiti	0.31	Myanmar	0.42	Tajikistan	2.33
Brazil	0.71	Honduras	0.93	Namibia	0.00	Tanzania	0.39
Bulgaria	3.15	Hungary	1.47	Nepal	0.30	Thailand	1.50
Burkina Faso	0.28	Iceland	0.78	Netherlands	1.23	Togo	0.39
Burundi	0.16	India	1.39	New Zealand	1.19	Trin. and Tob.	6.29
Byelarus	2.51	Indonesia	1.11	Nicaragua	0.91	Tunisia	1.17
Cambodia	0.12	Iran	2.36	Niger	0.39	Turkey	1.31
Cameroon	0.22	Iraq	3.23	Nigeria	2.12	Turkmenistan	5.67
Canada	1.69	Ireland	1.23	North Korea	[4.72]	Uganda	0.15
Central Af. R.	0.17	Israel	1.51	Norway	0.74	Ukraine	5.69
Chad	0.05	Italy	0.91	Oman	2.33	United Ar. Em.	4.92
Chile	1.26	Ivory Coast	1.46	Pakistan	1.14	United King.	1.17
China	2.03	Jamaica	3.29	Panama	1.02	United States	1.77
Colombia	0.75	Japan	1.00	Papua N.G.	0.60	Uruguay	0.53
Congo	2.50	Jordan	2.16	Paraguay	0.54	Uzbekistan	5.75
Costa Rica	0.51	Kazakhstan	4.78	Peru	0.67	Venezuela	3.04
Croatia	1.67	Kenya	0.85	Philippines	0.77	Vietnam	0.88
Cuba	1.54	Kuwait	2.92	Poland	2.84	Zaire	0.18
Czech Rep.	2.43	Kyrgyzstan	1.49	Portugal	0.97	Zambia	0.58
Denmark	1.08	Laos	0.14	Romania	1.81	Zimbabwe	1.14
Dom. Rep.	1.31	Latvia	1.45	Russia	3.84		
Ecuador	1.85	Lebanon	2.45	Rwanda	0.21		

2002 ESI: Annex 6

Variable Data

Variable: CO2PC

Name: Carbon lifestyle efficiency (CO₂ emissions per capita)

Units: Metric Tons of Carbon per Person

Reference Year: 1998

Source: Carbon Dioxide Information Analysis Center at http://cdiac.esd.ornl.gov/pns/pns_main.html

Logic: Emissions of carbon dioxide are not immediately harmful to any given country, but contribute to the global problem. Every country emits some carbon dioxide, but the amount per person varies widely, with some countries having much lower per capita emissions than others.

Methodology:

Mean	1.15	Max	10.23	97.5 percentile cut-off value:	5.11
Median	0.61	Min	0	2.5 percentile cut-off value:	0.01

Albania	0.14	Egypt	0.44	Liberia	0.04	Saudi Arabia	3.83
Algeria	0.97	El Salvador	0.27	Libya	1.86	Senegal	0.10
Angola	0.13	Estonia	3.25	Lithuania	1.15	Sierra Leone	0.03
Argentina	1.03	Ethiopia	0.01	Macedonia	1.69	Slovakia	1.93
Armenia	0.26	Finland	2.82	Madagascar	0.02	Slovenia	2.00
Australia	4.88	France	1.72	Malawi	0.02	Somalia	0.00
Austria	2.14	Gabon	0.66	Malaysia	1.54	South Africa	2.38
Azerbaijan	1.38	Gambia	0.05	Mali	0.01	South Korea	2.15
Bangladesh	0.05	Germany	2.75	Mauritania	0.31	Spain	1.70
Belgium	2.73	Ghana	0.06	Mexico	1.07	Sri Lanka	0.12
Benin	0.03	Greece	2.19	Moldova	0.60	Sudan	0.03
Bhutan	0.05	Guatemala	0.24	Mongolia	0.82	Sweden	1.50
Bolivia	0.41	Guinea	0.05	Morocco	0.32	Switzerland	1.56
Bosnia and H.	0.35	Guinea-Bissau	0.05	Mozambique	0.02	Syria	0.90
Botswana	0.66	Haiti	0.04	Myanmar	0.05	Tajikistan	0.23
Brazil	0.49	Honduras	0.23	Namibia	0.00	Tanzania	0.02
Bulgaria	1.55	Hungary	1.58	Nepal	0.04	Thailand	0.87
Burkina Faso	0.02	Iceland	2.06	Netherlands	2.85	Togo	0.05
Burundi	0.01	India	0.29	New Zealand	2.16	Trin. and Tob.	4.76
Byelarus	1.60	Indonesia	0.31	Nicaragua	0.19	Tunisia	0.65
Cambodia	0.02	Iran	1.20	Niger	0.03	Turkey	0.86
Cameroon	0.03	Iraq	1.03	Nigeria	0.20	Turkmenistan	1.76
Canada	4.17	Ireland	2.84	North Korea	2.64	Uganda	0.02
Central Af. R.	0.02	Israel	2.75	Norway	2.07	Ukraine	1.90
Chad	0.00	Italy	1.97	Oman	2.32	United Ar. Em.	10.23
Chile	1.11	Ivory Coast	0.25	Pakistan	0.18	United King.	2.51
China	0.68	Jamaica	1.18	Panama	0.57	United States	5.43
Colombia	0.45	Japan	2.45	Papua N.G.	0.14	Uruguay	0.49
Congo	0.18	Jordan	0.60	Paraguay	0.24	Uzbekistan	1.26
Costa Rica	0.36	Kazakhstan	2.06	Peru	0.31	Venezuela	1.82
Croatia	1.21	Kenya	0.09	Philippines	0.28	Vietnam	0.15
Cuba	0.62	Kuwait	7.40	Poland	2.27	Zaire	0.01
Czech Rep.	3.14	Kyrgyzstan	0.38	Portugal	1.51	Zambia	0.05
Denmark	2.76	Laos	0.02	Romania	1.12	Zimbabwe	0.34
Dom. Rep.	0.67	Latvia	0.88	Russia	2.66		
Ecuador	0.59	Lebanon	1.40	Rwanda	0.02		

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Variable Data

Variable: COALKM

Name: Coal consumption per populated land area

Units: Billion Btu/Populated Land Area

Reference Year: 1999

Source: US Energy Information Agency, available at <http://www.eia.doe.gov/emeu/international/contents.html>

Logic: Coal fired power plants emit higher levels of SO₂ and other air pollutants than natural gas or oil fired plants, and the energy produced is more carbon-intensive.

Methodology: Air pollution is generally greatest in densely populated areas. To take this into account, we used the Gridded Population of the World dataset available from CIESIN and calculated the total land area in each country inhabited with a population density of greater than 5 persons per sq. km. We then utilized this land area as the denominator for the coal consumption data.

Mean	1.2	Max	14.53	97.5 percentile cut-off value:	9.46
Median	0.03	Min	0	2.5 percentile cut-off value:	0

Albania	0.02	Egypt	0.51	Liberia	0.00	Saudi Arabia	0.00
Algeria	0.05	El Salvador	0.00	Libya	0.00	Senegal	0.00
Angola	0.00	Estonia	0.43	Lithuania	0.09	Sierra Leone	0.00
Argentina	0.03	Ethiopia	0.00	Macedonia	2.56	Slovakia	2.83
Armenia	0.00	Finland	0.95	Madagascar	0.00	Slovenia	2.57
Australia	8.97	France	1.10	Malawi	0.02	Somalia	0.00
Austria	1.55	Gabon	0.00	Malaysia	0.13	South Africa	5.39
Azerbaijan	0.00	Gambia	0.00	Mali	0.00	South Korea	14.53
Bangladesh	0.03	Germany	9.30	Mauritania	0.00	Spain	1.49
Belgium	9.68	Ghana	0.00	Mexico	0.18	Sri Lanka	0.00
Benin	0.00	Greece	2.86	Moldova	0.32	Sudan	0.00
Bhutan	0.01	Guatemala	0.00	Mongolia	0.59	Sweden	0.40
Bolivia	0.00	Guinea	0.00	Morocco	0.30	Switzerland	0.09
Bosnia and H.	0.31	Guinea-Bissau	0.00	Mozambique	0.00	Syria	0.00
Botswana	0.55	Haiti	0.00	Myanmar	0.00	Tajikistan	0.03
Brazil	0.17	Honduras	0.02	Namibia	0.00	Tanzania	0.00
Bulgaria	2.78	Hungary	1.69	Nepal	0.06	Thailand	0.52
Burkina Faso	0.00	Iceland	1.62	Netherlands	8.88	Togo	0.00
Burundi	0.00	India	2.11	New Zealand	0.43	Trin. and Tob.	0.00
Byelarus	0.09	Indonesia	0.18	Nicaragua	0.00	Tunisia	0.00
Cambodia	0.00	Iran	0.03	Niger	0.01	Turkey	1.08
Cameroon	0.00	Iraq	0.00	Nigeria	0.00	Turkmenistan	0.00
Canada	2.89	Ireland	0.97	North Korea	9.25	Uganda	0.00
Central Af. R.	0.00	Israel	11.99	Norway	0.38	Ukraine	3.33
Chad	0.00	Italy	1.57	Oman	0.00	United Ar. Em.	0.00
Chile	0.57	Ivory Coast	0.00	Pakistan	0.12	United King.	6.46
China	3.39	Jamaica	0.17	Panama	0.03	United States	4.91
Colombia	0.16	Japan	8.80	Papua N.G.	0.00	Uruguay	0.00
Congo	0.00	Jordan	0.00	Paraguay	0.01	Uzbekistan	0.10
Costa Rica	0.00	Kazakhstan	0.35	Peru	0.02	Venezuela	0.00
Croatia	0.18	Kenya	0.01	Philippines	0.35	Vietnam	0.35
Cuba	0.00	Kuwait	0.00	Poland	8.22	Zaire	0.00
Czech Rep.	8.74	Kyrgyzstan	0.10	Portugal	1.72	Zambia	0.01
Denmark	4.69	Laos	0.00	Romania	1.26	Zimbabwe	0.32
Dom. Rep.	0.12	Latvia	0.04	Russia	1.04		
Ecuador	0.00	Lebanon	0.51	Rwanda	0.00		

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Variable Data

Variable: DISINT
Name: Death rate from intestinal infectious diseases
Units: Deaths/100,000 Population **Reference Year:** MRYA 1990-1999
Source: World Health Organisation. 1997-1999 World Health Statistics Annual. Geneva: WHO, 2000, available at <http://www.who.int/whosis/mort/download.htm>
Logic: Indicator of the degree to which the population is affected by poor sanitation and water quality, which are related to environmental conditions
Methodology: The final number is based on an aggregation of deaths recorded for WHO code B01 for all age groups by sex. These were then combined with UN Population Division population data for the country in that particular year. The death rates were standardized utilizing the age structure for the population of Canada. See page 22 of the 2001 ESI report for more details on the methodology.

Mean 15.45 **Max** 36.81 **97.5 percentile cut-off value:** 36.43
Median 13.345 **Min** 0 **2.5 percentile cut-off value:** 0.12

Albania	0.33	Egypt	19.65	Liberia	[36.43]	Saudi Arabia	[11.28]
Algeria	[13.74]	El Salvador	36.17	Libya	[8.79]	Senegal	[30.1]
Angola	[36.43]	Estonia	0.31	Lithuania	0.34	Sierra Leone	[36.43]
Argentina	1.95	Ethiopia	[35.86]	Macedonia	[1.46]	Slovakia	0.24
Armenia	3.15	Finland	0.97	Madagascar	[35.85]	Slovenia	0.29
Australia	0.62	France	0.97	Malawi	[35.19]	Somalia	[36.24]
Austria	0.13	Gabon	[32.39]	Malaysia	[15.96]	South Africa	24.99
Azerbaijan	5.05	Gambia	[27.55]	Mali	[36.18]	South Korea	2.62
Bangladesh	[25.2]	Germany	0.34	Mauritania	[35.65]	Spain	0.56
Belgium	0.84	Ghana	[23.99]	Mexico	18.48	Sri Lanka	[15.31]
Benin	[31.38]	Greece	0.00	Moldova	1.04	Sudan	[35.8]
Bhutan	[6.16]	Guatemala	[23.35]	Mongolia	2.06	Sweden	0.39
Bolivia	[17.42]	Guinea	[35.81]	Morocco	[15.49]	Switzerland	[2.97]
Bosnia and H.	[6.81]	Guinea-Bissau	[36.14]	Mozambique	[33.47]	Syria	[12.91]
Botswana	[20.72]	Haiti	[31.97]	Myanmar	[28.31]	Tajikistan	36.81
Brazil	[14.43]	Honduras	[7.96]	Namibia	[21.54]	Tanzania	[30.75]
Bulgaria	0.56	Hungary	0.25	Nepal	[33.02]	Thailand	[12.95]
Burkina Faso	[35.57]	Iceland	1.11	Netherlands	0.28	Togo	[36.05]
Burundi	[36.25]	India	[24.25]	New Zealand	0.51	Trin. and Tob.	4.97
Byelarus	0.43	Indonesia	[15.69]	Nicaragua	24.07	Tunisia	[7.69]
Cambodia	[32.31]	Iran	[15.7]	Niger	[36.43]	Turkey	[15.51]
Cameroon	[34.55]	Iraq	[33.31]	Nigeria	[33.72]	Turkmenistan	23.34
Canada	0.30	Ireland	0.57	North Korea	[4.21]	Uganda	[34.06]
Central Af. R.	[33.51]	Israel	0.45	Norway	1.33	Ukraine	0.54
Chad	[36.19]	Italy	0.12	Oman	[5.68]	United Ar. Em.	[3.31]
Chile	3.21	Ivory Coast	[33.92]	Pakistan	[35.15]	United King.	0.75
China	[5.08]	Jamaica	[14.43]	Panama	[5.14]	United States	[7.35]
Colombia	6.42	Japan	0.88	Papua N.G.	[18.54]	Uruguay	4.30
Congo	[8.34]	Jordan	[14.88]	Paraguay	16.00	Uzbekistan	9.58
Costa Rica	9.28	Kazakhstan	3.24	Peru	[22.25]	Venezuela	20.16
Croatia	0.38	Kenya	[32.26]	Philippines	13.78	Vietnam	[2.15]
Cuba	9.51	Kuwait	0.26	Poland	0.11	Zaire	[36.05]
Czech Rep.	0.43	Kyrgyzstan	8.28	Portugal	0.17	Zambia	[34.88]
Denmark	[7.86]	Laos	[28.81]	Romania	1.08	Zimbabwe	19.43
Dom. Rep.	[14.65]	Latvia	0.23	Russia	0.90		
Ecuador	14.28	Lebanon	[12.84]	Rwanda	[36.06]		

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Variable Data

Variable: DISRES

Name: Child death rate from respiratory diseases

Units: Deaths/100,000 Population Aged 0-14

Reference Year: MRYA 1990-1998

Source: World Health Organisation. 1997-1999 World Health Statistics Annual. Geneva: WHO, 2000, available at <http://www.who.int/whosis/mort/download.htm>

Logic: Indicator of the degree to which children are impacted by poor air quality.

Methodology: The final number is based on an aggregation of deaths recorded for WHO codes B31 and B320, and B321, by sex and by age. These were then combined with UN Population Division population data broken down by age group to produce rates. See page 22 of the 2001 ESI report for more details on the methodology.

Mean	77	Max	251.62	97.5 percentile cut-off value:	222.27
Median	48.63	Min	0.24	2.5 percentile cut-off value:	0.47

Albania	40.92	Egypt	120.86	Liberia	[199.62]	Saudi Arabia	[36.42]
Algeria	[120.26]	El Salvador	17.69	Libya	[96.87]	Senegal	[121.23]
Angola	[221.92]	Estonia	5.12	Lithuania	3.11	Sierra Leone	[215.9]
Argentina	10.34	Ethiopia	[221.53]	Macedonia	[68.08]	Slovakia	10.63
Armenia	[42.14]	Finland	0.41	Madagascar	[161.86]	Slovenia	1.39
Australia	1.37	France	0.78	Malawi	[213.72]	Somalia	[209.11]
Austria	0.28	Gabon	[202.51]	Malaysia	[3.8]	South Africa	19.57
Azerbaijan	[50.96]	Gambia	[68.22]	Mali	[223.16]	South Korea	2.55
Bangladesh	[111.5]	Germany	0.51	Mauritania	[222.75]	Spain	0.64
Belgium	0.94	Ghana	[130.52]	Mexico	27.97	Sri Lanka	[47.2]
Benin	[180.36]	Greece	1.63	Moldova	33.59	Sudan	[117.08]
Bhutan	[114.36]	Guatemala	[63.95]	Mongolia	179.57	Sweden	1.03
Bolivia	[93.6]	Guinea	[182.11]	Morocco	[72.73]	Switzerland	[1.93]
Bosnia and H.	[60.45]	Guinea-Bissau	[208.4]	Mozambique	[190]	Syria	[42.55]
Botswana	[103.43]	Haiti	[98.13]	Myanmar	[169]	Tajikistan	[123.09]
Brazil	[28.63]	Honduras	[59.24]	Namibia	[56.51]	Tanzania	[148.89]
Bulgaria	19.52	Hungary	4.04	Nepal	[132.62]	Thailand	[14.48]
Burkina Faso	[195.77]	Iceland	3.07	Netherlands	0.88	Togo	[145.58]
Burundi	[161.39]	India	[83.54]	New Zealand	1.75	Trin. and Tob.	6.38
Byelarus	[73.65]	Indonesia	[70.56]	Nicaragua	26.20	Tunisia	[61.47]
Cambodia	[129.74]	Iran	[36.84]	Niger	[216.55]	Turkey	[42.77]
Cameroon	[191.62]	Iraq	[161.79]	Nigeria	[198.83]	Turkmenistan	251.62
Canada	0.62	Ireland	1.43	North Korea	[45.97]	Uganda	[122.21]
Central Af. R.	[170.89]	Israel	1.45	Norway	0.24	Ukraine	[26.05]
Chad	[210.08]	Italy	0.70	Oman	[30.92]	United Ar. Em.	[39.53]
Chile	11.86	Ivory Coast	[204.09]	Pakistan	[69.75]	United King.	1.78
China	[62.56]	Jamaica	[34.07]	Panama	[48.82]	United States	[40.43]
Colombia	12.73	Japan	1.52	Papua N.G.	[147.17]	Uruguay	11.00
Congo	[109.12]	Jordan	[56.45]	Paraguay	20.03	Uzbekistan	[131.06]
Costa Rica	6.35	Kazakhstan	46.00	Peru	[66.26]	Venezuela	19.07
Croatia	2.77	Kenya	[130.66]	Philippines	46.49	Vietnam	[30.24]
Cuba	5.11	Kuwait	3.53	Poland	2.67	Zaire	[190.89]
Czech Rep.	2.35	Kyrgyzstan	[126.21]	Portugal	1.87	Zambia	[200.12]
Denmark	[15.14]	Laos	[120.75]	Romania	48.44	Zimbabwe	44.52
Dom. Rep.	[35.77]	Latvia	[69.04]	Russia	[31.35]		
Ecuador	32.80	Lebanon	[68.43]	Rwanda	[158.85]		

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Variable Data

Variable: DJSGI
Name: Dow Jones Sustainability Group Index: percent of eligible companies in index
Units: Percentage **Reference Year:** 2000
Source: "Assessment of the Country Allocation of the Dow Jones Sustainability Group Index", SAM Sustainability Group
Logic: The Dow Jones Sustainability Group Index tracks a group of companies that have been rated as the top 10% in terms of sustainability. Firms that are already in the Dow Jones Global Index are eligible to enter the Sustainability Group Index. Countries in which a higher percentage of eligible firms meet the requirements have a private sector that is contributing more strongly to environmental sustainability.

Methodology: For each country, the number of companies in the Sustainability Index was divided by the number of companies in the Global Index.

Mean	24.7	Max	84.9	97.5 percentile cut-off value:	84.9
Median	17.9	Min	0	2.5 percentile cut-off value:	0

Albania	--	Egypt	--	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	--	Libya	--	Senegal	--
Angola	--	Estonia	--	Lithuania	--	Sierra Leone	--
Argentina	--	Ethiopia	--	Macedonia	--	Slovakia	--
Armenia	--	Finland	84.90	Madagascar	--	Slovenia	--
Australia	20.80	France	23.40	Malawi	--	Somalia	--
Austria	0.00	Gabon	--	Malaysia	5.20	South Africa	17.70
Azerbaijan	--	Gambia	--	Mali	--	South Korea	0.00
Bangladesh	--	Germany	75.20	Mauritania	--	Spain	63.40
Belgium	32.80	Ghana	--	Mexico	0.00	Sri Lanka	--
Benin	--	Greece	0.40	Moldova	--	Sudan	--
Bhutan	--	Guatemala	--	Mongolia	--	Sweden	56.60
Bolivia	--	Guinea	--	Morocco	--	Switzerland	82.40
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	5.90	Honduras	--	Namibia	--	Tanzania	--
Bulgaria	--	Hungary	--	Nepal	--	Thailand	0.00
Burkina Faso	--	Iceland	--	Netherlands	64.50	Togo	--
Burundi	--	India	--	New Zealand	0.00	Trin. and Tob.	--
Byelarus	--	Indonesia	0.00	Nicaragua	--	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	--
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	19.00	Ireland	30.20	North Korea	--	Uganda	--
Central Af. R.	--	Israel	--	Norway	33.10	Ukraine	--
Chad	--	Italy	4.80	Oman	--	United Ar. Em.	--
Chile	3.70	Ivory Coast	--	Pakistan	--	United King.	68.00
China	--	Jamaica	--	Panama	--	United States	19.80
Colombia	--	Japan	17.90	Papua N.G.	--	Uruguay	--
Congo	--	Jordan	--	Paraguay	--	Uzbekistan	--
Costa Rica	--	Kazakhstan	--	Peru	--	Venezuela	0.00
Croatia	--	Kenya	--	Philippines	0.00	Vietnam	--
Cuba	--	Kuwait	--	Poland	--	Zaire	--
Czech Rep.	--	Kyrgyzstan	--	Portugal	2.80	Zambia	--
Denmark	33.10	Laos	--	Romania	--	Zimbabwe	--
Dom. Rep.	--	Latvia	--	Russia	--		
Ecuador	--	Lebanon	--	Rwanda	--		

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Variable Data

Variable: ECOVAL

Name: Average Innovest EcoValue rating of firms

Units: Ratings from 1 (Worst) to 7 (Best)

Reference Year: 2001

Source: Innovest Strategic Value Advisors

Logic: The Innovest EcoValue '21 rating measures environmental performance at the firm level.

Methodology: Within each country, EcoValue levels were weighted by market capitalization share and then averaged to get a value for the individual country, based on the location of company headquarters.

Mean	4.45	Max	6.77	97.5 percentile cut-off value:	6.77
Median	4.52	Min	1.46	2.5 percentile cut-off value:	1.46

Albania	--	Egypt	--	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	--	Libya	--	Senegal	--
Angola	--	Estonia	--	Lithuania	--	Sierra Leone	--
Argentina	--	Ethiopia	--	Macedonia	--	Slovakia	--
Armenia	--	Finland	6.77	Madagascar	--	Slovenia	--
Australia	1.46	France	4.21	Malawi	--	Somalia	--
Austria	--	Gabon	--	Malaysia	--	South Africa	--
Azerbaijan	--	Gambia	--	Mali	--	South Korea	--
Bangladesh	--	Germany	5.06	Mauritania	--	Spain	2.25
Belgium	4.52	Ghana	--	Mexico	3.38	Sri Lanka	--
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	--	Mongolia	--	Sweden	5.67
Bolivia	--	Guinea	--	Morocco	--	Switzerland	5.75
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	--	Honduras	--	Namibia	--	Tanzania	--
Bulgaria	--	Hungary	--	Nepal	--	Thailand	--
Burkina Faso	--	Iceland	--	Netherlands	6.12	Togo	--
Burundi	--	India	--	New Zealand	--	Trin. and Tob.	--
Byelarus	--	Indonesia	--	Nicaragua	--	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	--
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	4.47	Ireland	3.11	North Korea	--	Uganda	--
Central Af. R.	--	Israel	3.00	Norway	6.14	Ukraine	--
Chad	--	Italy	2.78	Oman	--	United Ar. Em.	--
Chile	--	Ivory Coast	--	Pakistan	--	United King.	5.05
China	--	Jamaica	--	Panama	--	United States	4.61
Colombia	--	Japan	6.16	Papua N.G.	--	Uruguay	--
Congo	--	Jordan	--	Paraguay	--	Uzbekistan	--
Costa Rica	--	Kazakhstan	--	Peru	--	Venezuela	--
Croatia	--	Kenya	--	Philippines	--	Vietnam	--
Cuba	--	Kuwait	--	Poland	--	Zaire	--
Czech Rep.	--	Kyrgyzstan	--	Portugal	--	Zambia	--
Denmark	3.96	Laos	--	Romania	--	Zimbabwe	--
Dom. Rep.	--	Latvia	--	Russia	--		
Ecuador	--	Lebanon	--	Rwanda	--		

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Variable Data

Variable: EFPC

Name: Ecological footprint per capita

Units: Hectares per Person

Reference Year: 1996

Source: World Wide Fund for Nature (WWF), Living Planet Report 2000, Gland, Switzerland: 2000, and Redefining Progress at <http://www.rprogress.org/programs/sustainability/ef/>

Logic: The ecological footprint is a measure of the biologically productive land that is required to sustain a country's population at current consumption levels.

Methodology:

Mean	3.11	Max	15.99	97.5 percentile cut-off value:	10.06
Median	2.08	Min	0.6	2.5 percentile cut-off value:	0.71

Albania	1.86	Egypt	1.70	Liberia	1.16	Saudi Arabia	6.15
Algeria	1.79	El Salvador	1.55	Libya	4.36	Senegal	1.06
Angola	0.82	Estonia	7.12	Lithuania	4.76	Sierra Leone	0.73
Argentina	3.79	Ethiopia	0.85	Macedonia	3.24	Slovakia	3.94
Armenia	1.16	Finland	8.45	Madagascar	0.93	Slovenia	5.40
Australia	8.49	France	7.27	Malawi	0.87	Somalia	0.97
Austria	5.45	Gabon	2.06	Malaysia	3.68	South Africa	4.04
Azerbaijan	2.18	Gambia	0.99	Mali	0.86	South Korea	5.60
Bangladesh	0.60	Germany	6.31	Mauritania	1.22	Spain	5.50
Belgium	5.88	Ghana	1.12	Mexico	2.69	Sri Lanka	0.95
Benin	0.97	Greece	5.58	Moldova	2.47	Sudan	1.14
Bhutan	0.79	Guatemala	1.40	Mongolia	4.30	Sweden	7.53
Bolivia	1.29	Guinea	0.85	Morocco	1.56	Switzerland	6.63
Bosnia and H.	1.29	Guinea-Bissau	0.80	Mozambique	0.76	Syria	2.56
Botswana	1.68	Haiti	0.78	Myanmar	1.07	Tajikistan	0.90
Brazil	2.60	Honduras	1.43	Namibia	0.66	Tanzania	1.02
Bulgaria	3.81	Hungary	5.01	Nepal	1.01	Thailand	2.70
Burkina Faso	0.90	Iceland	[6.02]	Netherlands	5.75	Togo	0.82
Burundi	0.75	India	1.06	New Zealand	9.54	Trin. and Tob.	2.43
Byelarus	5.27	Indonesia	1.48	Nicaragua	1.26	Tunisia	2.27
Cambodia	0.83	Iran	2.47	Niger	0.97	Turkey	2.73
Cameroon	0.89	Iraq	1.73	Nigeria	1.31	Turkmenistan	3.62
Canada	7.66	Ireland	9.43	North Korea	1.92	Uganda	0.88
Central Af. R.	1.12	Israel	5.40	Norway	6.13	Ukraine	4.76
Chad	0.75	Italy	5.51	Oman	3.39	United Ar. Em.	15.99
Chile	3.39	Ivory Coast	0.95	Pakistan	1.09	United King.	6.29
China	1.84	Jamaica	2.68	Panama	2.35	United States	12.22
Colombia	1.90	Japan	5.94	Papua N.G.	1.40	Uruguay	4.91
Congo	1.15	Jordan	1.71	Paraguay	2.84	Uzbekistan	2.65
Costa Rica	2.77	Kazakhstan	4.45	Peru	1.33	Venezuela	2.88
Croatia	2.35	Kenya	1.15	Philippines	1.42	Vietnam	0.95
Cuba	2.10	Kuwait	10.31	Poland	5.40	Zaire	0.69
Czech Rep.	6.30	Kyrgyzstan	1.87	Portugal	4.99	Zambia	1.21
Denmark	9.88	Laos	0.91	Romania	3.49	Zimbabwe	1.45
Dom. Rep.	1.37	Latvia	3.74	Russia	5.36		
Ecuador	2.26	Lebanon	3.19	Rwanda	0.90		

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Variable Data

Variable: EIA
Name: Number of sectoral EIA guidelines
Units: Number of Guidelines **Reference Year:** 1998
Source: IIED, WRI and IUCN, A Directory of Impact Assessment Guidelines (Second Edition). London: IIED, 1998.
Logic: Environmental Impact Assessment guidelines mandated by national governments are an important prerequisite for sound environmental management.

Methodology:

Mean 4.46 **Max** 13 **97.5 percentile cut-off value:** 12.1
Median 3 **Min** 1 **2.5 percentile cut-off value:** 1

Albania	--	Egypt	11.00	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	--	Libya	--	Senegal	--
Angola	--	Estonia	--	Lithuania	--	Sierra Leone	--
Argentina	6.00	Ethiopia	--	Macedonia	--	Slovakia	8.00
Armenia	--	Finland	5.00	Madagascar	--	Slovenia	--
Australia	1.00	France	7.00	Malawi	2.00	Somalia	--
Austria	1.00	Gabon	--	Malaysia	13.00	South Africa	8.00
Azerbaijan	--	Gambia	8.00	Mali	--	South Korea	--
Bangladesh	3.00	Germany	3.00	Mauritania	--	Spain	6.00
Belgium	9.00	Ghana	1.00	Mexico	2.00	Sri Lanka	2.00
Benin	--	Greece	1.00	Moldova	--	Sudan	--
Bhutan	--	Guatemala	--	Mongolia	--	Sweden	3.00
Bolivia	7.00	Guinea	--	Morocco	--	Switzerland	6.00
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	1.00	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	2.00	Honduras	--	Namibia	--	Tanzania	1.00
Bulgaria	--	Hungary	--	Nepal	6.00	Thailand	7.00
Burkina Faso	--	Iceland	--	Netherlands	3.00	Togo	--
Burundi	--	India	9.00	New Zealand	3.00	Trin. and Tob.	--
Byelarus	--	Indonesia	5.00	Nicaragua	--	Tunisia	--
Cambodia	--	Iran	--	Niger	1.00	Turkey	--
Cameroon	--	Iraq	--	Nigeria	1.00	Turkmenistan	--
Canada	9.00	Ireland	2.00	North Korea	--	Uganda	--
Central Af. R.	--	Israel	--	Norway	--	Ukraine	--
Chad	--	Italy	4.00	Oman	2.00	United Ar. Em.	--
Chile	9.00	Ivory Coast	--	Pakistan	8.00	United King.	9.00
China	1.00	Jamaica	--	Panama	--	United States	9.00
Colombia	2.00	Japan	--	Papua N.G.	--	Uruguay	--
Congo	--	Jordan	--	Paraguay	4.00	Uzbekistan	--
Costa Rica	8.00	Kazakhstan	--	Peru	6.00	Venezuela	2.00
Croatia	--	Kenya	1.00	Philippines	1.00	Vietnam	2.00
Cuba	--	Kuwait	2.00	Poland	--	Zaire	--
Czech Rep.	1.00	Kyrgyzstan	--	Portugal	7.00	Zambia	--
Denmark	1.00	Laos	--	Romania	--	Zimbabwe	9.00
Dom. Rep.	--	Latvia	--	Russia	2.00		
Ecuador	1.00	Lebanon	--	Rwanda	--		

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Variable Data

Variable: EIONUM
Name: Number of memberships in environmental intergovernmental organizations
Units: Number of Memberships **Reference Year:** 1998
Source: Organizational Memberships from "Yearbook of International Organizations," provided in digital form from Monty Marshall, University of Maryland.
Logic: Countries contribute to global environmental governance by participating in intergovernmental environmental organizations.

Methodology: 100 Intergovernmental organizations were coded as "environmental" by CIESIN. (list available upon request)

Mean	12.98	Max	35	97.5 percentile cut-off value:	28.95
Median	12	Min	2	2.5 percentile cut-off value:	3

Albania	6.00	Egypt	21.00	Liberia	10.00	Saudi Arabia	8.00
Algeria	14.00	El Salvador	10.00	Libya	10.00	Senegal	14.00
Angola	8.00	Estonia	8.00	Lithuania	8.00	Sierra Leone	11.00
Argentina	15.00	Ethiopia	9.00	Macedonia	6.00	Slovakia	12.00
Armenia	4.00	Finland	25.00	Madagascar	9.00	Slovenia	11.00
Australia	19.00	France	35.00	Malawi	12.00	Somalia	8.00
Austria	20.00	Gabon	13.00	Malaysia	16.00	South Africa	13.00
Azerbaijan	5.00	Gambia	8.00	Mali	12.00	South Korea	16.00
Bangladesh	7.00	Germany	34.00	Mauritania	12.00	Spain	27.00
Belgium	26.00	Ghana	13.00	Mexico	15.00	Sri Lanka	14.00
Benin	10.00	Greece	23.00	Moldova	5.00	Sudan	15.00
Bhutan	2.00	Guatemala	13.00	Mongolia	5.00	Sweden	27.00
Bolivia	15.00	Guinea	5.00	Morocco	18.00	Switzerland	24.00
Bosnia and H.	5.00	Guinea-Bissau	11.00	Mozambique	6.00	Syria	15.00
Botswana	6.00	Haiti	8.00	Myanmar	--	Tajikistan	3.00
Brazil	20.00	Honduras	9.00	Namibia	6.00	Tanzania	16.00
Bulgaria	11.00	Hungary	15.00	Nepal	6.00	Thailand	16.00
Burkina Faso	9.00	Iceland	--	Netherlands	30.00	Togo	13.00
Burundi	5.00	India	23.00	New Zealand	12.00	Trin. and Tob.	12.00
Byelarus	5.00	Indonesia	15.00	Nicaragua	12.00	Tunisia	16.00
Cambodia	6.00	Iran	11.00	Niger	10.00	Turkey	14.00
Cameroon	18.00	Iraq	13.00	Nigeria	17.00	Turkmenistan	4.00
Canada	18.00	Ireland	19.00	North Korea	5.00	Uganda	13.00
Central Af. R.	7.00	Israel	12.00	Norway	26.00	Ukraine	8.00
Chad	9.00	Italy	26.00	Oman	10.00	United Ar. Em.	11.00
Chile	10.00	Ivory Coast	22.00	Pakistan	14.00	United King.	28.00
China	12.00	Jamaica	10.00	Panama	14.00	United States	23.00
Colombia	16.00	Japan	24.00	Papua N.G.	11.00	Uruguay	11.00
Congo	11.00	Jordan	11.00	Paraguay	9.00	Uzbekistan	5.00
Costa Rica	12.00	Kazakhstan	5.00	Peru	15.00	Venezuela	16.00
Croatia	9.00	Kenya	17.00	Philippines	14.00	Vietnam	8.00
Cuba	13.00	Kuwait	10.00	Poland	16.00	Zaire	12.00
Czech Rep.	12.00	Kyrgyzstan	3.00	Portugal	21.00	Zambia	10.00
Denmark	26.00	Laos	3.00	Romania	13.00	Zimbabwe	11.00
Dom. Rep.	10.00	Latvia	8.00	Russia	22.00		
Ecuador	17.00	Lebanon	10.00	Rwanda	5.00		

2002 ESI: Annex 6

Variable Data

Variable: ENEFF

Name: Energy efficiency (total energy consumption per unit GDP)

Units: Billion Btu/Million Dollars GDP

Reference Year: 1999

Source: US Energy Information Agency, <http://www.eia.doe.gov/emeu/international/contents.html>

Logic: The more efficient an economy is, the less energy it needs to produce goods and services.

Methodology:

Mean	9.11	Max	41.41	97.5 percentile cut-off value:	35.43
Median	7.14	Min	0.38	2.5 percentile cut-off value:	0.94

Albania	7.36	Egypt	9.42	Liberia	[4.74]	Saudi Arabia	19.88
Algeria	8.63	El Salvador	3.89	Libya	[12.24]	Senegal	4.20
Angola	2.72	Estonia	8.68	Lithuania	13.03	Sierra Leone	5.79
Argentina	6.05	Ethiopia	1.37	Macedonia	13.77	Slovakia	12.26
Armenia	10.68	Finland	10.99	Madagascar	2.04	Slovenia	8.57
Australia	10.17	France	7.64	Malawi	3.85	Somalia	[3.31]
Austria	6.84	Gabon	7.26	Malaysia	9.10	South Africa	11.58
Azerbaijan	28.20	Gambia	1.54	Mali	1.33	South Korea	9.94
Bangladesh	2.36	Germany	7.17	Mauritania	11.46	Spain	7.33
Belgium	10.03	Ghana	3.05	Mexico	7.63	Sri Lanka	2.81
Benin	2.64	Greece	7.90	Moldova	16.43	Sudan	[4.77]
Bhutan	4.81	Guatemala	3.57	Mongolia	17.16	Sweden	10.98
Bolivia	6.40	Guinea	1.52	Morocco	4.29	Switzerland	6.35
Bosnia and H.	[13.03]	Guinea-Bissau	5.25	Mozambique	1.57	Syria	15.76
Botswana	4.31	Haiti	1.92	Myanmar	[4.98]	Tajikistan	41.41
Brazil	7.11	Honduras	5.72	Namibia	2.15	Tanzania	3.06
Bulgaria	19.81	Hungary	9.27	Nepal	1.80	Thailand	6.71
Burkina Faso	1.06	Iceland	16.46	Netherlands	10.05	Togo	2.91
Burundi	1.80	India	5.43	New Zealand	11.15	Trin. and Tob.	37.84
Byelarus	15.91	Indonesia	6.05	Nicaragua	5.77	Tunisia	5.20
Cambodia	0.49	Iran	13.40	Niger	2.10	Turkey	7.20
Cameroon	3.81	Iraq	[20.55]	Nigeria	8.59	Turkmenistan	18.62
Canada	15.63	Ireland	5.78	North Korea	[24.07]	Uganda	1.05
Central Af. R.	1.21	Israel	6.88	Norway	14.90	Ukraine	37.22
Chad	0.38	Italy	6.28	Oman	[13.61]	United Ar. Em.	[23.03]
Chile	7.44	Ivory Coast	6.76	Pakistan	7.41	United King.	7.54
China	7.03	Jamaica	16.83	Panama	9.48	United States	10.93
Colombia	5.03	Japan	6.88	Papua N.G.	4.23	Uruguay	5.18
Congo	8.74	Jordan	11.46	Paraguay	4.66	Uzbekistan	34.12
Costa Rica	4.19	Kazakhstan	19.56	Peru	4.58	Venezuela	21.17
Croatia	12.41	Kenya	5.02	Philippines	3.93	Vietnam	4.01
Cuba	[3.36]	Kuwait	[15.28]	Poland	11.74	Zaire	[5.86]
Czech Rep.	11.55	Kyrgyzstan	17.93	Portugal	6.32	Zambia	12.87
Denmark	6.42	Laos	0.80	Romania	11.90	Zimbabwe	6.33
Dom. Rep.	4.22	Latvia	10.07	Russia	23.36		
Ecuador	9.77	Lebanon	12.16	Rwanda	1.71		

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Variable Data

Variable: ESIMIS

Name: Percent of ESI variables missing from public global data sets

Units: Percentage

Reference Year: 2002

Source: 2002 Environmental Sustainability Index data set.

Logic: The greater the number of missing variables, the poorer the data availability in that country. Environmental monitoring and data systems are vital for tracking progress towards environmental sustainability.

Methodology: Data coverage for the following variables was evaluated: SO₂, NO₂, TSP, GMS_DO, GMS_PH, GMS_SS, GMS_EC, PRTMAM, PRTBRD, NOXKM, SO₂KM, VOCKM, COALKM, CARSKM, FERTHA, PESTHA, BODWAT, FOREST, TFR, GR2050, UND_NO, WATSUP, DISRES, DISINT, U5MR, TAI, SCHOOL, PRAREA, EIA, ENEFF, RENPC, FSHCAT, and FSHCON.

Mean	8.8	Max	17	97.5 percentile cut-off value:	16
Median	9	Min	0	2.5 percentile cut-off value:	0.58

Albania	8.00	Egypt	6.00	Liberia	16.00	Saudi Arabia	14.00
Algeria	9.00	El Salvador	7.00	Libya	15.00	Senegal	8.00
Angola	13.00	Estonia	9.00	Lithuania	4.00	Sierra Leone	14.00
Argentina	3.00	Ethiopia	13.00	Macedonia	13.00	Slovakia	3.00
Armenia	11.00	Finland	0.00	Madagascar	13.00	Slovenia	5.00
Australia	4.00	France	2.00	Malawi	13.00	Somalia	16.00
Austria	3.00	Gabon	14.00	Malaysia	3.00	South Africa	6.00
Azerbaijan	15.00	Gambia	14.00	Mali	9.00	South Korea	2.00
Bangladesh	9.00	Germany	3.00	Mauritania	14.00	Spain	4.00
Belgium	4.00	Ghana	7.00	Mexico	2.00	Sri Lanka	11.00
Benin	12.00	Greece	4.00	Moldova	7.00	Sudan	8.00
Bhutan	16.00	Guatemala	9.00	Mongolia	13.00	Sweden	4.00
Bolivia	12.00	Guinea	13.00	Morocco	9.00	Switzerland	5.00
Bosnia and H.	16.00	Guinea-Bissau	13.00	Mozambique	11.00	Syria	11.00
Botswana	12.00	Haiti	11.00	Myanmar	11.00	Tajikistan	16.00
Brazil	3.00	Honduras	9.00	Namibia	14.00	Tanzania	10.00
Bulgaria	4.00	Hungary	1.00	Nepal	11.00	Thailand	3.00
Burkina Faso	14.00	Iceland	7.00	Netherlands	0.00	Togo	12.00
Burundi	15.00	India	5.00	New Zealand	1.00	Trin. and Tob.	11.00
Byelarus	12.00	Indonesia	5.00	Nicaragua	7.00	Tunisia	10.00
Cambodia	14.00	Iran	7.00	Niger	14.00	Turkey	5.00
Cameroon	11.00	Iraq	13.00	Nigeria	14.00	Turkmenistan	15.00
Canada	0.00	Ireland	6.00	North Korea	17.00	Uganda	11.00
Central Af. R.	13.00	Israel	7.00	Norway	2.00	Ukraine	6.00
Chad	14.00	Italy	4.00	Oman	15.00	United Ar. Em.	16.00
Chile	4.00	Ivory Coast	13.00	Pakistan	7.00	United King.	2.00
China	4.00	Jamaica	11.00	Panama	9.00	United States	4.00
Colombia	3.00	Japan	3.00	Papua N.G.	11.00	Uruguay	8.00
Congo	12.00	Jordan	8.00	Paraguay	10.00	Uzbekistan	14.00
Costa Rica	4.00	Kazakhstan	10.00	Peru	12.00	Venezuela	6.00
Croatia	6.00	Kenya	9.00	Philippines	3.00	Vietnam	13.00
Cuba	7.00	Kuwait	12.00	Poland	2.00	Zaire	15.00
Czech Rep.	5.00	Kyrgyzstan	14.00	Portugal	1.00	Zambia	13.00
Denmark	5.00	Laos	14.00	Romania	4.00	Zimbabwe	8.00
Dom. Rep.	12.00	Latvia	7.00	Russia	4.00		
Ecuador	5.00	Lebanon	13.00	Rwanda	13.00		

2002 ESI: Annex 6

Variable Data

Variable: FCCC

Name: Participation in the UN Framework Convention on Climate Change

Units: Score Ranging from 0 (Low) to 2 (High)

Reference Year: 2001

Source: United Nations Framework Convention on Climate Change web site at <http://www.unfccc.int>

Logic: Climate change is a global environmental problem that can only be solved through international cooperation. This is a measure of national-level political commitment to address climate change.

Methodology: Countries receive one point for signature and one point for ratification.

Mean	1.53	Max	2	97.5 percentile cut-off value:	2
Median	2	Min	0	2.5 percentile cut-off value:	0

Albania	1.00	Egypt	2.00	Liberia	0.00	Saudi Arabia	1.00
Algeria	2.00	El Salvador	2.00	Libya	1.00	Senegal	2.00
Angola	1.00	Estonia	2.00	Lithuania	1.00	Sierra Leone	1.00
Argentina	2.00	Ethiopia	2.00	Macedonia	1.00	Slovakia	2.00
Armenia	2.00	Finland	2.00	Madagascar	1.00	Slovenia	1.00
Australia	2.00	France	2.00	Malawi	1.00	Somalia	0.00
Austria	2.00	Gabon	1.00	Malaysia	2.00	South Africa	1.00
Azerbaijan	2.00	Gambia	1.00	Mali	2.00	South Korea	2.00
Bangladesh	1.00	Germany	2.00	Mauritania	1.00	Spain	2.00
Belgium	2.00	Ghana	2.00	Mexico	2.00	Sri Lanka	2.00
Benin	1.00	Greece	2.00	Moldova	2.00	Sudan	1.00
Bhutan	2.00	Guatemala	1.00	Mongolia	2.00	Sweden	2.00
Bolivia	2.00	Guinea	1.00	Morocco	2.00	Switzerland	2.00
Bosnia and H.	1.00	Guinea-Bissau	1.00	Mozambique	1.00	Syria	1.00
Botswana	2.00	Haiti	1.00	Myanmar	1.00	Tajikistan	1.00
Brazil	1.00	Honduras	2.00	Namibia	1.00	Tanzania	1.00
Bulgaria	2.00	Hungary	2.00	Nepal	1.00	Thailand	2.00
Burkina Faso	1.00	Iceland	2.00	Netherlands	2.00	Togo	1.00
Burundi	2.00	India	1.00	New Zealand	2.00	Trin. and Tob.	1.00
Byelarus	1.00	Indonesia	2.00	Nicaragua	2.00	Tunisia	2.00
Cambodia	1.00	Iran	1.00	Niger	2.00	Turkey	0.00
Cameroon	1.00	Iraq	0.00	Nigeria	1.00	Turkmenistan	2.00
Canada	2.00	Ireland	2.00	North Korea	1.00	Uganda	1.00
Central Af. R.	1.00	Israel	2.00	Norway	2.00	Ukraine	1.00
Chad	2.00	Italy	2.00	Oman	1.00	United Ar. Em.	1.00
Chile	2.00	Ivory Coast	2.00	Pakistan	1.00	United King.	2.00
China	1.00	Jamaica	2.00	Panama	2.00	United States	2.00
Colombia	1.00	Japan	2.00	Papua N.G.	1.00	Uruguay	2.00
Congo	2.00	Jordan	2.00	Paraguay	1.00	Uzbekistan	2.00
Costa Rica	2.00	Kazakhstan	2.00	Peru	2.00	Venezuela	1.00
Croatia	1.00	Kenya	1.00	Philippines	2.00	Vietnam	1.00
Cuba	2.00	Kuwait	1.00	Poland	2.00	Zaire	2.00
Czech Rep.	2.00	Kyrgyzstan	1.00	Portugal	2.00	Zambia	1.00
Denmark	2.00	Laos	2.00	Romania	2.00	Zimbabwe	2.00
Dom. Rep.	1.00	Latvia	2.00	Russia	2.00		
Ecuador	2.00	Lebanon	2.00	Rwanda	1.00		

2002 ESI: Annex 6

Variable Data

Variable: FERTHA

Name: Fertilizer consumption per hectare of arable land

Units: Hundreds Grams/Hectare of Arable Land

Reference Year: 1998

Source: World Bank, World Development Indicators 2001. Washington, DC: World Bank, 2001.

Logic: Excessive use of fertilizers from agricultural activities has a negative impact on soil and water, altering chemistry and levels of nutrients and leading to eutrophication problems.

Methodology:

Mean	1437.62	Max	31000	97.5 percentile cut-off value:	7911.78
Median	675.295	Min	0	2.5 percentile cut-off value:	1.07

Albania	433.28	Egypt	3926.08	Liberia	0.00	Saudi Arabia	870.27
Algeria	125.05	El Salvador	1475.00	Libya	277.13	Senegal	120.18
Angola	17.33	Estonia	289.26	Lithuania	474.70	Sierra Leone	61.98
Argentina	323.80	Ethiopia	165.07	Macedonia	749.57	Slovakia	722.64
Armenia	0.00	Finland	1407.48	Madagascar	33.83	Slovenia	3315.58
Australia	392.38	France	2630.98	Malawi	267.73	Somalia	4.81
Austria	1803.87	Gabon	12.31	Malaysia	7725.88	South Africa	529.11
Azerbaijan	141.75	Gambia	76.92	Mali	114.25	South Korea	5117.10
Bangladesh	1465.22	Germany	2473.66	Mauritania	43.03	Spain	1475.35
Belgium	3743.84	Ghana	42.06	Mexico	676.87	Sri Lanka	2682.72
Benin	221.81	Greece	1709.46	Moldova	673.72	Sudan	22.46
Bhutan	7.14	Guatemala	1635.29	Mongolia	37.85	Sweden	1006.47
Bolivia	37.71	Guinea	37.11	Morocco	387.91	Switzerland	7927.71
Bosnia and H.	618.80	Guinea-Bissau	20.00	Mozambique	16.14	Syria	698.80
Botswana	122.45	Haiti	144.46	Myanmar	179.94	Tajikistan	766.34
Brazil	1078.29	Honduras	825.33	Namibia	[1292.97]	Tanzania	74.20
Bulgaria	394.31	Hungary	945.84	Nepal	418.56	Thailand	988.61
Burkina Faso	147.74	Iceland	31000.00	Netherlands	5132.45	Togo	78.18
Burundi	26.92	India	1040.09	New Zealand	4254.02	Trin. and Tob.	1413.33
Byelarus	1478.91	Indonesia	1545.57	Nicaragua	214.08	Tunisia	416.73
Cambodia	34.37	Iran	743.90	Niger	1.86	Turkey	892.34
Cameroon	66.33	Iraq	737.31	Nigeria	66.77	Turkmenistan	926.38
Canada	581.65	Ireland	5210.33	North Korea	924.74	Uganda	3.68
Central Af. R.	3.11	Israel	3450.14	Norway	2257.71	Ukraine	158.87
Chad	47.78	Italy	2103.86	Oman	3750.00	United Ar. Em.	7900.00
Chile	2255.68	Ivory Coast	384.41	Pakistan	1148.77	United King.	3325.35
China	2825.56	Jamaica	1347.41	Panama	644.72	United States	1117.48
Colombia	3015.87	Japan	3131.20	Papua N.G.	2500.00	Uruguay	1058.17
Congo	289.02	Jordan	918.86	Paraguay	279.55	Uzbekistan	1920.45
Costa Rica	8795.56	Kazakhstan	15.45	Peru	519.62	Venezuela	919.70
Croatia	1390.28	Kenya	319.00	Philippines	1141.69	Vietnam	3416.49
Cuba	467.52	Kuwait	3500.00	Poland	1162.54	Zaire	0.00
Czech Rep.	970.48	Kyrgyzstan	419.50	Portugal	1319.15	Zambia	76.62
Denmark	1704.02	Laos	127.07	Romania	385.74	Zimbabwe	541.61
Dom. Rep.	892.52	Latvia	241.72	Russia	86.27		
Ecuador	1096.00	Lebanon	3360.33	Rwanda	3.66		

2002 ESI: Annex 6

Variable Data

Variable: FOREST
Name: Forest cover change 1990-2000, annual change rate (percentage)
Units: Percent Change **Reference Year:** 1990-2000
Source: Source: Forest Resources Assessment 2000. <http://www.fao.org/forestry/fo/fra/index.jsp>
Logic: When forests are lost or severely degraded, their capacity to function as regulators for the environment is also lost, increasing flood and erosion hazards, reducing soil fertility, and contributing to the loss of plant and animal life. As a result, the sustainable provision of goods and services from forests is jeopardized (Forest Resources Assessment).

Methodology:

Mean	-0.3	Max	5.3	97.5 percentile cut-off value:	3.39
Median	-0.05	Min	-9	2.5 percentile cut-off value:	-4.2

Albania	-0.80	Egypt	3.30	Liberia	-2.00	Saudi Arabia	0.00
Algeria	1.30	El Salvador	-4.60	Libya	1.40	Senegal	-0.70
Angola	-0.20	Estonia	0.60	Lithuania	0.20	Sierra Leone	-2.90
Argentina	-0.80	Ethiopia	-0.80	Macedonia	0.00	Slovakia	0.90
Armenia	1.30	Finland	0.00	Madagascar	-0.90	Slovenia	0.20
Australia	-0.18	France	0.40	Malawi	-2.40	Somalia	-1.00
Austria	0.20	Gabon	0.00	Malaysia	-1.20	South Africa	-0.10
Azerbaijan	1.30	Gambia	1.00	Mali	-0.70	South Korea	-0.10
Bangladesh	1.30	Germany	0.00	Mauritania	-2.70	Spain	0.60
Belgium	-0.20	Ghana	-1.70	Mexico	-1.10	Sri Lanka	-1.60
Benin	-2.30	Greece	0.90	Moldova	0.20	Sudan	-1.40
Bhutan	0.00	Guatemala	-1.70	Mongolia	-0.50	Sweden	0.00
Bolivia	-0.30	Guinea	-0.50	Morocco	0.00	Switzerland	0.40
Bosnia and H.	0.00	Guinea-Bissau	-0.90	Mozambique	-0.20	Syria	0.00
Botswana	-0.90	Haiti	-5.70	Myanmar	-1.40	Tajikistan	0.50
Brazil	-0.40	Honduras	-1.00	Namibia	-0.90	Tanzania	-0.20
Bulgaria	0.60	Hungary	0.40	Nepal	-1.80	Thailand	-0.70
Burkina Faso	-0.20	Iceland	2.20	Netherlands	0.30	Togo	-3.40
Burundi	-9.00	India	0.10	New Zealand	0.50	Trin. and Tob.	-0.80
Byelarus	3.20	Indonesia	-1.20	Nicaragua	-3.00	Tunisia	0.20
Cambodia	-0.90	Iran	0.00	Niger	-3.70	Turkey	0.20
Cameroon	-0.90	Iraq	0.00	Nigeria	-2.60	Turkmenistan	0.00
Canada	0.00	Ireland	3.00	North Korea	0.00	Uganda	-2.00
Central Af. R.	-0.10	Israel	4.90	Norway	0.40	Ukraine	0.30
Chad	-0.60	Italy	0.30	Oman	5.30	United Ar. Em.	2.80
Chile	-0.10	Ivory Coast	-3.10	Pakistan	-1.50	United King.	0.60
China	1.20	Jamaica	-1.50	Panama	-1.60	United States	0.20
Colombia	-0.40	Japan	0.00	Papua N.G.	-0.40	Uruguay	0.20
Congo	-0.10	Jordan	0.00	Paraguay	-0.50	Uzbekistan	0.10
Costa Rica	-0.80	Kazakhstan	2.20	Peru	-0.40	Venezuela	0.50
Croatia	0.10	Kenya	-0.50	Philippines	-1.40	Vietnam	0.00
Cuba	1.30	Kuwait	3.50	Poland	0.20	Zaire	-0.40
Czech Rep.	0.00	Kyrgyzstan	2.60	Portugal	1.70	Zambia	-2.40
Denmark	0.20	Laos	-0.40	Romania	0.20	Zimbabwe	-1.50
Dom. Rep.	0.00	Latvia	0.40	Russia	0.00		
Ecuador	-1.20	Lebanon	-0.40	Rwanda	-3.90		

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Variable Data

Variable: FSC

Name: FSC accredited forests as percent of total forest area

Units: FSC Forest Area as Percent of Total Forest Area

Reference Year: 2000

Source: Forest Stewardship Council web site, <http://www.fscoax.org/html/5-3-3.html>, and World Resources Institute, World Resources 2000-2001, Washington, DC: WRI, 2000, Data Table FG.2

Logic: This variable measures the extent to which an economy seeks sustainable forestry practices.

Methodology: In calculating the ESI, the base-10 logarithm of this variable was used.

Mean	1.98	Max	66.46	97.5 percentile cut-off value:	35.53
Median	0	Min	0	2.5 percentile cut-off value:	0

Albania	0.00	Egypt	0.00	Liberia	0.00	Saudi Arabia	0.00
Algeria	0.00	El Salvador	0.00	Libya	0.00	Senegal	0.00
Angola	0.00	Estonia	0.03	Lithuania	10.28	Sierra Leone	0.00
Argentina	0.06	Ethiopia	0.00	Macedonia	0.00	Slovakia	0.00
Armenia	0.00	Finland	0.00	Madagascar	0.00	Slovenia	0.00
Australia	0.00	France	0.09	Malawi	0.00	Somalia	0.00
Austria	0.09	Gabon	0.00	Malaysia	0.29	South Africa	9.04
Azerbaijan	0.00	Gambia	0.00	Mali	0.00	South Korea	0.00
Bangladesh	0.00	Germany	2.55	Mauritania	0.00	Spain	0.00
Belgium	0.60	Ghana	0.00	Mexico	0.95	Sri Lanka	0.92
Benin	0.00	Greece	0.00	Moldova	0.00	Sudan	0.00
Bhutan	0.00	Guatemala	10.54	Mongolia	0.00	Sweden	33.97
Bolivia	1.85	Guinea	0.00	Morocco	0.00	Switzerland	5.05
Bosnia and H.	0.00	Guinea-Bissau	0.00	Mozambique	0.00	Syria	0.00
Botswana	0.00	Haiti	0.00	Myanmar	0.00	Tajikistan	0.00
Brazil	0.16	Honduras	0.26	Namibia	0.76	Tanzania	0.00
Bulgaria	0.00	Hungary	3.30	Nepal	0.00	Thailand	0.04
Burkina Faso	0.00	Iceland	0.00	Netherlands	18.69	Togo	0.00
Burundi	0.00	India	0.00	New Zealand	5.41	Trin. and Tob.	0.00
Byelarus	0.00	Indonesia	0.10	Nicaragua	0.00	Tunisia	0.00
Cambodia	0.00	Iran	0.00	Niger	0.00	Turkey	0.00
Cameroon	0.00	Iraq	0.00	Nigeria	0.00	Turkmenistan	0.00
Canada	0.05	Ireland	66.46	North Korea	0.00	Uganda	0.00
Central Af. R.	0.00	Israel	0.00	Norway	0.06	Ukraine	0.00
Chad	0.00	Italy	0.11	Oman	0.00	United Ar. Em.	0.00
Chile	1.16	Ivory Coast	0.00	Pakistan	0.00	United King.	37.65
China	0.00	Jamaica	0.00	Panama	0.29	United States	1.38
Colombia	0.04	Japan	0.02	Papua N.G.	0.01	Uruguay	3.15
Congo	0.00	Jordan	0.00	Paraguay	0.00	Uzbekistan	0.00
Costa Rica	3.88	Kazakhstan	0.00	Peru	0.00	Venezuela	0.00
Croatia	13.53	Kenya	0.00	Philippines	0.26	Vietnam	0.00
Cuba	0.00	Kuwait	0.00	Poland	42.07	Zaire	0.00
Czech Rep.	0.40	Kyrgyzstan	0.00	Portugal	0.00	Zambia	0.00
Denmark	0.09	Laos	0.00	Romania	0.00	Zimbabwe	0.48
Dom. Rep.	0.00	Latvia	4.31	Russia	0.02		
Ecuador	0.00	Lebanon	0.00	Rwanda	0.00		

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Variable Data

Variable: FSHCAT

Name: Total marine fish catch

Units: Metric Tons

Reference Year: 1999

Source: FAOSTAT on-line database, <http://apps.fao.org/>

Logic: Many marine fisheries are becoming depleted and overfished. This is a measure of pressure on global marine fish resources. Large marine fish catches by one nation necessarily depletes the stocks available to other nations.

Methodology:

Mean	649667.01	Max	11500550	97.5 percentile cut-off value:	5897902.2
Median	109395	Min	160	2.5 percentile cut-off value:	1226.5

Albania	1679.00	Egypt	155133.00	Liberia	10861.00	Saudi Arabia	41160.00
Algeria	101540.00	El Salvador	1351.00	Libya	32450.00	Senegal	319900.00
Angola	168466.00	Estonia	95315.00	Lithuania	27482.00	Sierra Leone	41909.00
Argentina	634190.00	Ethiopia	--	Macedonia	--	Slovakia	--
Armenia	--	Finland	104058.00	Madagascar	87958.00	Slovenia	1820.00
Australia	134900.00	France	498887.00	Malawi	--	Somalia	19100.00
Austria	--	Gabon	41470.00	Malaysia	1057194.00	South Africa	576551.00
Azerbaijan	--	Gambia	26650.00	Mali	--	South Korea	1372773.00
Bangladesh	169087.00	Germany	194921.00	Mauritania	25948.00	Spain	1017201.00
Belgium	27218.00	Ghana	410668.00	Mexico	882256.00	Sri Lanka	241030.00
Benin	7758.00	Greece	143913.00	Moldova	--	Sudan	5500.00
Bhutan	--	Guatemala	936.00	Mongolia	--	Sweden	343996.00
Bolivia	--	Guinea	81618.00	Morocco	619136.00	Switzerland	--
Bosnia and H.	--	Guinea-Bissau	3867.00	Mozambique	12608.00	Syria	2530.00
Botswana	--	Haiti	3800.00	Myanmar	695904.00	Tajikistan	--
Brazil	420088.00	Honduras	3775.00	Namibia	294966.00	Tanzania	47020.00
Bulgaria	4226.00	Hungary	--	Nepal	--	Thailand	2340433.00
Burkina Faso	--	Iceland	1678886.00	Netherlands	446609.00	Togo	17801.00
Burundi	--	India	2242891.00	New Zealand	552552.00	Trin. and Tob.	14250.00
Byelarus	--	Indonesia	3414900.00	Nicaragua	8497.00	Tunisia	74438.00
Cambodia	28100.00	Iran	233495.00	Niger	--	Turkey	533593.00
Cameroon	59651.00	Iraq	13093.00	Nigeria	280941.00	Turkmenistan	--
Canada	569535.00	Ireland	253242.00	North Korea	164900.00	Uganda	--
Central Af. R.	--	Israel	5792.00	Norway	2551177.00	Ukraine	385903.00
Chad	--	Italy	183871.00	Oman	100776.00	United Ar. Em.	117462.00
Chile	4886811.00	Ivory Coast	62187.00	Pakistan	431873.00	United King.	711809.00
China	11500550.00	Jamaica	6283.00	Panama	109395.00	United States	3329233.00
Colombia	83012.00	Japan	3961326.00	Papua N.G.	37946.00	Uruguay	79683.00
Congo	17866.00	Jordan	160.00	Paraguay	--	Uzbekistan	--
Costa Rica	19838.00	Kazakhstan	--	Peru	8257115.00	Venezuela	315413.00
Croatia	19306.00	Kenya	5603.00	Philippines	1592090.00	Vietnam	777000.00
Cuba	42862.00	Kuwait	4757.00	Poland	192079.00	Zaire	3945.00
Czech Rep.	--	Kyrgyzstan	--	Portugal	189895.00	Zambia	--
Denmark	1293373.00	Laos	--	Romania	2438.00	Zimbabwe	--
Dom. Rep.	5608.00	Latvia	121058.00	Russia	3467192.00		
Ecuador	497769.00	Lebanon	3340.00	Rwanda	--		

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Variable Data

Variable: FSHCON

Name: Seafood supply per capita

Units: Kg per Person per Year

Reference Year: 1999

Source: FAOSTAT on-line database, <http://apps.fao.org/>

Logic: Many global fisheries are under stress. This is a measure of pressure on global fishing grounds. The greater the per capita consumption of seafood, the higher the pressure on this transboundary resource.

Methodology: Seafood supply represents the per capita availability of seafood, and includes production + imports - exports.

Mean	13.19	Max	91.4	97.5 percentile cut-off value:	54.74
Median	8.8	Min	0.1	2.5 percentile cut-off value:	0.36

Albania	1.90	Egypt	9.90	Liberia	4.50	Saudi Arabia	7.00
Algeria	3.50	El Salvador	2.70	Libya	6.10	Senegal	34.70
Angola	6.20	Estonia	19.70	Lithuania	17.40	Sierra Leone	13.90
Argentina	9.60	Ethiopia	0.20	Macedonia	4.80	Slovakia	5.90
Armenia	1.00	Finland	35.60	Madagascar	7.20	Slovenia	6.70
Australia	18.80	France	28.70	Malawi	5.20	Somalia	1.70
Austria	14.10	Gabon	44.30	Malaysia	51.70	South Africa	7.30
Azerbaijan	1.00	Gambia	22.60	Mali	9.00	South Korea	49.20
Bangladesh	9.60	Germany	14.60	Mauritania	13.80	Spain	40.90
Belgium	20.20	Ghana	22.20	Mexico	10.50	Sri Lanka	20.60
Benin	8.90	Greece	26.70	Moldova	0.90	Sudan	1.60
Bhutan	--	Guatemala	1.30	Mongolia	0.10	Sweden	27.50
Bolivia	1.70	Guinea	14.70	Morocco	7.20	Switzerland	17.90
Bosnia and H.	1.40	Guinea-Bissau	2.90	Mozambique	2.10	Syria	1.10
Botswana	6.60	Haiti	2.70	Myanmar	16.30	Tajikistan	0.10
Brazil	6.70	Honduras	3.80	Namibia	11.60	Tanzania	9.40
Bulgaria	3.50	Hungary	4.70	Nepal	1.00	Thailand	32.20
Burkina Faso	1.40	Iceland	91.40	Netherlands	15.90	Togo	17.00
Burundi	3.20	India	4.60	New Zealand	24.30	Trin. and Tob.	14.10
Byelarus	1.10	Indonesia	17.60	Nicaragua	1.50	Tunisia	9.00
Cambodia	7.10	Iran	4.50	Niger	0.80	Turkey	6.90
Cameroon	8.80	Iraq	1.60	Nigeria	5.50	Turkmenistan	2.00
Canada	21.80	Ireland	15.40	North Korea	18.30	Uganda	8.60
Central Af. R.	3.60	Israel	23.30	Norway	50.10	Ukraine	8.80
Chad	6.40	Italy	23.50	Oman	--	United Ar. Em.	27.00
Chile	17.20	Ivory Coast	10.00	Pakistan	2.20	United King.	22.10
China	25.30	Jamaica	16.80	Panama	14.20	United States	20.30
Colombia	5.00	Japan	66.20	Papua N.G.	13.70	Uruguay	7.90
Congo	24.10	Jordan	3.40	Paraguay	5.90	Uzbekistan	0.50
Costa Rica	6.50	Kazakhstan	3.10	Peru	25.80	Venezuela	19.30
Croatia	4.40	Kenya	4.50	Philippines	29.10	Vietnam	17.20
Cuba	12.50	Kuwait	10.60	Poland	14.10	Zaire	5.90
Czech Rep.	11.50	Kyrgyzstan	0.60	Portugal	58.10	Zambia	7.00
Denmark	24.40	Laos	8.50	Romania	1.80	Zimbabwe	2.20
Dom. Rep.	12.40	Latvia	11.60	Russia	22.20		
Ecuador	7.40	Lebanon	6.80	Rwanda	0.50		

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Variable Data

Variable: GASPR

Name: Ratio of premium gasoline price to world average

Units: Ratio of Gasoline Price to World Average

Reference Year: 1998-2000 MRYA

Source: German Agency for Technical Cooperation (GTZ), Fuel Prices and Taxation (1999) and the electronic update for 2000. Available from World Bank, World Development Indicators 2002, WDI table 3.12.

Logic: Unsubsidized gasoline prices are an indicator that appropriate price signals are being sent and that environmental externalities have been internalized. High taxes on gasoline act as an incentive for public transportation use and development of alternative fuels.

Methodology: Pump price for super gasoline (US\$ per liter): Fuel prices refer to the pump prices of the most widely sold grade of gasoline. Prices have been converted from the local currency to U.S. dollars, and the ratio of the gas price to the world average in the same time period was used in order to normalize the data. For more information, see World Development Indicators, Table 3.12.

Mean	1.01	Max	1.95	97.5 percentile cut-off value:	1.8
Median	1.02	Min	0.03	2.5 percentile cut-off value:	0.15

Albania	0.93	Egypt	0.43	Liberia	[0.92]	Saudi Arabia	0.39
Algeria	0.44	El Salvador	1.10	Libya	0.41	Senegal	1.20
Angola	0.49	Estonia	0.98	Lithuania	1.08	Sierra Leone	[1.34]
Argentina	1.75	Ethiopia	0.75	Macedonia	1.25	Slovakia	1.13
Armenia	0.90	Finland	1.74	Madagascar	1.25	Slovenia	1.03
Australia	0.93	France	1.62	Malawi	1.13	Somalia	[0.99]
Austria	1.34	Gabon	0.87	Malaysia	0.46	South Africa	0.82
Azerbaijan	0.92	Gambia	1.05	Mali	1.15	South Korea	1.51
Bangladesh	0.75	Germany	1.49	Mauritania	1.10	Spain	1.20
Belgium	1.57	Ghana	0.33	Mexico	1.00	Sri Lanka	1.08
Benin	0.79	Greece	1.18	Moldova	0.74	Sudan	0.46
Bhutan	0.95	Guatemala	0.87	Mongolia	0.62	Sweden	1.54
Bolivia	1.31	Guinea	1.39	Morocco	1.34	Switzerland	1.28
Bosnia and H.	1.11	Guinea-Bissau	[1.05]	Mozambique	0.92	Syria	0.72
Botswana	0.69	Haiti	1.05	Myanmar	[1.06]	Tajikistan	0.74
Brazil	1.51	Honduras	1.02	Namibia	0.77	Tanzania	1.23
Bulgaria	1.15	Hungary	1.33	Nepal	1.03	Thailand	0.64
Burkina Faso	1.11	Iceland	1.72	Netherlands	1.69	Togo	0.79
Burundi	1.66	India	0.98	New Zealand	0.79	Trin. and Tob.	0.64
Byelarus	0.68	Indonesia	0.28	Nicaragua	1.02	Tunisia	0.80
Cambodia	1.00	Iran	0.08	Niger	1.11	Turkey	1.44
Cameroon	0.92	Iraq	0.05	Nigeria	0.44	Turkmenistan	0.03
Canada	0.95	Ireland	1.18	North Korea	1.46	Uganda	1.41
Central Af. R.	1.62	Israel	1.87	Norway	[1.21]	Ukraine	0.61
Chad	1.11	Italy	1.59	Oman	0.51	United Ar. Em.	0.41
Chile	1.05	Ivory Coast	1.25	Pakistan	0.87	United King.	1.92
China	0.66	Jamaica	1.02	Panama	0.87	United States	0.77
Colombia	0.80	Japan	1.74	Papua N.G.	0.87	Uruguay	1.95
Congo	0.87	Jordan	0.74	Paraguay	1.18	Uzbekistan	0.70
Costa Rica	1.07	Kazakhstan	0.59	Peru	1.31	Venezuela	0.20
Croatia	1.25	Kenya	1.16	Philippines	0.61	Vietnam	0.62
Cuba	1.00	Kuwait	0.34	Poland	1.25	Zaire	1.64
Czech Rep.	1.26	Kyrgyzstan	0.72	Portugal	1.26	Zambia	1.64
Denmark	1.66	Laos	0.67	Romania	0.75	Zimbabwe	1.39
Dom. Rep.	1.16	Latvia	1.10	Russia	0.54		
Ecuador	0.51	Lebanon	0.87	Rwanda	1.46		

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Variable Data

Variable: GEF
Name: Global environmental facility participation
Units: Standardized Scale (Z-Score) **Reference Year:** 2000
Source: GEF Projects Allocations and Disbursements GEF R.3/Inf.3, October 3, 2001 at http://www.gefweb.org/Allocations_Disbursements.pdf and GEF-2 Current and Projected Funding Status, GEF/R.3/19, November 21, 2001.
Logic: Managing global environmental problems requires active financial participation of both donors and recipients. The GEF represents the most significant global-scale effort to support world-wide environmental protection efforts.

Methodology: This score combines payments and receipts. To make payments and receipts comparable, the two were first standardized, and countries were assigned the higher of the two possible z-scores. Payments were normalized by share of United Nations budget, and receipts were normalized by share of total GEF payments. Covers receipts through June 30, 2001 and payments through November 20, 2001.

Mean	0.3	Max	15.13	97.5 percentile cut-off value:	2.95
Median	-0.08	Min	-0.1	2.5 percentile cut-off value:	-0.1

Albania	0.69	Egypt	-0.10	Liberia	-0.10	Saudi Arabia	-0.10
Algeria	-0.10	El Salvador	-0.10	Libya	-0.10	Senegal	0.55
Angola	-0.10	Estonia	-0.10	Lithuania	0.31	Sierra Leone	-0.10
Argentina	-0.10	Ethiopia	-0.10	Macedonia	15.13	Slovakia	0.49
Armenia	-0.10	Finland	-0.06	Madagascar	1.10	Slovenia	-0.08
Australia	-0.08	France	-0.08	Malawi	1.60	Somalia	-0.10
Austria	-0.08	Gabon	-0.10	Malaysia	-0.10	South Africa	-0.10
Azerbaijan	-0.03	Gambia	-0.10	Mali	-0.06	South Korea	-0.10
Bangladesh	-0.10	Germany	-0.08	Mauritania	0.20	Spain	-0.09
Belgium	-0.07	Ghana	0.28	Mexico	-0.10	Sri Lanka	0.02
Benin	2.11	Greece	-0.09	Moldova	-0.10	Sudan	-0.10
Bhutan	9.30	Guatemala	-0.08	Mongolia	1.65	Sweden	-0.04
Bolivia	0.69	Guinea	-0.10	Morocco	0.19	Switzerland	-0.10
Bosnia and H.	-0.10	Guinea-Bissau	0.23	Mozambique	0.21	Syria	-0.10
Botswana	-0.10	Haiti	-0.10	Myanmar	-0.10	Tajikistan	-0.10
Brazil	-0.10	Honduras	0.05	Namibia	-0.10	Tanzania	-0.10
Bulgaria	0.92	Hungary	-0.06	Nepal	-0.10	Thailand	-0.10
Burkina Faso	1.37	Iceland	-0.10	Netherlands	-0.06	Togo	-0.10
Burundi	-0.10	India	-0.08	New Zealand	-0.08	Trin. and Tob.	0.00
Byelarus	0.14	Indonesia	-0.06	Nicaragua	0.31	Tunisia	-0.10
Cambodia	0.13	Iran	-0.10	Niger	-0.10	Turkey	-0.09
Cameroon	-0.10	Iraq	-0.10	Nigeria	-0.02	Turkmenistan	-0.10
Canada	-0.07	Ireland	-0.08	North Korea	-0.10	Uganda	1.26
Central Af. R.	0.29	Israel	-0.10	Norway	-0.06	Ukraine	-0.03
Chad	-0.10	Italy	-0.09	Oman	-0.10	United Ar. Em.	-0.10
Chile	-0.10	Ivory Coast	0.55	Pakistan	-0.02	United King.	-0.08
China	-0.10	Jamaica	0.00	Panama	0.30	United States	-0.09
Colombia	-0.10	Japan	-0.08	Papua N.G.	1.33	Uruguay	-0.10
Congo	3.83	Jordan	0.25	Paraguay	-0.05	Uzbekistan	-0.10
Costa Rica	0.48	Kazakhstan	-0.10	Peru	-0.10	Venezuela	-0.10
Croatia	0.01	Kenya	-0.07	Philippines	-0.10	Vietnam	1.91
Cuba	-0.02	Kuwait	-0.10	Poland	0.04	Zaire	-0.10
Czech Rep.	-0.07	Kyrgyzstan	-0.10	Portugal	-0.09	Zambia	2.30
Denmark	-0.07	Laos	0.31	Romania	0.21	Zimbabwe	-0.05
Dom. Rep.	-0.10	Latvia	0.09	Russia	-0.10		
Ecuador	0.47	Lebanon	-0.08	Rwanda	-0.10		

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Variable Data

Variable: GMS_DO
Name: Dissolved oxygen concentration
Units: Milligrams/Liter
Reference Year: 1994-96 or MRYA
Source: United Nations Environment Programme (UNEP), Global Environmental Monitoring System/Water Quality Monitoring System. <http://www.cciw.ca/gems/>, with data for an additional 29 countries from Prescott-Allen, R. The Wellbeing of Nations, Washington, DC: Island Press, 2001.

Logic: A measure of eutrophication, which has an important impact on the health of aquatic resources and ecosystems. High levels correspond to low eutrophication.

Methodology: The country values represent averages of the station-level values for the three year time period 1994-96, except where data were only available for an earlier time period (1988-1993). The number of stations per country varies depending on country size, number of water bodies, and level of participation in the GEMS monitoring system. The data from "The Wellbeing of Nations" included a smaller subset of stations representing outfalls of major watersheds. An analysis of a sample of countries with numerous stations found that the data for subsetted stations are broadly comparable to the data for all GEMS stations in those countries.

Mean	7.73	Max	11.27	97.5 percentile cut-off value:	11.15
Median	7.7	Min	2.98	2.5 percentile cut-off value:	3.81

Albania	6.60	Egypt	[7.49]	Liberia	[8.01]	Saudi Arabia	[8.69]
Algeria	[8.72]	El Salvador	[6.09]	Libya	[7.58]	Senegal	4.43
Angola	[7.69]	Estonia	11.15	Lithuania	5.68	Sierra Leone	[6.07]
Argentina	10.00	Ethiopia	[5.79]	Macedonia	[8.93]	Slovakia	10.03
Armenia	[7.3]	Finland	11.19	Madagascar	[6.24]	Slovenia	9.70
Australia	[10.64]	France	10.33	Malawi	[8.35]	Somalia	[7.83]
Austria	11.15	Gabon	[7.27]	Malaysia	4.54	South Africa	[7.54]
Azerbaijan	[8.27]	Gambia	[3.75]	Mali	8.46	South Korea	10.32
Bangladesh	[6.13]	Germany	[10.45]	Mauritania	[5.54]	Spain	8.35
Belgium	5.62	Ghana	6.80	Mexico	6.10	Sri Lanka	[6.64]
Benin	[6.27]	Greece	11.27	Moldova	10.95	Sudan	7.84
Bhutan	[6.26]	Guatemala	[6.63]	Mongolia	[8.57]	Sweden	[9.27]
Bolivia	[3.85]	Guinea	[6.51]	Morocco	6.25	Switzerland	[10.85]
Bosnia and H.	[6.15]	Guinea-Bissau	[5.75]	Mozambique	[5.44]	Syria	[5.83]
Botswana	[9.13]	Haiti	[8.9]	Myanmar	[4.83]	Tajikistan	[5.78]
Brazil	7.27	Honduras	[7.61]	Namibia	[7.58]	Tanzania	6.87
Bulgaria	8.23	Hungary	10.82	Nepal	[6.69]	Thailand	2.98
Burkina Faso	[5.87]	Iceland	[8.39]	Netherlands	9.78	Togo	[7.28]
Burundi	[3.94]	India	6.38	New Zealand	9.87	Trin. and Tob.	[9.61]
Byelarus	[8.81]	Indonesia	3.31	Nicaragua	[6.28]	Tunisia	[9.35]
Cambodia	[4.74]	Iran	10.57	Niger	[5.4]	Turkey	7.77
Cameroon	[4.87]	Iraq	[7.28]	Nigeria	[6.77]	Turkmenistan	[6.74]
Canada	10.85	Ireland	10.85	North Korea	[6.73]	Uganda	[7.04]
Central Af. R.	[5.29]	Israel	[10.33]	Norway	[9.16]	Ukraine	8.60
Chad	[5.85]	Italy	8.73	Oman	[8.57]	United Ar. Em.	[8.74]
Chile	[7.62]	Ivory Coast	[6.7]	Pakistan	7.11	United King.	10.40
China	7.99	Jamaica	[6.3]	Panama	[7.78]	United States	9.26
Colombia	5.55	Japan	10.18	Papua N.G.	[8.3]	Uruguay	[8.12]
Congo	[9.15]	Jordan	[8.91]	Paraguay	[8.33]	Uzbekistan	[7.71]
Costa Rica	[7.12]	Kazakhstan	[8.27]	Peru	[7.11]	Venezuela	[8.4]
Croatia	8.95	Kenya	[6.83]	Philippines	8.24	Vietnam	[9.23]
Cuba	8.10	Kuwait	[10.24]	Poland	9.86	Zaire	[5.56]
Czech Rep.	10.33	Kyrgyzstan	[6.93]	Portugal	7.65	Zambia	[5.77]
Denmark	10.00	Laos	[7.98]	Romania	9.70	Zimbabwe	[4.8]
Dom. Rep.	[8.5]	Latvia	10.75	Russia	9.69		
Ecuador	[6.52]	Lebanon	[5.78]	Rwanda	[6.62]		

2002 ESI: Annex 6

Variable Data

Variable: GMS_EC
Name: Electrical conductivity
Units: Micro-Siemens/Centimeter
Reference Year: 1994-96 or MRYA
Source: United Nations Environment Programme (UNEP), Global Environmental Monitoring System/Water Quality Monitoring System. <http://www.cciw.ca/gems/>
Logic: A widely used bulk measure of metals concentration and salinity. High levels of conductivity correspond to high concentrations.

Methodology: The country values represent averages of the station-level values for the three year time period 1994-96, except where data were only available for an earlier time period (1988-1993). The number of stations per country varies depending on country size, number of water bodies, and level of participation in the GEMS monitoring system.

Mean	832.89	Max	4520.19	97.5 percentile cut-off value:	2667.02
Median	596.47	Min	0	2.5 percentile cut-off value:	66.06

Albania	[112.94]	Egypt	[1977.91]	Liberia	[891.54]	Saudi Arabia	[2057.25]
Algeria	[1478.73]	El Salvador	[582.63]	Libya	[1858.24]	Senegal	380.80
Angola	[291.46]	Estonia	[219.48]	Lithuania	598.75	Sierra Leone	[350.5]
Argentina	113.68	Ethiopia	[871.56]	Macedonia	[1619.25]	Slovakia	[918.85]
Armenia	[1953.96]	Finland	50.49	Madagascar	[436.49]	Slovenia	[908.82]
Australia	[655.39]	France	299.38	Malawi	[311.31]	Somalia	[739.68]
Austria	[811.6]	Gabon	[777.5]	Malaysia	508.01	South Africa	[1312.26]
Azerbaijan	[1473.98]	Gambia	[283.18]	Mali	120.77	South Korea	141.33
Bangladesh	231.60	Germany	1566.07	Mauritania	[756.33]	Spain	[927.14]
Belgium	2626.19	Ghana	185.59	Mexico	1239.62	Sri Lanka	[731.02]
Benin	[1378.26]	Greece	[2259.13]	Moldova	[260.18]	Sudan	259.33
Bhutan	[315.59]	Guatemala	[1061.16]	Mongolia	[531.94]	Sweden	77.56
Bolivia	[416.7]	Guinea	[716.05]	Morocco	3300.63	Switzerland	301.06
Bosnia and H.	[1248.06]	Guinea-Bissau	[1071.4]	Mozambique	[894.71]	Syria	[1608.99]
Botswana	[575.51]	Haiti	[713.29]	Myanmar	[594.19]	Tajikistan	[2442.78]
Brazil	145.65	Honduras	[388.43]	Namibia	[435.61]	Tanzania	363.21
Bulgaria	[1743.52]	Hungary	579.26	Nepal	[2722.27]	Thailand	348.33
Burkina Faso	[1074.82]	Iceland	[304.23]	Netherlands	623.12	Togo	[136.55]
Burundi	[237.91]	India	4520.19	New Zealand	125.84	Trin. and Tob.	[1614.88]
Byelarus	[1124.68]	Indonesia	167.13	Nicaragua	[438.42]	Tunisia	[1064.77]
Cambodia	[648.36]	Iran	419.64	Niger	[247.69]	Turkey	[1105.28]
Cameroon	[493.57]	Iraq	[2454.88]	Nigeria	[1157.79]	Turkmenistan	[2438.25]
Canada	237.44	Ireland	[723.43]	North Korea	[727.1]	Uganda	[1195.79]
Central Af. R.	[1242.78]	Israel	[2149.96]	Norway	0.61	Ukraine	[557.81]
Chad	[368.95]	Italy	[915.42]	Oman	[853.45]	United Ar. Em.	[2087.05]
Chile	667.94	Ivory Coast	[387.14]	Pakistan	410.13	United King.	368.06
China	522.78	Jamaica	[998.46]	Panama	[248.78]	United States	375.65
Colombia	85.80	Japan	179.29	Papua N.G.	[510.96]	Uruguay	[446.24]
Congo	[1153.53]	Jordan	1014.42	Paraguay	[455.6]	Uzbekistan	[1031.99]
Costa Rica	[1359.25]	Kazakhstan	[823.68]	Peru	[1297.18]	Venezuela	[175.58]
Croatia	[700.79]	Kenya	504.00	Philippines	136.70	Vietnam	[609.69]
Cuba	515.00	Kuwait	[2493.15]	Poland	1043.77	Zaire	[385.47]
Czech Rep.	[592.77]	Kyrgyzstan	[1938.57]	Portugal	191.13	Zambia	[130.62]
Denmark	[422.19]	Laos	[239.07]	Romania	[438.87]	Zimbabwe	[700.63]
Dom. Rep.	[326.71]	Latvia	[371.55]	Russia	0.00		
Ecuador	[129.35]	Lebanon	[1696.86]	Rwanda	[609.09]		

2002 ESI: Annex 6

Variable Data

Variable: GMS_PH
Name: Phosphorus concentration
Units: Milligrams/Liter
Reference Year: 1994-96 or MRYA
Source: United Nations Environment Programme (UNEP), Global Environmental Monitoring System/Water Quality Monitoring System. <http://www.cciw.ca/gems/>, with data for an additional 29 countries from Prescott-Allen, R. The Wellbeing of Nations, Washington, DC: Island Press, 2001.
Logic: A measure of eutrophication, which affects aquatic resources health. High levels correspond to high eutrophication.

Methodology: The country values represent averages of the station-level values for the three year time period 1994-96, except where data were only available for an earlier time period (1988-1993). The number of stations per country varies depending on country size, number of water bodies, and level of participation in the GEMS monitoring system. The data from "The Wellbeing of Nations" included a smaller subset of stations representing outfalls of major watersheds. An analysis of a sample of countries with numerous stations found that the data for subsetted stations are broadly comparable to the data for all GEMS stations in those countries.

Mean	0.36	Max	1.75	97.5 percentile cut-off value:	1.06
Median	0.34	Min	0	2.5 percentile cut-off value:	0.01

Albania	0.00	Egypt	[0.6]	Liberia	[0.49]	Saudi Arabia	[0.11]
Algeria	[0.4]	El Salvador	[0.22]	Libya	[0.47]	Senegal	[0.34]
Angola	[0.57]	Estonia	0.11	Lithuania	0.08	Sierra Leone	[0.36]
Argentina	0.04	Ethiopia	[0.38]	Macedonia	[0.34]	Slovakia	0.22
Armenia	[0.48]	Finland	0.01	Madagascar	[0.45]	Slovenia	0.10
Australia	0.06	France	0.17	Malawi	[0.52]	Somalia	[0.35]
Austria	0.10	Gabon	[0.29]	Malaysia	0.04	South Africa	[0.73]
Azerbaijan	[0.6]	Gambia	[0.53]	Mali	0.15	South Korea	[1.13]
Bangladesh	[0.51]	Germany	0.32	Mauritania	[0.48]	Spain	0.50
Belgium	1.63	Ghana	[0.13]	Mexico	[0.64]	Sri Lanka	[0.1]
Benin	[0.67]	Greece	0.31	Moldova	0.20	Sudan	1.75
Bhutan	[0.13]	Guatemala	[0.41]	Mongolia	[0.17]	Sweden	[0.28]
Bolivia	[0.34]	Guinea	[0.49]	Morocco	0.26	Switzerland	0.07
Bosnia and H.	[0.36]	Guinea-Bissau	[0.82]	Mozambique	[0.49]	Syria	[0.21]
Botswana	[0.2]	Haiti	[0.34]	Myanmar	[0.31]	Tajikistan	[0.96]
Brazil	0.09	Honduras	[0.4]	Namibia	[0.35]	Tanzania	[0.32]
Bulgaria	[0.39]	Hungary	0.21	Nepal	[0.42]	Thailand	0.31
Burkina Faso	[0.38]	Iceland	[0.35]	Netherlands	0.27	Togo	[0.33]
Burundi	[0.68]	India	[0.15]	New Zealand	0.04	Trin. and Tob.	[0.08]
Byelarus	[0.36]	Indonesia	0.56	Nicaragua	[0.61]	Tunisia	[0.39]
Cambodia	[0.43]	Iran	[0.35]	Niger	[0.69]	Turkey	0.35
Cameroon	[0.5]	Iraq	0.01	Nigeria	[0.66]	Turkmenistan	[0.48]
Canada	0.00	Ireland	0.11	North Korea	[0.81]	Uganda	0.16
Central Af. R.	[0.35]	Israel	[0.42]	Norway	0.01	Ukraine	0.23
Chad	[0.36]	Italy	0.13	Oman	[0.2]	United Ar. Em.	[0.44]
Chile	[0.51]	Ivory Coast	[0.14]	Pakistan	0.20	United King.	0.09
China	0.28	Jamaica	[1.01]	Panama	[0.37]	United States	0.08
Colombia	[0.36]	Japan	0.06	Papua N.G.	[0.11]	Uruguay	[0.31]
Congo	[0.21]	Jordan	1.01	Paraguay	[0.18]	Uzbekistan	[0.51]
Costa Rica	[0.34]	Kazakhstan	[0.47]	Peru	[0.29]	Venezuela	[0.45]
Croatia	0.50	Kenya	[0.58]	Philippines	[0.35]	Vietnam	[0.59]
Cuba	0.01	Kuwait	[0.66]	Poland	0.33	Zaire	[0.27]
Czech Rep.	0.29	Kyrgyzstan	[0.23]	Portugal	0.13	Zambia	[0.56]
Denmark	0.14	Laos	[0.45]	Romania	0.40	Zimbabwe	[0.09]
Dom. Rep.	[0.19]	Latvia	0.10	Russia	[0.14]		
Ecuador	[0.25]	Lebanon	[0.38]	Rwanda	[0.49]		

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Variable Data

Variable: GMS_SS
Name: Suspended solids
Units: Natural Log of Milligrams/Liter
Reference Year: 1994-96 or MRYA
Source: United Nations Environment Programme (UNEP), Global Environmental Monitoring System/Water Quality Monitoring System. <http://www.cciw.ca/gems/>, with data for an additional 29 countries from Prescott-Allen, R. The Wellbeing of Nations, Washington, DC: Island Press, 2001.

Logic: A measure of water quality and turbidity.

Methodology: The country values represent averages of the station-level values for the three year time period 1994-96, except where data were only available for an earlier time period (1988-1993). The number of stations per country varies depending on country size, number of water bodies, and level of participation in the GEMS monitoring system. Data from "The Wellbeing of Nations" included a smaller subset of stations representing outfalls of major watersheds. An analysis of a sample of countries with numerous stations found that the data for subsetting stations are broadly comparable to the data for all GEMS stations in those countries. The data in this table were transformed using the natural logarithm.

Mean	5.05	Max	8.09	97.5 percentile cut-off value:	8.03
Median	5.105	Min	1.17	2.5 percentile cut-off value:	1.94

Albania	[3.59]	Egypt	[3.88]	Liberia	[7.6]	Saudi Arabia	[8.01]
Algeria	[5.11]	El Salvador	[5.16]	Libya	[6.32]	Senegal	[3.26]
Angola	[5.32]	Estonia	[7.97]	Lithuania	[2.98]	Sierra Leone	[5.9]
Argentina	4.77	Ethiopia	[3.59]	Macedonia	[3.94]	Slovakia	[3.75]
Armenia	[4.09]	Finland	1.17	Madagascar	[6.13]	Slovenia	[3.87]
Australia	7.64	France	3.24	Malawi	[4.77]	Somalia	[6.88]
Austria	[1.95]	Gabon	[6.26]	Malaysia	5.70	South Africa	[4.44]
Azerbaijan	[6.61]	Gambia	[5.97]	Mali	4.55	South Korea	1.69
Bangladesh	4.08	Germany	3.06	Mauritania	[5.86]	Spain	[4.04]
Belgium	3.53	Ghana	4.55	Mexico	5.17	Sri Lanka	[5.81]
Benin	[5.81]	Greece	[3.57]	Moldova	[6.52]	Sudan	6.38
Bhutan	[5.03]	Guatemala	[3.91]	Mongolia	[5.61]	Sweden	[2.47]
Bolivia	[5.48]	Guinea	[4.09]	Morocco	4.40	Switzerland	3.98
Bosnia and H.	[8.01]	Guinea-Bissau	[7.17]	Mozambique	[3.59]	Syria	[5.01]
Botswana	[4.18]	Haiti	[6.16]	Myanmar	6.41	Tajikistan	[6.93]
Brazil	4.08	Honduras	[6.38]	Namibia	7.01	Tanzania	[4.52]
Bulgaria	[3.09]	Hungary	3.42	Nepal	[5.41]	Thailand	5.60
Burkina Faso	[4.68]	Iceland	[5.61]	Netherlands	3.26	Togo	[5.92]
Burundi	[5.57]	India	[6.56]	New Zealand	2.32	Trin. and Tob.	[7.44]
Byelarus	[7.54]	Indonesia	5.37	Nicaragua	[5.19]	Tunisia	[5.24]
Cambodia	[5.37]	Iran	[5.92]	Niger	[5.29]	Turkey	[2.3]
Cameroon	[5.42]	Iraq	7.22	Nigeria	[5.99]	Turkmenistan	[7.86]
Canada	2.84	Ireland	[3.97]	North Korea	[7.85]	Uganda	[4.22]
Central Af. R.	[4.82]	Israel	[2.83]	Norway	[3.02]	Ukraine	[4.42]
Chad	[3.86]	Italy	5.63	Oman	[6.96]	United Ar. Em.	[8.04]
Chile	5.10	Ivory Coast	[5.89]	Pakistan	6.76	United King.	2.26
China	7.97	Jamaica	[5.66]	Panama	[4.94]	United States	[4.19]
Colombia	4.77	Japan	3.27	Papua N.G.	6.09	Uruguay	[4.32]
Congo	[5.55]	Jordan	4.50	Paraguay	[6.38]	Uzbekistan	8.09
Costa Rica	[4.33]	Kazakhstan	7.22	Peru	[4.96]	Venezuela	[3.93]
Croatia	[6.12]	Kenya	[5.64]	Philippines	3.62	Vietnam	6.52
Cuba	[4.33]	Kuwait	[8.08]	Poland	3.24	Zaire	[6.86]
Czech Rep.	[3.93]	Kyrgyzstan	[4.78]	Portugal	1.94	Zambia	[5.11]
Denmark	[2.62]	Laos	[5.13]	Romania	[4.38]	Zimbabwe	[4.62]
Dom. Rep.	[6.85]	Latvia	[2.9]	Russia	3.23		
Ecuador	[4.1]	Lebanon	[6.1]	Rwanda	[5.77]		

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Variable Data

Variable: GR2050
Name: Percentage change in projected population between 2000 and 2050
Units: Percent Change in Population **Reference Year:** 2001
Source: Population Reference Bureau, 2001 World Population Data Sheet, Washington, DC: PRB, 2001.
Logic: The projected change in population between 2000 and 2050 provides an indication of the trajectory of population change, which has an impact on a country's per capita natural resource availability and environmental conditions.

Methodology: A threshold of 0 was applied. All countries with growth rates of 0 or below received the same score.

Mean	65.82	Max	282.01	97.5 percentile cut-off value:	242.61
Median	48.72	Min	-35.95	2.5 percentile cut-off value:	-25.8

Albania	51.18	Egypt	64.26	Liberia	209.98	Saudi Arabia	185.38
Algeria	66.22	El Salvador	93.00	Libya	106.39	Senegal	135.10
Angola	140.89	Estonia	-35.95	Lithuania	-15.61	Sierra Leone	188.69
Argentina	45.49	Ethiopia	164.22	Macedonia	3.38	Slovakia	-13.03
Armenia	-0.29	Finland	-7.83	Madagascar	185.91	Slovenia	-14.94
Australia	28.90	France	9.99	Malawi	110.28	Somalia	240.50
Austria	0.79	Gabon	48.57	Malaysia	93.99	South Africa	-25.35
Azerbaijan	41.75	Gambia	195.18	Mali	230.27	South Korea	4.78
Bangladesh	56.24	Germany	-14.48	Mauritania	207.91	Spain	-22.71
Belgium	-2.70	Ghana	60.62	Mexico	50.34	Sri Lanka	18.94
Benin	173.96	Greece	-11.47	Moldova	-0.47	Sudan	99.91
Bhutan	127.00	Guatemala	142.58	Mongolia	61.02	Sweden	7.37
Bolivia	100.01	Guinea	137.86	Morocco	66.00	Switzerland	1.80
Bosnia and H.	-0.65	Guinea-Bissau	166.78	Mozambique	18.42	Syria	105.86
Botswana	-26.42	Haiti	70.17	Myanmar	43.37	Tajikistan	39.75
Brazil	43.94	Honduras	81.17	Namibia	37.10	Tanzania	143.65
Bulgaria	-34.80	Hungary	-19.49	Nepal	110.78	Thailand	15.21
Burkina Faso	179.53	Iceland	17.54	Netherlands	12.20	Togo	88.65
Burundi	158.47	India	57.60	New Zealand	28.54	Trin. and Tob.	5.84
Byelarus	-14.53	Indonesia	47.88	Nicaragua	122.22	Tunisia	46.46
Cambodia	38.30	Iran	51.52	Niger	174.81	Turkey	46.68
Cameroon	119.34	Iraq	127.14	Nigeria	139.73	Turkmenistan	29.16
Canada	18.05	Ireland	17.94	North Korea	20.12	Uganda	250.65
Central Af. R.	78.05	Israel	64.39	Norway	15.46	Ukraine	-21.84
Chad	282.01	Italy	-20.39	Oman	218.02	United Ar. Em.	53.60
Chile	25.60	Ivory Coast	117.82	Pakistan	138.11	United King.	6.87
China	7.52	Jamaica	48.04	Panama	47.54	United States	45.31
Colombia	66.03	Japan	-20.95	Papua N.G.	123.71	Uruguay	33.92
Congo	245.47	Jordan	128.48	Paraguay	155.25	Uzbekistan	60.94
Costa Rica	51.00	Kazakhstan	-5.45	Peru	62.05	Venezuela	63.33
Croatia	-16.01	Kenya	25.65	Philippines	67.36	Vietnam	48.87
Cuba	-2.83	Kuwait	180.75	Poland	-12.25	Zaire	239.25
Czech Rep.	-8.88	Kyrgyzstan	51.85	Portugal	-18.32	Zambia	107.67
Denmark	16.50	Laos	71.76	Romania	-14.02	Zimbabwe	-18.37
Dom. Rep.	73.91	Latvia	-25.10	Russia	-11.57		
Ecuador	92.04	Lebanon	35.38	Rwanda	21.78		

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Variable Data

Variable: GRAFT

Name: Corruption measure (World Bank)

Units: Standardized Scale (z-score)

Reference Year: 2000

Source: Dataset from "Aggregating Governance Indicators" and "Governance Matters", Kaufmann D., Kraay A. and Zoido-Lobaton P, May 2000, World Bank.

Logic: Corruption contributes to lax enforcement of environmental regulations and an ability on the part of producers and consumers to evade responsibility for the environmental harms they cause.

Methodology:

Mean	-0.07	Max	2.13	97.5 percentile cut-off value:	2.08
Median	-0.305	Min	-1.57	2.5 percentile cut-off value:	-1.31

Albania	-0.99	Egypt	-0.27	Liberia	-1.05	Saudi Arabia	-0.58
Algeria	-0.88	El Salvador	-0.35	Libya	-0.88	Senegal	-0.24
Angola	-0.86	Estonia	0.59	Lithuania	0.03	Sierra Leone	-0.02
Argentina	-0.27	Ethiopia	-0.44	Macedonia	-0.52	Slovakia	0.03
Armenia	-0.80	Finland	2.08	Madagascar	-0.47	Slovenia	1.02
Australia	1.60	France	1.28	Malawi	-0.19	Somalia	-1.05
Austria	1.46	Gabon	-1.02	Malaysia	0.63	South Africa	0.30
Azerbaijan	-1.00	Gambia	-0.02	Mali	-0.48	South Korea	0.16
Bangladesh	-0.29	Germany	1.62	Mauritania	--	Spain	1.21
Belgium	0.67	Ghana	-0.30	Mexico	-0.28	Sri Lanka	-0.12
Benin	-0.78	Greece	0.82	Moldova	-0.39	Sudan	-1.02
Bhutan	--	Guatemala	-0.82	Mongolia	-0.15	Sweden	2.09
Bolivia	-0.44	Guinea	-0.18	Morocco	0.13	Switzerland	2.07
Bosnia and H.	-0.35	Guinea-Bissau	-0.85	Mozambique	-0.53	Syria	-0.79
Botswana	0.54	Haiti	-0.53	Myanmar	-1.10	Tajikistan	-1.32
Brazil	0.06	Honduras	-0.94	Namibia	0.38	Tanzania	-0.92
Bulgaria	-0.56	Hungary	0.61	Nepal	--	Thailand	-0.16
Burkina Faso	-0.37	Iceland	1.83	Netherlands	2.03	Togo	-0.24
Burundi	--	India	-0.31	New Zealand	2.07	Trin. and Tob.	0.51
Byelarus	-0.65	Indonesia	-0.80	Nicaragua	-0.84	Tunisia	0.02
Cambodia	--	Iran	-0.85	Niger	-1.57	Turkey	-0.35
Cameroon	-1.10	Iraq	-1.26	Nigeria	-0.95	Turkmenistan	-1.29
Canada	2.06	Ireland	1.57	North Korea	-0.53	Uganda	-0.47
Central Af. R.	--	Israel	1.28	Norway	1.69	Ukraine	-0.89
Chad	-0.59	Italy	0.80	Oman	0.48	United Ar. Em.	-0.03
Chile	1.03	Ivory Coast	-0.08	Pakistan	-0.77	United King.	1.71
China	-0.29	Jamaica	-0.12	Panama	-0.46	United States	1.41
Colombia	-0.49	Japan	0.72	Papua N.G.	-0.85	Uruguay	0.43
Congo	-0.60	Jordan	0.14	Paraguay	-0.96	Uzbekistan	-0.96
Costa Rica	0.58	Kazakhstan	-0.87	Peru	-0.20	Venezuela	-0.72
Croatia	-0.46	Kenya	-0.65	Philippines	-0.23	Vietnam	-0.33
Cuba	0.27	Kuwait	0.62	Poland	0.49	Zaire	-1.56
Czech Rep.	0.38	Kyrgyzstan	-0.76	Portugal	1.22	Zambia	-0.61
Denmark	2.13	Laos	--	Romania	-0.46	Zimbabwe	-0.32
Dom. Rep.	-0.77	Latvia	-0.26	Russia	-0.62		
Ecuador	-0.82	Lebanon	-0.40	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: INNOV

Name: Innovation

Units: Unitless Scale

Reference Year: 2001

Source Porter, Michael E. and Scott Stern, National Innovative Capacity, Chapter 2.2 in Porter, Michael, and Jeffrey Sachs (eds.), The Global Competitiveness Report 2001-2002, New York: Oxford University Press, 2001, p. 104.

Logic: This index measures the underlying capacity of a country to engage in technological innovation by examining factors such as scientific infrastructure and policy environment.

Methodology:

Mean	19.85	Max	30.3	97.5 percentile cut-off value:	29.43
Median	19.4	Min	11.6	2.5 percentile cut-off value:	11.6

Albania	--	Egypt	17.20	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	12.50	Libya	--	Senegal	--
Angola	--	Estonia	21.20	Lithuania	19.20	Sierra Leone	--
Argentina	17.00	Ethiopia	--	Macedonia	--	Slovakia	20.00
Armenia	--	Finland	29.10	Madagascar	--	Slovenia	20.40
Australia	26.90	France	26.80	Malawi	--	Somalia	--
Austria	25.30	Gabon	--	Malaysia	16.80	South Africa	21.00
Azerbaijan	--	Gambia	--	Mali	--	South Korea	22.90
Bangladesh	11.60	Germany	27.20	Mauritania	--	Spain	23.40
Belgium	25.40	Ghana	--	Mexico	16.80	Sri Lanka	15.50
Benin	--	Greece	18.40	Moldova	--	Sudan	--
Bhutan	--	Guatemala	13.20	Mongolia	--	Sweden	26.90
Bolivia	11.60	Guinea	--	Morocco	--	Switzerland	26.90
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	20.10	Honduras	11.90	Namibia	--	Tanzania	--
Bulgaria	16.90	Hungary	21.10	Nepal	--	Thailand	17.40
Burkina Faso	--	Iceland	24.80	Netherlands	26.90	Togo	--
Burundi	--	India	18.90	New Zealand	22.10	Trin. and Tob.	18.60
Byelarus	--	Indonesia	16.40	Nicaragua	12.70	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	17.80
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	26.50	Ireland	25.40	North Korea	--	Uganda	--
Central Af. R.	--	Israel	26.50	Norway	25.30	Ukraine	20.30
Chad	--	Italy	23.30	Oman	--	United Ar. Em.	--
Chile	19.70	Ivory Coast	--	Pakistan	--	United King.	27.00
China	18.10	Jamaica	--	Panama	17.40	United States	30.30
Colombia	15.10	Japan	26.40	Papua N.G.	--	Uruguay	16.80
Congo	--	Jordan	--	Paraguay	13.10	Uzbekistan	--
Costa Rica	18.80	Kazakhstan	--	Peru	14.30	Venezuela	15.20
Croatia	--	Kenya	--	Philippines	15.80	Vietnam	13.80
Cuba	--	Kuwait	--	Poland	19.60	Zaire	--
Czech Rep.	21.30	Kyrgyzstan	--	Portugal	21.60	Zambia	--
Denmark	25.20	Laos	--	Romania	16.30	Zimbabwe	13.00
Dom. Rep.	13.60	Latvia	18.50	Russia	20.60		
Ecuador	11.90	Lebanon	--	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: ISO14

Name: Number of ISO 14001 certified companies per million dollars GDP

Units: Number of ISO 14001 Certified Companies/GDP in US **Reference Year:** 2001

Source: ISO14001/EMAS registered companies, ISO World, International Standards Organisation, available at <http://www.ecology.or.jp/isoworld/english/analy14k.htm>, accessed 20 November 2001.

Logic: ISO 14001 specifies standards for environmental management. The more firms that receive ISO 14001 certification, the more likely it is that industries are instituting management practices that reduce waste and resource consumption.

Methodology:

Mean	5.36	Max	101.23	97.5 percentile cut-off value:	47.3
Median	0.41	Min	0	2.5 percentile cut-off value:	0

Albania	0.00	Egypt	3.93	Liberia	0.00	Saudi Arabia	0.28
Algeria	0.07	El Salvador	0.00	Libya	0.00	Senegal	0.00
Angola	0.00	Estonia	15.05	Lithuania	3.95	Sierra Leone	0.00
Argentina	3.60	Ethiopia	0.00	Macedonia	1.11	Slovakia	11.31
Armenia	0.00	Finland	54.67	Madagascar	0.00	Slovenia	41.85
Australia	25.86	France	8.48	Malawi	0.00	Somalia	0.00
Austria	11.50	Gabon	0.00	Malaysia	17.97	South Africa	3.44
Azerbaijan	0.00	Gambia	0.00	Mali	0.00	South Korea	11.86
Bangladesh	0.11	Germany	12.70	Mauritania	0.00	Spain	21.48
Belgium	5.19	Ghana	0.30	Mexico	2.82	Sri Lanka	0.34
Benin	0.00	Greece	4.28	Moldova	0.00	Sudan	0.00
Bhutan	0.00	Guatemala	0.52	Mongolia	0.00	Sweden	101.23
Bolivia	0.54	Guinea	0.00	Morocco	0.52	Switzerland	38.02
Bosnia and H.	0.00	Guinea-Bissau	0.00	Mozambique	0.00	Syria	0.58
Botswana	0.00	Haiti	0.00	Myanmar	0.19	Tajikistan	0.00
Brazil	2.85	Honduras	1.33	Namibia	4.16	Tanzania	0.00
Bulgaria	0.00	Hungary	25.63	Nepal	0.00	Thailand	12.04
Burkina Faso	0.00	Iceland	2.74	Netherlands	24.95	Togo	0.00
Burundi	0.00	India	1.93	New Zealand	9.17	Trin. and Tob.	1.03
Byelarus	0.00	Indonesia	1.35	Nicaragua	0.00	Tunisia	0.57
Cambodia	0.00	Iran	0.39	Niger	0.00	Turkey	2.16
Cameroon	0.00	Iraq	0.00	Nigeria	0.50	Turkmenistan	0.00
Canada	10.72	Ireland	23.58	North Korea	0.00	Uganda	0.00
Central Af. R.	0.00	Israel	5.51	Norway	23.48	Ukraine	0.06
Chad	0.00	Italy	8.64	Oman	1.26	United Ar. Em.	9.82
Chile	1.30	Ivory Coast	0.00	Pakistan	0.17	United King.	19.84
China	1.90	Jamaica	1.10	Panama	0.00	United States	1.88
Colombia	0.85	Japan	23.16	Papua N.G.	0.00	Uruguay	7.35
Congo	0.00	Jordan	9.11	Paraguay	0.43	Uzbekistan	0.00
Costa Rica	11.12	Kazakhstan	0.00	Peru	1.15	Venezuela	0.50
Croatia	2.79	Kenya	0.68	Philippines	3.08	Vietnam	0.96
Cuba	0.00	Kuwait	0.00	Poland	7.91	Zaire	0.00
Czech Rep.	10.17	Kyrgyzstan	0.00	Portugal	3.06	Zambia	2.73
Denmark	64.32	Laos	0.00	Romania	0.36	Zimbabwe	1.19
Dom. Rep.	0.24	Latvia	2.71	Russia	0.11		
Ecuador	0.26	Lebanon	2.74	Rwanda	0.00		

2002 ESI: Annex 6

Variable Data

Variable: IUCN

Name: IUCN member organizations per million population

Units: Organizations/Million Population

Reference Year: 2001

Source: Membership List, IUCN-The World Conservation Union, 1 August 2001

Logic: IUCN is the oldest international environmental membership organization, currently with over 900 members (governmental and NGO) worldwide, so it includes the most significant NGOs in each country

Methodology:

Mean	0.52	Max	7.02	97.5 percentile cut-off value:	2.58
Median	0.24	Min	0	2.5 percentile cut-off value:	0

Albania	0.00	Egypt	0.04	Liberia	0.00	Saudi Arabia	0.14
Algeria	0.10	El Salvador	0.94	Libya	0.19	Senegal	0.41
Angola	0.24	Estonia	1.47	Lithuania	0.54	Sierra Leone	0.37
Argentina	0.56	Ethiopia	0.02	Macedonia	0.49	Slovakia	0.56
Armenia	0.00	Finland	0.96	Madagascar	0.06	Slovenia	0.50
Australia	1.96	France	0.52	Malawi	0.28	Somalia	0.00
Austria	0.74	Gabon	0.00	Malaysia	0.26	South Africa	0.48
Azerbaijan	0.00	Gambia	0.00	Mali	0.55	South Korea	0.12
Bangladesh	0.11	Germany	0.21	Mauritania	0.73	Spain	0.75
Belgium	0.68	Ghana	0.15	Mexico	0.09	Sri Lanka	0.61
Benin	0.00	Greece	0.55	Moldova	0.47	Sudan	0.03
Bhutan	0.00	Guatemala	0.00	Mongolia	0.41	Sweden	0.79
Bolivia	0.94	Guinea	0.00	Morocco	0.21	Switzerland	1.11
Bosnia and H.	0.00	Guinea-Bissau	2.44	Mozambique	0.15	Syria	0.06
Botswana	5.04	Haiti	0.00	Myanmar	0.00	Tajikistan	0.00
Brazil	0.09	Honduras	0.74	Namibia	1.11	Tanzania	0.08
Bulgaria	0.25	Hungary	0.30	Nepal	0.38	Thailand	0.03
Burkina Faso	0.33	Iceland	7.02	Netherlands	1.37	Togo	0.19
Burundi	0.00	India	0.02	New Zealand	1.82	Trin. and Tob.	0.00
Byelarus	0.00	Indonesia	0.00	Nicaragua	0.38	Tunisia	0.52
Cambodia	0.00	Iran	0.00	Niger	0.19	Turkey	0.06
Cameroon	0.13	Iraq	0.00	Nigeria	0.03	Turkmenistan	0.18
Canada	1.00	Ireland	0.78	North Korea	0.05	Uganda	0.21
Central Af. R.	0.00	Israel	0.62	Norway	1.33	Ukraine	0.06
Chad	0.00	Italy	0.33	Oman	0.42	United Ar. Em.	0.60
Chile	0.19	Ivory Coast	0.00	Pakistan	0.15	United King.	0.73
China	0.01	Jamaica	1.52	Panama	2.76	United States	0.18
Colombia	0.28	Japan	0.17	Papua N.G.	0.20	Uruguay	1.49
Congo	0.64	Jordan	2.12	Paraguay	0.71	Uzbekistan	0.04
Costa Rica	2.15	Kazakhstan	0.27	Peru	0.31	Venezuela	0.28
Croatia	0.64	Kenya	0.24	Philippines	0.04	Vietnam	0.04
Cuba	0.09	Kuwait	1.32	Poland	0.21	Zaire	0.07
Czech Rep.	0.49	Kyrgyzstan	0.20	Portugal	0.40	Zambia	0.72
Denmark	1.31	Laos	0.19	Romania	0.13	Zimbabwe	1.76
Dom. Rep.	0.35	Latvia	0.42	Russia	0.06		
Ecuador	1.24	Lebanon	1.63	Rwanda	0.00		

2002 ESI: Annex 6

Variable Data

Variable: MONFUN

Name: Montreal Protocol Multilateral Fund participation

Units: Standardized Scale (Z-Score)

Reference Year: 2001

Source Report of the Thirty-Fourth Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, UNEP/OzL.Pro/ExCom/34/58, 21 July 2001; Report of the Thirty-Third Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, UNEP/OzL.Pro/ExCom/33/32, 30 March 2001; Report of the Thirty-Second Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol, UNEP/OzL.Pro/ExCom/32/44, 22 January 2001; Report of the 13th Meeting of the Sub-Committee on Monitoring, Evaluation and Finance, UNEP/OzL.Pro/ExCom/33/3, 27 March 2001.

Logic: Managing global environmental problems requires active financial participation, both among donors and recipients. The Montreal Protocol Multilateral Fund is a major organized effort to finance reductions in production and consumption of ozone-depleting substances.

Methodology: This score combines payments (contributions to the Montreal Protocol Multilateral Fund and bilateral payments credited under the terms of the Fund) and receipts by countries from the Fund. To make payments and receipts comparable, the two were first standardized, and countries were assigned the higher of the two possible z-scores. Payments were normalized by share of United Nations budget, and receipts were normalized by share of total Fund payments. Covers payments during 2000 and receipts during 2001.

Mean	0.65	Max	9.99	97.5 percentile cut-off value:	4.4
Median	-0.12	Min	-0.29	2.5 percentile cut-off value:	-0.29

Albania	-0.29	Egypt	-0.16	Liberia	-0.29	Saudi Arabia	-0.29
Algeria	0.15	El Salvador	-0.22	Libya	1.48	Senegal	0.45
Angola	-0.20	Estonia	4.47	Lithuania	-0.29	Sierra Leone	-0.29
Argentina	-0.12	Ethiopia	-0.29	Macedonia	5.17	Slovakia	2.56
Armenia	-0.29	Finland	2.97	Madagascar	-0.29	Slovenia	-0.29
Australia	2.85	France	2.88	Malawi	9.99	Somalia	-0.29
Austria	2.82	Gabon	-0.12	Malaysia	0.37	South Africa	-0.29
Azerbaijan	-0.29	Gambia	-0.06	Mali	0.37	South Korea	-0.29
Bangladesh	-0.29	Germany	3.47	Mauritania	0.61	Spain	2.93
Belgium	2.77	Ghana	0.37	Mexico	-0.20	Sri Lanka	0.12
Benin	3.23	Greece	0.01	Moldova	-0.29	Sudan	-0.17
Bhutan	-0.29	Guatemala	-0.29	Mongolia	1.54	Sweden	2.35
Bolivia	-0.06	Guinea	-0.18	Morocco	0.93	Switzerland	-0.29
Bosnia and H.	-0.29	Guinea-Bissau	-0.29	Mozambique	-0.29	Syria	1.17
Botswana	-0.29	Haiti	-0.06	Myanmar	-0.29	Tajikistan	-0.29
Brazil	0.00	Honduras	-0.08	Namibia	-0.29	Tanzania	-0.29
Bulgaria	4.34	Hungary	2.84	Nepal	-0.29	Thailand	-0.09
Burkina Faso	0.71	Iceland	2.76	Netherlands	2.65	Togo	-0.29
Burundi	0.04	India	0.21	New Zealand	2.58	Trin. and Tob.	-0.10
Byelarus	-0.29	Indonesia	-0.27	Nicaragua	-0.17	Tunisia	0.08
Cambodia	-0.29	Iran	0.61	Niger	-0.02	Turkey	-0.17
Cameroon	-0.24	Iraq	-0.29	Nigeria	0.68	Turkmenistan	-0.29
Canada	3.09	Ireland	2.08	North Korea	-0.29	Uganda	0.13
Central Af. R.	1.52	Israel	-0.29	Norway	2.26	Ukraine	-0.29
Chad	-0.29	Italy	-0.29	Oman	0.71	United Ar. Em.	-0.29
Chile	0.02	Ivory Coast	-0.29	Pakistan	-0.22	United King.	2.59
China	0.05	Jamaica	-0.29	Panama	-0.29	United States	2.85
Colombia	0.05	Japan	2.92	Papua N.G.	-0.29	Uruguay	0.68
Congo	2.72	Jordan	4.08	Paraguay	1.48	Uzbekistan	-0.29
Costa Rica	-0.18	Kazakhstan	-0.29	Peru	-0.29	Venezuela	0.03
Croatia	-0.25	Kenya	-0.12	Philippines	-0.29	Vietnam	-0.05
Cuba	-0.05	Kuwait	-0.29	Poland	1.53	Zaire	-0.13
Czech Rep.	1.71	Kyrgyzstan	-0.29	Portugal	-0.29	Zambia	-0.29
Denmark	2.60	Laos	1.67	Romania	-0.10	Zimbabwe	-0.08
Dom. Rep.	-0.27	Latvia	-0.29	Russia	-0.29		
Ecuador	-0.25	Lebanon	3.18	Rwanda	-0.29		

2002 ESI: Annex 6

Variable Data

Variable: NO₂

Name: Urban NO₂ concentration

Units: Micrograms/m³

Reference Year: MRYA 1990-1996

Source: World Resources Institute, World Resources 1998-99; World Bank, World Development Indicators 2000; WHO, Air Management Information System-AMIS 2.0, 1998; and Global Urban Observatory, Citibase, 1999.

Logic: Indicator of Urban Air Quality.

Methodology: The values were originally collected at the city level. The number of city with data provided by each country varied. Within each country the values have been normalized by city population for the year 1995, then summed to give the total concentration for the given country.

Mean	56.4	Max	209	97.5 percentile cut-off value:	150.64
Median	47.53	Min	1	2.5 percentile cut-off value:	2.9

Albania	[60.89]	Egypt	[43.83]	Liberia	[61.49]	Saudi Arabia	[81.06]
Algeria	[53.26]	El Salvador	70.50	Libya	[46.57]	Senegal	[69.4]
Angola	[62.73]	Estonia	[49.62]	Lithuania	28.31	Sierra Leone	[68.27]
Argentina	56.79	Ethiopia	[29.96]	Macedonia	[54.15]	Slovakia	25.62
Armenia	[43.88]	Finland	30.69	Madagascar	[74.32]	Slovenia	[70.59]
Australia	16.47	France	56.61	Malawi	[50.96]	Somalia	[37.88]
Austria	39.75	Gabon	[54.6]	Malaysia	0.00	South Africa	44.03
Azerbaijan	[55.98]	Gambia	[72.72]	Mali	[60.58]	South Korea	52.86
Bangladesh	[31.4]	Germany	40.07	Mauritania	[39.99]	Spain	32.36
Belgium	46.79	Ghana	[78.99]	Mexico	130.00	Sri Lanka	[10.27]
Benin	[83.02]	Greece	64.00	Moldova	[48.89]	Sudan	[45.76]
Bhutan	[42.04]	Guatemala	69.33	Mongolia	[48.34]	Sweden	29.68
Bolivia	[56.14]	Guinea	[69.79]	Morocco	[59.76]	Switzerland	42.20
Bosnia and H.	[69.78]	Guinea-Bissau	[60.83]	Mozambique	[69.3]	Syria	[41.83]
Botswana	[31.08]	Haiti	[67.05]	Myanmar	[65.36]	Tajikistan	[57.04]
Brazil	51.37	Honduras	29.50	Namibia	[32.01]	Tanzania	[15.78]
Bulgaria	111.14	Hungary	45.11	Nepal	[53.45]	Thailand	23.00
Burkina Faso	[13.09]	Iceland	42.00	Netherlands	58.00	Togo	[67.58]
Burundi	[22.28]	India	29.68	New Zealand	19.51	Trin. and Tob.	[19.84]
Byelarus	42.60	Indonesia	[34.62]	Nicaragua	32.00	Tunisia	[55.3]
Cambodia	[55.61]	Iran	[33.3]	Niger	[54.95]	Turkey	9.45
Cameroon	[51.6]	Iraq	[54.84]	Nigeria	[28.68]	Turkmenistan	[78.54]
Canada	41.24	Ireland	[24.02]	North Korea	[43.24]	Uganda	[66.8]
Central Af. R.	[45.32]	Israel	35.55	Norway	49.65	Ukraine	[59.59]
Chad	[41.48]	Italy	124.38	Oman	[42.24]	United Ar. Em.	[93.7]
Chile	81.00	Ivory Coast	[62.85]	Pakistan	[63.59]	United King.	64.47
China	71.72	Jamaica	[46.73]	Panama	42.00	United States	60.57
Colombia	[77.84]	Japan	62.01	Papua N.G.	[45.41]	Uruguay	[49.92]
Congo	[67.23]	Jordan	[33.55]	Paraguay	[81.35]	Uzbekistan	[52.12]
Costa Rica	45.75	Kazakhstan	[52.39]	Peru	[38.5]	Venezuela	57.00
Croatia	[49.24]	Kenya	[71.05]	Philippines	[46.18]	Vietnam	[65.5]
Cuba	5.00	Kuwait	[61.33]	Poland	58.14	Zaire	[44.21]
Czech Rep.	28.59	Kyrgyzstan	[37.59]	Portugal	49.57	Zambia	[77.89]
Denmark	54.00	Laos	[39.33]	Romania	71.00	Zimbabwe	[47.56]
Dom. Rep.	[44.3]	Latvia	63.74	Russia	3.44		
Ecuador	[35.71]	Lebanon	[20.84]	Rwanda	[62.88]		

Variable: NOXKM
Name: NOx emissions per populated land area
Units: 1000 Metric Tons/Sq. Km. of Populated Land Area **Reference Year:** 2000
Source: Intergovernmental Panel on Climate Change: Special Report on Emissions Scenarios, Data Version 1.1, B1 Illustrative Marker Scenario with model IMAGE. Available at http://sres.ciesin.columbia.edu/final_data.html
Logic: Indicator of air pollution: emissions contribute to declines in air quality. The use of a Gridded dataset gives more detailed information about the distribution of pollution sources and permits a better estimate of total emissions within each country.

Methodology: The gridded emissions data, originally available as 1x1 degree cells, were summarized at the country level to give the total emissions for each country. Air pollution is generally greatest in densely populated areas. To take this into account, we used the Gridded Population of the World dataset available from CIESIN and calculated the total land area in each country inhabited with a population density of greater than 5 persons per sq. km. We then utilized this land area as the denominator for the emissions data.

Mean	0.52	Max	6.34	97.5 percentile cut-off value:	3.05
Median	0.23	Min	0.01	2.5 percentile cut-off value:	0.04

Albania	0.07	Egypt	2.18	Liberia	0.27	Saudi Arabia	0.20
Algeria	0.86	El Salvador	0.07	Libya	6.34	Senegal	0.20
Angola	0.33	Estonia	0.09	Lithuania	0.21	Sierra Leone	0.48
Argentina	0.11	Ethiopia	0.13	Macedonia	0.15	Slovakia	0.27
Armenia	0.45	Finland	0.19	Madagascar	0.11	Slovenia	0.17
Australia	1.00	France	0.99	Malawi	0.16	Somalia	0.05
Austria	0.46	Gabon	0.11	Malaysia	0.21	South Africa	0.64
Azerbaijan	0.29	Gambia	[0.12]	Mali	0.12	South Korea	1.24
Bangladesh	0.67	Germany	1.82	Mauritania	0.20	Spain	0.44
Belgium	3.43	Ghana	0.29	Mexico	0.38	Sri Lanka	0.15
Benin	0.14	Greece	0.47	Moldova	0.09	Sudan	0.18
Bhutan	0.07	Guatemala	0.24	Mongolia	0.16	Sweden	0.27
Bolivia	0.21	Guinea	0.08	Morocco	0.10	Switzerland	0.95
Bosnia and H.	0.16	Guinea-Bissau	0.13	Mozambique	0.13	Syria	0.21
Botswana	2.65	Haiti	0.03	Myanmar	0.19	Tajikistan	0.16
Brazil	0.34	Honduras	0.14	Namibia	1.84	Tanzania	0.19
Bulgaria	0.19	Hungary	0.23	Nepal	0.93	Thailand	0.45
Burkina Faso	0.16	Iceland	1.76	Netherlands	1.51	Togo	0.19
Burundi	0.23	India	0.52	New Zealand	0.16	Trin. and Tob.	[0.57]
Byelarus	0.20	Indonesia	0.18	Nicaragua	0.09	Tunisia	0.22
Cambodia	1.31	Iran	0.12	Niger	0.16	Turkey	0.33
Cameroon	0.17	Iraq	0.31	Nigeria	0.24	Turkmenistan	0.17
Canada	1.15	Ireland	0.45	North Korea	1.18	Uganda	0.26
Central Af. R.	0.61	Israel	0.76	Norway	0.26	Ukraine	0.36
Chad	0.17	Italy	1.00	Oman	0.09	United Ar. Em.	4.99
Chile	0.10	Ivory Coast	0.26	Pakistan	0.25	United King.	2.76
China	0.75	Jamaica	0.20	Panama	0.05	United States	1.29
Colombia	0.26	Japan	1.50	Papua N.G.	0.01	Uruguay	0.09
Congo	0.26	Jordan	0.30	Paraguay	0.38	Uzbekistan	0.16
Costa Rica	0.03	Kazakhstan	0.14	Peru	0.07	Venezuela	0.41
Croatia	0.18	Kenya	0.22	Philippines	0.31	Vietnam	0.56
Cuba	0.16	Kuwait	1.05	Poland	0.28	Zaire	0.15
Czech Rep.	0.43	Kyrgyzstan	0.08	Portugal	0.22	Zambia	0.41
Denmark	1.01	Laos	0.29	Romania	0.27	Zimbabwe	0.21
Dom. Rep.	0.06	Latvia	0.04	Russia	0.44		
Ecuador	0.21	Lebanon	1.22	Rwanda	0.32		

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Variable Data

Variable: NUKE
Name: Nuclear waste generated
Units: Standardized Scale (z-score) **Reference Year:** 1996
Source: International Atomic Energy Agency, Waste Management Database, 1997
Logic: Radioactive waste, as a source of ionizing radiation, has long been recognized as a potential hazard to human health. Many practices in the fields of research, medicine, industry and generation of electricity generate waste that requires management to ensure the protection of human health and the environment now and in the future, without imposing undue burdens on future generations (The Principle of Radioactive Waste Management, IAEA, 1997).

Methodology: Two variables were initially available for Radioactive Waste: Accumulated Quantity (cubic meters) as generated and Accumulated Quantity (cubic meters) after treatment. We calculated the z-scores for the two variables, in order to make them comparable, and took which ever variable was available for each country. For the three countries (Australia, Canada and Czech Republic) which had both variables, we took the higher.

Mean 0.03 **Max** 4.36 **97.5 percentile cut-off value:** 4.3
Median -0.33 **Min** -0.36 **2.5 percentile cut-off value:** -0.36

Albania	-0.33	Egypt	-0.33	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	--	Libya	--	Senegal	--
Angola	--	Estonia	-0.36	Lithuania	-0.10	Sierra Leone	--
Argentina	-0.35	Ethiopia	--	Macedonia	--	Slovakia	-0.24
Armenia	--	Finland	-0.34	Madagascar	--	Slovenia	-0.35
Australia	-0.34	France	2.18	Malawi	--	Somalia	--
Austria	--	Gabon	--	Malaysia	-0.33	South Africa	-0.23
Azerbaijan	--	Gambia	--	Mali	--	South Korea	-0.30
Bangladesh	--	Germany	0.19	Mauritania	--	Spain	-0.26
Belgium	-0.31	Ghana	--	Mexico	-0.33	Sri Lanka	--
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	-0.33	Mongolia	--	Sweden	-0.23
Bolivia	--	Guinea	--	Morocco	--	Switzerland	-0.32
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	-0.34	Honduras	--	Namibia	--	Tanzania	--
Bulgaria	-0.20	Hungary	-0.34	Nepal	--	Thailand	-0.36
Burkina Faso	--	Iceland	--	Netherlands	-0.32	Togo	--
Burundi	--	India	-0.06	New Zealand	--	Trin. and Tob.	--
Byelarus	-0.32	Indonesia	-0.36	Nicaragua	--	Tunisia	-0.33
Cambodia	--	Iran	-0.33	Niger	--	Turkey	-0.36
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	0.66	Ireland	--	North Korea	--	Uganda	--
Central Af. R.	--	Israel	--	Norway	-0.35	Ukraine	4.36
Chad	--	Italy	-0.19	Oman	--	United Ar. Em.	--
Chile	-0.36	Ivory Coast	--	Pakistan	--	United King.	3.98
China	--	Jamaica	--	Panama	--	United States	1.67
Colombia	--	Japan	--	Papua N.G.	--	Uruguay	--
Congo	--	Jordan	--	Paraguay	--	Uzbekistan	-0.33
Costa Rica	--	Kazakhstan	--	Peru	--	Venezuela	--
Croatia	--	Kenya	--	Philippines	--	Vietnam	--
Cuba	-0.33	Kuwait	--	Poland	-0.35	Zaire	--
Czech Rep.	-0.28	Kyrgyzstan	--	Portugal	-0.36	Zambia	--
Denmark	-0.35	Laos	--	Romania	-0.31	Zimbabwe	--
Dom. Rep.	--	Latvia	--	Russia	--		
Ecuador	--	Lebanon	--	Rwanda	--		

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Variable Data

Variable: PESTHA

Name: Pesticide use

Units: Kg/Hectare of Cropland

Reference Year: 1996

Source: World Resource Institute, World Resources 2000-2001, Washington, DC: WRI, 2000.

Logic: Excessive use of pesticides in agricultural activities has a negative impact on soil, water, humans and wildlife.

Methodology:

Mean	3088.19	Max	24125	97.5 percentile cut-off value:	16753.29
Median	1760.3	Min	1	2.5 percentile cut-off value:	16.58

Albania	435.00	Egypt	1293.00	Liberia	[3187.75]	Saudi Arabia	[3636.09]
Algeria	835.00	El Salvador	2642.00	Libya	[5535.85]	Senegal	183.00
Angola	42.00	Estonia	105.00	Lithuania	312.00	Sierra Leone	[4865.61]
Argentina	1266.00	Ethiopia	34.00	Macedonia	7718.00	Slovakia	4148.00
Armenia	[1458.6]	Finland	410.00	Madagascar	28.00	Slovenia	6389.00
Australia	2535.00	France	[2926.41]	Malawi	[5746.72]	Somalia	[2605.53]
Austria	2710.00	Gabon	[3041.56]	Malaysia	5982.00	South Africa	57.00
Azerbaijan	[3257.84]	Gambia	46.00	Mali	136.00	South Korea	13829.00
Bangladesh	176.00	Germany	2085.00	Mauritania	[1098.19]	Spain	[4231.99]
Belgium	[6653.81]	Ghana	2333.00	Mexico	[3474.48]	Sri Lanka	6271.00
Benin	[1043.74]	Greece	[5033.87]	Moldova	1434.00	Sudan	106.00
Bhutan	670.00	Guatemala	574.00	Mongolia	[1463.19]	Sweden	509.00
Bolivia	1514.00	Guinea	83.00	Morocco	[626.36]	Switzerland	4576.00
Bosnia and H.	[721.76]	Guinea-Bissau	274.00	Mozambique	[565.82]	Syria	[4761.05]
Botswana	40.00	Haiti	23.00	Myanmar	16.00	Tajikistan	[4483.9]
Brazil	836.00	Honduras	6521.00	Namibia	[5079.5]	Tanzania	[579.69]
Bulgaria	966.00	Hungary	2863.00	Nepal	21.00	Thailand	1116.00
Burkina Faso	1.00	Iceland	[14190.4]	Netherlands	11842.00	Togo	95.00
Burundi	268.00	India	436.00	New Zealand	2215.00	Trin. and Tob.	11827.00
Byelarus	[3226.19]	Indonesia	88.00	Nicaragua	357.00	Tunisia	[4335.49]
Cambodia	[3581.9]	Iran	1881.00	Niger	[3267.22]	Turkey	1145.00
Cameroon	253.00	Iraq	[2769.33]	Nigeria	[4466.61]	Turkmenistan	6744.00
Canada	644.00	Ireland	[10952.15]	North Korea	[450.4]	Uganda	17.00
Central Af. R.	12.00	Israel	[4482.06]	Norway	941.00	Ukraine	2001.00
Chad	223.00	Italy	19288.00	Oman	24125.00	United Ar. Em.	[15295.21]
Chile	3240.00	Ivory Coast	[1828.76]	Pakistan	365.00	United King.	4745.00
China	[4403.59]	Jamaica	[4730.17]	Panama	[3467.54]	United States	1599.00
Colombia	6134.00	Japan	[7592.05]	Papua N.G.	1750.00	Uruguay	1316.00
Congo	216.00	Jordan	1495.00	Paraguay	1542.00	Uzbekistan	[2369.4]
Costa Rica	18726.00	Kazakhstan	[2943.15]	Peru	[1533.57]	Venezuela	1403.00
Croatia	3060.00	Kenya	[3233.01]	Philippines	[4155.62]	Vietnam	[7888.77]
Cuba	[4055.46]	Kuwait	[6192.79]	Poland	490.00	Zaire	[2921.01]
Czech Rep.	1169.00	Kyrgyzstan	1860.00	Portugal	2584.00	Zambia	317.00
Denmark	2200.00	Laos	57.00	Romania	1617.00	Zimbabwe	531.00
Dom. Rep.	[1770.6]	Latvia	208.00	Russia	407.00		
Ecuador	1696.00	Lebanon	[8809.02]	Rwanda	260.00		

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Variable Data

Variable: POLITY
Name: Democratic institutions
Units: Scale ranging from 10 (autocratic) to +10 (democratic) **Reference Year:** 1999
Source: Polity IV Project, University of Maryland, at <http://www.bsos.umd.edu/cidcm/inscr/index.htm#polity>
Logic: The presence of democratic institutions increases the likelihood that important environmental issues will be debated, that alternative views will be aired, and that decision-making and implementation will be carried out in an open manner. These factors improve the quality of environmental governance.

Methodology:

Mean	3.06	Max	10	97.5 percentile cut-off value:	10
Median	6	Min	-10	2.5 percentile cut-off value:	-9

Albania	5.00	Egypt	-6.00	Liberia	0.00	Saudi Arabia	-10.00
Algeria	-2.00	El Salvador	7.00	Libya	-7.00	Senegal	-1.00
Angola	-3.00	Estonia	6.00	Lithuania	10.00	Sierra Leone	4.00
Argentina	7.00	Ethiopia	1.00	Macedonia	6.00	Slovakia	9.00
Armenia	5.00	Finland	10.00	Madagascar	6.00	Slovenia	10.00
Australia	10.00	France	9.00	Malawi	7.00	Somalia	-7.00
Austria	10.00	Gabon	-4.00	Malaysia	4.00	South Africa	9.00
Azerbaijan	-7.00	Gambia	-5.00	Mali	4.00	South Korea	8.00
Bangladesh	6.00	Germany	10.00	Mauritania	-6.00	Spain	10.00
Belgium	10.00	Ghana	2.00	Mexico	6.00	Sri Lanka	6.00
Benin	6.00	Greece	10.00	Moldova	6.00	Sudan	-7.00
Bhutan	-8.00	Guatemala	6.00	Mongolia	10.00	Sweden	10.00
Bolivia	8.00	Guinea	-1.00	Morocco	-6.00	Switzerland	10.00
Bosnia and H.	--	Guinea-Bissau	5.00	Mozambique	6.00	Syria	-9.00
Botswana	9.00	Haiti	6.00	Myanmar	-7.00	Tajikistan	-1.00
Brazil	8.00	Honduras	7.00	Namibia	6.00	Tanzania	-1.00
Bulgaria	9.00	Hungary	10.00	Nepal	6.00	Thailand	9.00
Burkina Faso	-1.00	Iceland	10.00	Netherlands	10.00	Togo	-2.00
Burundi	-2.00	India	9.00	New Zealand	10.00	Trin. and Tob.	10.00
Byelarus	-7.00	Indonesia	7.00	Nicaragua	9.00	Tunisia	-3.00
Cambodia	2.00	Iran	3.00	Niger	4.00	Turkey	7.00
Cameroon	-4.00	Iraq	-9.00	Nigeria	4.00	Turkmenistan	-8.00
Canada	10.00	Ireland	10.00	North Korea	-9.00	Uganda	-1.00
Central Af. R.	6.00	Israel	10.00	Norway	10.00	Ukraine	6.00
Chad	-2.00	Italy	10.00	Oman	-9.00	United Ar. Em.	-8.00
Chile	7.00	Ivory Coast	-6.00	Pakistan	-6.00	United King.	10.00
China	-7.00	Jamaica	9.00	Panama	7.00	United States	10.00
Colombia	8.00	Japan	10.00	Papua N.G.	10.00	Uruguay	9.00
Congo	-6.00	Jordan	-2.00	Paraguay	6.00	Uzbekistan	-9.00
Costa Rica	10.00	Kazakhstan	-3.00	Peru	3.00	Venezuela	7.00
Croatia	-5.00	Kenya	-2.00	Philippines	7.00	Vietnam	-7.00
Cuba	-7.00	Kuwait	-7.00	Poland	10.00	Zaire	-8.00
Czech Rep.	9.00	Kyrgyzstan	4.00	Portugal	10.00	Zambia	1.00
Denmark	10.00	Laos	-8.00	Romania	7.00	Zimbabwe	-6.00
Dom. Rep.	8.00	Latvia	7.00	Russia	5.00		
Ecuador	8.00	Lebanon	5.00	Rwanda	-4.00		

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Variable Data

Variable: PRAREA

Name: Percent of land area under protected status

Units: Percent Land Area

Reference Year: 1998

Source: World Conservation Monitoring Centre Protected Areas Database. Data Provider: World Conservation Monitoring Centre (WCMC), 1999, accessed at http://www.unep-wcmc.org/protected_areas/data/un_annex.htm

Logic: The percentage of land area dedicated to protected areas represents an investment by the country in biodiversity conservation.

Methodology: Marine protected areas were subtracted from the total area of protected areas so as to limit the focus to land-based ecosystem protection.

Mean	8.37	Max	60.72	97.5 percentile cut-off value:	29.6
Median	6.195	Min	0	2.5 percentile cut-off value:	0

Albania	3.57	Egypt	0.12	Liberia	1.16	Saudi Arabia	34.17
Algeria	2.44	El Salvador	0.24	Libya	0.08	Senegal	10.97
Angola	4.58	Estonia	8.66	Lithuania	9.90	Sierra Leone	2.12
Argentina	3.22	Ethiopia	16.93	Macedonia	7.05	Slovakia	21.64
Armenia	7.16	Finland	8.42	Madagascar	2.07	Slovenia	5.94
Australia	7.54	France	9.02	Malawi	11.25	Somalia	0.30
Austria	29.23	Gabon	2.70	Malaysia	4.36	South Africa	5.14
Azerbaijan	5.52	Gambia	0.38	Mali	3.65	South Korea	6.95
Bangladesh	0.68	Germany	25.24	Mauritania	0.54	Spain	8.36
Belgium	2.81	Ghana	5.32	Mexico	5.74	Sri Lanka	11.69
Benin	11.21	Greece	0.92	Moldova	1.50	Sudan	4.88
Bhutan	21.40	Guatemala	19.90	Mongolia	10.31	Sweden	8.28
Bolivia	16.22	Guinea	0.67	Morocco	0.68	Switzerland	18.04
Bosnia and H.	0.52	Guinea-Bissau	0.00	Mozambique	6.31	Syria	0.00
Botswana	18.26	Haiti	0.35	Myanmar	0.26	Tajikistan	4.10
Brazil	5.92	Honduras	8.55	Namibia	13.61	Tanzania	27.74
Bulgaria	4.51	Hungary	6.98	Nepal	8.98	Thailand	12.74
Burkina Faso	10.42	Iceland	9.54	Netherlands	10.78	Togo	7.56
Burundi	5.25	India	4.07	New Zealand	23.84	Trin. and Tob.	3.95
Byelarus	4.22	Indonesia	14.54	Nicaragua	10.73	Tunisia	0.25
Cambodia	17.97	Iran	5.04	Niger	8.17	Turkey	1.20
Cameroon	3.44	Iraq	0.00	Nigeria	3.27	Turkmenistan	3.51
Canada	7.79	Ireland	0.94	North Korea	2.58	Uganda	20.78
Central Af. R.	8.71	Israel	15.68	Norway	6.25	Ukraine	1.34
Chad	8.95	Italy	7.29	Oman	12.50	United Ar. Em.	0.00
Chile	18.74	Ivory Coast	6.15	Pakistan	4.66	United King.	17.73
China	7.05	Jamaica	8.60	Panama	19.08	United States	20.13
Colombia	7.65	Japan	5.49	Papua N.G.	1.49	Uruguay	0.25
Congo	4.55	Jordan	3.10	Paraguay	3.44	Uzbekistan	1.83
Costa Rica	19.21	Kazakhstan	2.70	Peru	5.00	Venezuela	60.72
Croatia	6.38	Kenya	7.64	Philippines	2.17	Vietnam	2.93
Cuba	3.21	Kuwait	1.04	Poland	9.28	Zaire	6.24
Czech Rep.	16.20	Kyrgyzstan	3.50	Portugal	5.68	Zambia	30.09
Denmark	23.96	Laos	11.64	Romania	4.59	Zimbabwe	12.80
Dom. Rep.	13.08	Latvia	6.62	Russia	2.46		
Ecuador	16.16	Lebanon	0.46	Rwanda	15.06		

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Variable Data

Variable: PRTBRD
Name: Percentage of breeding birds threatened
Units: Percent of Breeding Birds **Reference Year:** 2000
Source: 2000 IUCN Red List, <http://www.redlist.org/info/tables/table3.html>, and World Resources Institute, World Resources 2000-2001, Washington, DC: WRI, 2000. Original sources: World Conservation Monitoring Center, IUCN-The World Conservation Union, Food and Agriculture Organization of the United Nations and other sources. <http://earthtrends.wri.org>

Logic: The percent of breeding birds threatened gives an estimate of a country's success at preserving its biodiversity.

Methodology: The number of bird species threatened divided by known bird species in the country, expressed as a percentage.

Mean	4.34	Max	35	97.5 percentile cut-off value:	28.01
Median	2.52	Min	0	2.5 percentile cut-off value:	0

Albania	1.30	Egypt	4.58	Liberia	2.96	Saudi Arabia	9.68
Algeria	3.13	El Salvador	0.00	Libya	1.10	Senegal	1.04
Angola	1.96	Estonia	1.41	Lithuania	1.98	Sierra Leone	2.15
Argentina	4.24	Ethiopia	2.56	Macedonia	1.43	Slovakia	1.91
Armenia	1.65	Finland	1.21	Madagascar	13.37	Slovenia	0.48
Australia	4.93	France	1.86	Malawi	2.11	Somalia	2.37
Austria	1.41	Gabon	1.07	Malaysia	7.28	South Africa	3.36
Azerbaijan	3.23	Gambia	0.71	Mali	1.01	South Korea	22.32
Bangladesh	7.80	Germany	2.09	Mauritania	0.73	Spain	2.52
Belgium	1.11	Ghana	1.51	Mexico	4.92	Sri Lanka	5.60
Benin	0.65	Greece	2.79	Moldova	2.82	Sudan	0.88
Bhutan	2.68	Guatemala	1.31	Mongolia	3.76	Sweden	0.80
Bolivia	--	Guinea	2.44	Morocco	4.29	Switzerland	1.04
Bosnia and H.	1.38	Guinea-Bissau	0.00	Mozambique	0.00	Syria	3.92
Botswana	1.81	Haiti	18.67	Myanmar	4.04	Tajikistan	--
Brazil	7.53	Honduras	1.18	Namibia	1.92	Tanzania	3.99
Bulgaria	4.17	Hungary	3.90	Nepal	4.26	Thailand	6.01
Burkina Faso	0.60	Iceland	0.00	Netherlands	2.09	Togo	0.00
Burundi	1.55	India	7.56	New Zealand	32.67	Trin. and Tob.	0.38
Byelarus	1.36	Indonesia	7.39	Nicaragua	1.04	Tunisia	2.89
Cambodia	6.19	Iran	4.02	Niger	1.00	Turkey	3.64
Cameroon	2.17	Iraq	6.40	Nigeria	1.32	Turkmenistan	--
Canada	1.88	Ireland	0.70	North Korea	16.52	Uganda	1.57
Central Af. R.	0.56	Israel	6.67	Norway	0.82	Ukraine	3.04
Chad	1.35	Italy	2.14	Oman	9.35	United Ar. Em.	11.94
Chile	5.07	Ivory Coast	2.24	Pakistan	4.53	United King.	0.87
China	6.62	Jamaica	10.62	Panama	2.19	United States	8.31
Colombia	4.53	Japan	12.80	Papua N.G.	4.90	Uruguay	4.64
Congo	0.67	Jordan	5.67	Paraguay	4.68	Uzbekistan	--
Costa Rica	2.17	Kazakhstan	3.79	Peru	4.61	Venezuela	1.79
Croatia	1.79	Kenya	2.83	Philippines	34.18	Vietnam	6.54
Cuba	13.14	Kuwait	35.00	Poland	1.76	Zaire	3.01
Czech Rep.	1.01	Kyrgyzstan	--	Portugal	3.38	Zambia	1.82
Denmark	0.51	Laos	3.90	Romania	3.24	Zimbabwe	1.88
Dom. Rep.	11.03	Latvia	1.38	Russia	6.05		
Ecuador	4.32	Lebanon	4.55	Rwanda	1.75		

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Variable Data

Variable: PRTMAM
Name: Percentage of mammals threatened
Units: Percent of Mammals **Reference Year:** 2000
Source: 2000 IUCN Red List, <http://www.redlist.org/info/tables/table3.html>, and World Resources Institute, World Resources 2000-2001, Washington, DC: WRI, 2000. Original sources: World Conservation Monitoring Center, IUCN-The World Conservation Union, Food and Agriculture Organization of the United Nations and other sources. <http://earthtrends.wri.org>

Logic: The percent of mammals threatened gives an estimate of a country's success at preserving its biodiversity.

Methodology: Number of mammal species threatened divided by known mammal species in the country, expressed as a percentage. Note that due to inconsistencies in the taxonomies used in the two lists utilized to develop this variable, Haiti appears to have over 100 percent of its mammal species threatened.

Mean	13.98	Max	133.33	97.5 percentile cut-off value:	44.06
Median	11.27	Min	0	2.5 percentile cut-off value:	1.69

Albania	4.41	Egypt	12.24	Liberia	8.29	Saudi Arabia	9.09
Algeria	14.13	El Salvador	1.48	Libya	11.84	Senegal	5.73
Angola	6.52	Estonia	7.69	Lithuania	7.35	Sierra Leone	7.48
Argentina	10.00	Ethiopia	13.33	Macedonia	14.10	Slovakia	10.59
Armenia	8.33	Finland	10.00	Madagascar	35.46	Slovenia	12.00
Australia	24.23	France	19.35	Malawi	4.10	Somalia	11.11
Austria	10.84	Gabon	7.89	Malaysia	15.67	South Africa	16.08
Azerbaijan	13.13	Gambia	2.56	Mali	9.49	South Korea	26.53
Bangladesh	19.27	Germany	15.79	Mauritania	16.39	Spain	29.27
Belgium	18.97	Ghana	5.86	Mexico	14.05	Sri Lanka	22.73
Benin	3.72	Greece	14.74	Moldova	4.41	Sudan	8.99
Bhutan	20.20	Guatemala	2.40	Mongolia	9.02	Sweden	13.33
Bolivia	7.28	Guinea	5.79	Morocco	15.24	Switzerland	8.00
Bosnia and H.	13.89	Guinea-Bissau	1.85	Mozambique	0.00	Syria	6.35
Botswana	3.05	Haiti	133.33	Myanmar	14.34	Tajikistan	10.71
Brazil	18.94	Honduras	5.20	Namibia	5.60	Tanzania	13.61
Bulgaria	18.52	Hungary	10.84	Nepal	14.92	Thailand	12.83
Burkina Faso	4.76	Iceland	54.55	Netherlands	20.00	Togo	4.59
Burundi	4.67	India	27.22	New Zealand	80.00	Trin. and Tob.	1.00
Byelarus	6.76	Indonesia	30.63	Nicaragua	3.00	Tunisia	14.10
Cambodia	17.07	Iran	16.43	Niger	8.40	Turkey	14.66
Cameroon	9.05	Iraq	12.35	Nigeria	9.12	Turkmenistan	12.62
Canada	7.25	Ireland	20.00	North Korea	--	Uganda	5.62
Central Af. R.	5.74	Israel	12.07	Norway	18.52	Ukraine	15.74
Chad	12.69	Italy	15.56	Oman	16.07	United Ar. Em.	12.00
Chile	23.08	Ivory Coast	7.39	Pakistan	11.92	United King.	24.00
China	19.00	Jamaica	20.83	Panama	9.17	United States	8.56
Colombia	10.03	Japan	19.68	Papua N.G.	26.13	Uruguay	7.41
Congo	6.00	Jordan	11.27	Paraguay	2.95	Uzbekistan	9.28
Costa Rica	6.83	Kazakhstan	10.11	Peru	10.22	Venezuela	6.70
Croatia	11.84	Kenya	14.21	Philippines	31.65	Vietnam	17.37
Cuba	35.48	Kuwait	4.76	Poland	17.86	Zaire	8.89
Czech Rep.	9.88	Kyrgyzstan	8.43	Portugal	26.98	Zambia	5.15
Denmark	11.63	Laos	15.70	Romania	20.24	Zimbabwe	4.44
Dom. Rep.	25.00	Latvia	6.02	Russia	15.61		
Ecuador	10.26	Lebanon	10.53	Rwanda	5.30		

2002 ESI: Annex 6

Variable Data

Variable: RENPC

Name: Renewable resources production as a percentage of total energy consumption

Units: Renewable Energy Production as a Percent of Total Energy **Reference Year:** 1999

Source: US Energy Information Agency, <http://www.eia.doe.gov/emeu/international/contents.html>, accessed 20 November 2001.

Logic: The higher the proportion of hydroelectric and renewable energy sources, the less reliance on more environmentally damaging sources such as fossil fuel and nuclear energy.

Methodology: Hydroelectric, biomass, geothermal, solar and wind electric power production as a percentage of total energy consumption. Some countries exceed 100 percent because they are net exporters of renewable energy.

Mean	21.22	Max	489.91	97.5 percentile cut-off value:	108.4
Median	8.165	Min	0	2.5 percentile cut-off value:	0

Albania	67.28	Egypt	7.80	Liberia	0.00	Saudi Arabia	0.00
Algeria	0.16	El Salvador	24.41	Libya	0.00	Senegal	0.00
Angola	10.31	Estonia	0.22	Lithuania	1.50	Sierra Leone	0.00
Argentina	9.14	Ethiopia	30.36	Macedonia	9.12	Slovakia	6.12
Armenia	16.92	Finland	17.61	Madagascar	21.69	Slovenia	13.97
Australia	4.24	France	7.50	Malawi	46.02	Somalia	0.00
Austria	31.26	Gabon	14.06	Malaysia	3.03	South Africa	0.17
Azerbaijan	4.19	Gambia	0.00	Mali	23.75	South Korea	0.59
Bangladesh	1.77	Germany	2.53	Mauritania	0.56	Spain	5.51
Belgium	0.53	Ghana	38.69	Mexico	7.31	Sri Lanka	25.03
Benin	11.75	Greece	3.91	Moldova	1.90	Sudan	14.39
Bhutan	367.59	Guatemala	16.71	Mongolia	0.00	Sweden	33.95
Bolivia	13.34	Guinea	19.59	Morocco	3.71	Switzerland	34.62
Bosnia and H.	18.61	Guinea-Bissau	0.00	Mozambique	92.00	Syria	9.71
Botswana	0.00	Haiti	15.06	Myanmar	11.29	Tajikistan	60.72
Brazil	38.59	Honduras	22.57	Namibia	0.00	Tanzania	35.96
Bulgaria	3.75	Hungary	0.17	Nepal	22.66	Thailand	3.33
Burkina Faso	7.40	Iceland	66.77	Netherlands	1.26	Togo	0.11
Burundi	20.92	India	7.01	New Zealand	36.82	Trin. and Tob.	0.05
Byelarus	0.02	Indonesia	5.63	Nicaragua	14.44	Tunisia	0.26
Cambodia	7.99	Iran	1.57	Niger	0.00	Turkey	12.20
Cameroon	39.86	Iraq	0.54	Nigeria	10.12	Turkmenistan	0.02
Canada	28.89	Ireland	2.01	North Korea	13.37	Uganda	52.03
Central Af. R.	16.97	Israel	0.05	Norway	66.18	Ukraine	2.46
Chad	0.00	Italy	7.26	Oman	0.00	United Ar. Em.	0.00
Chile	15.85	Ivory Coast	5.98	Pakistan	13.01	United King.	1.42
China	7.27	Jamaica	3.36	Panama	21.00	United States	4.30
Colombia	28.97	Japan	5.42	Papua N.G.	18.17	Uruguay	37.39
Congo	16.38	Jordan	0.07	Paraguay	489.91	Uzbekistan	3.22
Costa Rica	49.72	Kazakhstan	4.01	Peru	28.27	Venezuela	20.44
Croatia	16.45	Kenya	25.17	Philippines	22.76	Vietnam	21.60
Cuba	2.25	Kuwait	0.00	Poland	1.30	Zaire	50.76
Czech Rep.	1.81	Kyrgyzstan	56.12	Portugal	8.64	Zambia	82.36
Denmark	5.13	Laos	130.59	Romania	11.24	Zimbabwe	8.34
Dom. Rep.	4.98	Latvia	18.30	Russia	6.32		
Ecuador	20.31	Lebanon	3.10	Rwanda	10.65		

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Variable Data

Variable: SCHOOL

Name: Mean years of schooling (age 15 and above)

Units: Years

Reference Year: 2000

Source: United Nations Development Program. Human Development Report 2001, New York: Oxford University Press, 2001, Table A2.1.

Logic: The more educated a population is, the more likely it is to have the ingenuity to develop sustainable solutions to environment and development challenges.

Methodology:

Mean	5.93	Max	12	97.5 percentile cut-off value:	11.64
Median	5.86	Min	0.8	2.5 percentile cut-off value:	1.06

Albania	[5.1]	Egypt	5.50	Liberia	[2.05]	Saudi Arabia	[6.17]
Algeria	5.40	El Salvador	5.20	Libya	[7.02]	Senegal	2.60
Angola	[2.85]	Estonia	[8.01]	Lithuania	[7.71]	Sierra Leone	2.40
Argentina	8.80	Ethiopia	[2.22]	Macedonia	[6.38]	Slovakia	9.30
Armenia	[6.16]	Finland	10.00	Madagascar	[3.89]	Slovenia	7.10
Australia	10.90	France	7.90	Malawi	3.20	Somalia	[3.03]
Austria	8.40	Gabon	[3.38]	Malaysia	6.80	South Africa	6.10
Azerbaijan	[6.25]	Gambia	2.30	Mali	0.90	South Korea	10.80
Bangladesh	2.60	Germany	10.20	Mauritania	[1.96]	Spain	7.30
Belgium	9.30	Ghana	3.90	Mexico	7.20	Sri Lanka	6.90
Benin	2.30	Greece	8.70	Moldova	[5.43]	Sudan	2.10
Bhutan	[4.23]	Guatemala	3.50	Mongolia	[6.26]	Sweden	11.40
Bolivia	5.60	Guinea	[3.54]	Morocco	[6.6]	Switzerland	10.50
Bosnia and H.	[6.72]	Guinea-Bissau	0.80	Mozambique	1.10	Syria	5.80
Botswana	6.30	Haiti	2.80	Myanmar	2.80	Tajikistan	[5.7]
Brazil	4.90	Honduras	4.80	Namibia	[4.12]	Tanzania	2.70
Bulgaria	9.50	Hungary	9.10	Nepal	2.40	Thailand	6.50
Burkina Faso	[2.51]	Iceland	8.80	Netherlands	9.40	Togo	3.30
Burundi	[2.74]	India	5.10	New Zealand	11.70	Trin. and Tob.	7.80
Byelarus	[6.17]	Indonesia	5.00	Nicaragua	4.60	Tunisia	5.00
Cambodia	[3.25]	Iran	5.30	Niger	1.00	Turkey	5.30
Cameroon	3.50	Iraq	[5.08]	Nigeria	[2.31]	Turkmenistan	[6.83]
Canada	11.60	Ireland	9.40	North Korea	[4.59]	Uganda	3.50
Central Af. R.	2.50	Israel	9.60	Norway	11.90	Ukraine	[6.22]
Chad	[4.4]	Italy	7.20	Oman	[7.1]	United Ar. Em.	[7.44]
Chile	7.60	Ivory Coast	[3.38]	Pakistan	3.90	United King.	9.40
China	6.40	Jamaica	5.30	Panama	8.60	United States	12.00
Colombia	5.30	Japan	9.50	Papua N.G.	2.90	Uruguay	7.60
Congo	5.10	Jordan	6.90	Paraguay	6.20	Uzbekistan	[5.82]
Costa Rica	6.10	Kazakhstan	[5.36]	Peru	7.60	Venezuela	6.60
Croatia	6.30	Kenya	4.20	Philippines	8.20	Vietnam	[4.75]
Cuba	[7.8]	Kuwait	6.20	Poland	9.80	Zaire	3.00
Czech Rep.	9.50	Kyrgyzstan	[6.45]	Portugal	5.90	Zambia	5.50
Denmark	9.70	Laos	[5.01]	Romania	9.50	Zimbabwe	5.40
Dom. Rep.	4.90	Latvia	[7.96]	Russia	[4.65]		
Ecuador	6.40	Lebanon	[7.03]	Rwanda	2.60		

2002 ESI: Annex 6

Variable Data

Variable: SO₂

Name: Urban SO₂ concentration

Units: Micrograms/m³

Reference Year: MRYA 1990-1996

Source: World Resources Institute, World Resources 1998-99; World Bank, World Development Indicators 2000; WHO, Air Management Information System-AMIS 2.0, 1998; and Global Urban Observatory, Citibase, 1999.

Logic: Indicator of Urban Air Quality.

Methodology: The values were originally collected at the city level. The number of cities with data provided by each country varied. Within each country the values have been normalized by city population for the year 1995, then summed to give the total concentration for the given country.

Mean	50.57	Max	130	97.5 percentile cut-off value:	101.12
Median	49.785	Min	0	2.5 percentile cut-off value:	7.56

Albania	[28.69]	Egypt	69.00	Liberia	[152.18]	Saudi Arabia	[43.64]
Algeria	[80.17]	El Salvador	[44.13]	Libya	[63.66]	Senegal	[47.25]
Angola	[108.55]	Estonia	[37.09]	Lithuania	2.10	Sierra Leone	[155.89]
Argentina	1.02	Ethiopia	[97.46]	Macedonia	[14.06]	Slovakia	22.66
Armenia	[19.33]	Finland	4.38	Madagascar	[89.7]	Slovenia	[51.21]
Australia	13.17	France	13.89	Malawi	[106.66]	Somalia	[137.61]
Austria	13.21	Gabon	[109.48]	Malaysia	20.49	South Africa	22.37
Azerbaijan	[11.56]	Gambia	[69.33]	Mali	[134.39]	South Korea	52.41
Bangladesh	[48.3]	Germany	12.80	Mauritania	[135.89]	Spain	11.00
Belgium	21.02	Ghana	[64.07]	Mexico	74.00	Sri Lanka	[24.57]
Benin	[116.45]	Greece	34.00	Moldova	[58.34]	Sudan	[116.64]
Bhutan	[81.22]	Guatemala	[13.51]	Mongolia	[41.16]	Sweden	5.23
Bolivia	[50.41]	Guinea	[93.84]	Morocco	[78.15]	Switzerland	11.34
Bosnia and H.	[37.68]	Guinea-Bissau	[119.06]	Mozambique	[90.47]	Syria	[63.5]
Botswana	[14.47]	Haiti	[43.7]	Myanmar	[135.07]	Tajikistan	[48.85]
Brazil	75.78	Honduras	[41.17]	Namibia	[10.24]	Tanzania	[48.97]
Bulgaria	52.45	Hungary	37.33	Nepal	[71.84]	Thailand	11.00
Burkina Faso	[145.42]	Iceland	5.00	Netherlands	10.00	Togo	[112.4]
Burundi	[104.1]	India	27.55	New Zealand	3.49	Trin. and Tob.	[19.82]
Byelarus	[45.15]	Indonesia	[51.05]	Nicaragua	[33.45]	Tunisia	[58.16]
Cambodia	[57.52]	Iran	209.00	Niger	[146.57]	Turkey	87.02
Cameroon	[114.97]	Iraq	[121.24]	Nigeria	[149.5]	Turkmenistan	[92.24]
Canada	12.87	Ireland	18.89	North Korea	[27.19]	Uganda	[79.53]
Central Af. R.	[71.5]	Israel	16.82	Norway	5.47	Ukraine	[37.08]
Chad	[126.77]	Italy	15.55	Oman	[24.03]	United Ar. Em.	[61.54]
Chile	29.00	Ivory Coast	[137.72]	Pakistan	[91.95]	United King.	21.96
China	97.07	Jamaica	[22.12]	Panama	[10.33]	United States	15.43
Colombia	[20.75]	Japan	24.33	Papua N.G.	[66.38]	Uruguay	[40.04]
Congo	[65.76]	Jordan	[54.64]	Paraguay	[37.51]	Uzbekistan	[69.18]
Costa Rica	38.84	Kazakhstan	[103.96]	Peru	[52.62]	Venezuela	33.00
Croatia	31.00	Kenya	[47.81]	Philippines	33.00	Vietnam	[64.07]
Cuba	1.00	Kuwait	[17.53]	Poland	54.72	Zaire	[123.84]
Czech Rep.	27.34	Kyrgyzstan	[82.8]	Portugal	9.22	Zambia	[96.68]
Denmark	7.00	Laos	[103.19]	Romania	10.00	Zimbabwe	[38.44]
Dom. Rep.	[16.96]	Latvia	5.36	Russia	97.55		
Ecuador	21.52	Lebanon	[62.71]	Rwanda	[102.81]		

2002 ESI: Annex 6

Variable Data

Variable: SO2EXP
Name: SO₂ exports
Units: 100 Metric Tons
Reference Year: 1997 (Asia) and 1998
Source: International Institute for Applied Systems Analysis, RAINS-ASIA and Co-operative Programme for monitoring and evaluation of the long range transmission of air pollutants in Europe (EMEP)
Logic: The transport of sulphur emissions across national boundaries contributes to poor air quality and acid rain in receiving countries.

Methodology:

Mean 1542.9 **Max** 12300 **97.5 percentile cut-off value:** 5366.75
Median 1283.345 **Min** 4.12 **2.5 percentile cut-off value:** 18.67

Albania	307.00	Egypt	[816.09]	Liberia	[1343.31]	Saudi Arabia	[2085.36]
Algeria	[1620.92]	El Salvador	[1108.28]	Libya	[3087.65]	Senegal	[2635.64]
Angola	[1032.47]	Estonia	496.00	Lithuania	363.00	Sierra Leone	[246.76]
Argentina	[2893.04]	Ethiopia	[1360.06]	Macedonia	71.00	Slovakia	746.00
Armenia	12.00	Finland	245.00	Madagascar	[673.96]	Slovenia	538.00
Australia	[3503.31]	France	2537.00	Malawi	[2379.44]	Somalia	[1243.2]
Austria	175.00	Gabon	[911.48]	Malaysia	401.00	South Africa	[2753.94]
Azerbaijan	[1382.22]	Gambia	[1282.13]	Mali	[793.00]	South Korea	438.00
Bangladesh	238.00	Germany	4448.00	Mauritania	[966.81]	Spain	5201.00
Belgium	832.00	Ghana	[2454.67]	Mexico	[1495.17]	Sri Lanka	81.50
Benin	[1176.44]	Greece	2029.00	Moldova	143.00	Sudan	[618.46]
Bhutan	4.12	Guatemala	[915.87]	Mongolia	69.00	Sweden	144.00
Bolivia	[955.75]	Guinea	[364.11]	Morocco	[1617.14]	Switzerland	94.00
Bosnia and H.	1897.00	Guinea-Bissau	[1765.55]	Mozambique	[1364.33]	Syria	[1271.38]
Botswana	[2400.93]	Haiti	[1962.04]	Myanmar	23.60	Tajikistan	1340.00
Brazil	[2665.88]	Honduras	[586.61]	Namibia	[1795.06]	Tanzania	[432.75]
Bulgaria	4974.00	Hungary	2348.00	Nepal	188.00	Thailand	[1043.92]
Burkina Faso	[1653.6]	Iceland	110.00	Netherlands	425.00	Togo	[846.8]
Burundi	[1142.39]	India	3400.00	New Zealand	[2051.79]	Trin. and Tob.	[1636.88]
Byelarus	628.00	Indonesia	1320.00	Nicaragua	[2897.05]	Tunisia	[1763.12]
Cambodia	39.80	Iran	[2180.87]	Niger	[1649.03]	Turkey	3465.00
Cameroon	[2166.13]	Iraq	[1991.21]	Nigeria	[956.91]	Turkmenistan	[964.44]
Canada	[3234.25]	Ireland	565.00	North Korea	617.00	Uganda	[382.62]
Central Af. R.	[1902.93]	Israel	[632.58]	Norway	98.00	Ukraine	3560.00
Chad	[841.98]	Italy	3876.00	Oman	[1870.89]	United Ar. Em.	[1292.63]
Chile	[1814.13]	Ivory Coast	[1284.56]	Pakistan	420.00	United King.	5591.00
China	12300.00	Jamaica	[1369.33]	Panama	[2111.66]	United States	[2687.09]
Colombia	[703.08]	Japan	1420.00	Papua N.G.	[889.47]	Uruguay	[1659.94]
Congo	[1174.57]	Jordan	[1926.42]	Paraguay	[442.96]	Uzbekistan	[1818.24]
Costa Rica	[1086.85]	Kazakhstan	[1445.52]	Peru	[289.61]	Venezuela	[1434.99]
Croatia	367.00	Kenya	[2778.82]	Philippines	723.00	Vietnam	201.00
Cuba	[1834.57]	Kuwait	[2958.57]	Poland	5849.00	Zaire	[1068.53]
Czech Rep.	1762.00	Kyrgyzstan	[1066.46]	Portugal	1349.00	Zambia	[2561.36]
Denmark	326.00	Laos	8.18	Romania	2768.00	Zimbabwe	[2129.68]
Dom. Rep.	[977.94]	Latvia	155.00	Russia	4148.00		
Ecuador	[732.94]	Lebanon	[2067.78]	Rwanda	[1838.69]		

2002 ESI: Annex 6

Variable Data

Variable: SO2KM
Name: SO₂ emissions per populated land area
Units: 1000 Metric Tons/Sq. Km. of Populated Land Area **Reference Year:** 2000
Source: Intergovernmental Panel on Climate Change: Special Report on Emissions Scenarios, Data Version 1.1, B1 Illustrative Marker Scenario with model IMAGE. Available at http://sres.ciesin.columbia.edu/final_data.html
Logic: Indicator of air pollution: emissions contribute to declines in air quality. The use of a Gridded dataset gives more detailed information about the distribution of pollution sources and permits a better estimate of total emissions within each country.

Methodology: The gridded emissions data, originally available as 1x1 degree cells, were summarized at the country level to give the total emissions for each country. Air pollution is generally greatest in densely populated areas. To take this into account, we used the Gridded Population of the World dataset available from CIESIN and calculated the total land area in each country inhabited with a population density of greater than 5 persons per sq. km. We then utilized this land area as the denominator for the emissions data.

Mean 1.55 **Max** 21.39 **97.5 percentile cut-off value:** 11.84
Median 0.58 **Min** 0.03 **2.5 percentile cut-off value:** 0.05

Albania	0.60	Egypt	4.09	Liberia	0.11	Saudi Arabia	0.56
Algeria	0.54	El Salvador	0.70	Libya	3.22	Senegal	0.15
Angola	0.20	Estonia	0.58	Lithuania	1.69	Sierra Leone	[2.08]
Argentina	0.15	Ethiopia	0.07	Macedonia	0.90	Slovakia	4.85
Armenia	2.29	Finland	1.48	Madagascar	0.04	Slovenia	2.34
Australia	2.84	France	1.09	Malawi	0.05	Somalia	0.06
Austria	0.85	Gabon	0.11	Malaysia	1.60	South Africa	2.35
Azerbaijan	1.68	Gambia	0.11	Mali	0.07	South Korea	19.43
Bangladesh	0.69	Germany	5.10	Mauritania	0.18	Spain	1.31
Belgium	21.39	Ghana	0.17	Mexico	0.97	Sri Lanka	0.21
Benin	0.14	Greece	1.83	Moldova	1.65	Sudan	0.11
Bhutan	0.03	Guatemala	0.16	Mongolia	0.43	Sweden	0.77
Bolivia	0.07	Guinea	0.07	Morocco	0.53	Switzerland	0.51
Bosnia and H.	1.78	Guinea-Bissau	0.19	Mozambique	0.13	Syria	0.71
Botswana	1.32	Haiti	0.14	Myanmar	0.09	Tajikistan	2.61
Brazil	0.36	Honduras	0.15	Namibia	0.87	Tanzania	0.10
Bulgaria	4.61	Hungary	2.65	Nepal	0.05	Thailand	1.07
Burkina Faso	0.08	Iceland	0.96	Netherlands	4.19	Togo	0.07
Burundi	0.13	India	1.15	New Zealand	0.44	Trin. and Tob.	0.52
Byelarus	0.95	Indonesia	0.36	Nicaragua	0.12	Tunisia	1.61
Cambodia	0.18	Iran	0.49	Niger	0.09	Turkey	0.65
Cameroon	0.08	Iraq	0.58	Nigeria	0.19	Turkmenistan	0.18
Canada	2.79	Ireland	0.97	North Korea	7.64	Uganda	0.16
Central Af. R.	0.29	Israel	3.31	Norway	0.35	Ukraine	2.06
Chad	0.10	Italy	2.79	Oman	0.11	United Ar. Em.	1.52
Chile	4.38	Ivory Coast	0.20	Pakistan	0.30	United King.	5.37
China	2.68	Jamaica	17.05	Panama	0.23	United States	1.68
Colombia	0.24	Japan	0.97	Papua N.G.	0.04	Uruguay	0.17
Congo	0.14	Jordan	2.71	Paraguay	0.08	Uzbekistan	0.77
Costa Rica	0.38	Kazakhstan	0.58	Peru	0.45	Venezuela	0.59
Croatia	1.87	Kenya	0.16	Philippines	0.88	Vietnam	0.26
Cuba	1.73	Kuwait	7.12	Poland	3.90	Zaire	0.17
Czech Rep.	7.98	Kyrgyzstan	0.27	Portugal	1.17	Zambia	2.10
Denmark	2.86	Laos	0.11	Romania	2.04	Zimbabwe	0.33
Dom. Rep.	0.64	Latvia	0.18	Russia	0.93		
Ecuador	0.35	Lebanon	0.60	Rwanda	0.49		

2002 ESI: Annex 6

Variable Data

Variable: SUBFSH

Name: Subsidies to the commecial fishing sector

Units: US Dollars (Millions)

Reference Year: 1997

Source: World Wildlife Fund (WWF-US). Hard Facts, Hidden Problems: A Review of Current Data on Fishing Subsidies, A WWF Technical Paper, October 2001, Annex 1.

Logic: Subsidies to the fishing industry encourage over-capacity, and therefore over-fishing.

Methodology: Data on itemized fishing subsidies were combined from Annex 1 of the WWF report. Where estimated ranges were given, the mid-point of the range was used. In calculating the ESI, the base-10 logarithm of this variable was used.

Mean	220.58	Max	2935.3	97.5 percentile cut-off value:	2935.3
Median	41.75	Min	0.9	2.5 percentile cut-off value:	0.9

Albania	--	Egypt	--	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	--	Libya	--	Senegal	--
Angola	--	Estonia	--	Lithuania	--	Sierra Leone	--
Argentina	--	Ethiopia	--	Macedonia	--	Slovakia	--
Armenia	--	Finland	24.50	Madagascar	--	Slovenia	--
Australia	33.90	France	108.00	Malawi	--	Somalia	--
Austria	--	Gabon	--	Malaysia	1.70	South Africa	--
Azerbaijan	--	Gambia	--	Mali	--	South Korea	346.70
Bangladesh	--	Germany	50.60	Mauritania	--	Spain	170.45
Belgium	3.48	Ghana	--	Mexico	23.7	Sri Lanka	--
Benin	--	Greece	38.60	Moldova	--	Sudan	--
Bhutan	--	Guatemala	--	Mongolia	--	Sweden	43.20
Bolivia	--	Guinea	--	Morocco	--	Switzerland	--
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	--	Honduras	--	Namibia	--	Tanzania	--
Bulgaria	--	Hungary	--	Nepal	--	Thailand	3.10
Burkina Faso	--	Iceland	36.20	Netherlands	29.00	Togo	--
Burundi	--	India	--	New Zealand	40.30	Trin. and Tob.	--
Byelarus	--	Indonesia	254.40	Nicaragua	--	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	28.60
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	768.55	Ireland	92.88	North Korea	--	Uganda	--
Central Af. R.	--	Israel	--	Norway	160.40	Ukraine	--
Chad	--	Italy	65.20	Oman	--	United Ar. Em.	--
Chile	--	Ivory Coast	--	Pakistan	--	United King.	99.03
China	54.70	Jamaica	--	Panama	--	United States	867.90
Colombia	--	Japan	2935.30	Papua N.G.	--	Uruguay	--
Congo	--	Jordan	--	Paraguay	--	Uzbekistan	--
Costa Rica	--	Kazakhstan	--	Peru	0.90	Venezuela	--
Croatia	--	Kenya	--	Philippines	2.20	Vietnam	35.30
Cuba	--	Kuwait	--	Poland	7.90	Zaire	--
Czech Rep.	--	Kyrgyzstan	--	Portugal	38.24	Zambia	--
Denmark	60.65	Laos	--	Romania	--	Zimbabwe	--
Dom. Rep.	--	Latvia	--	Russia	633.00		
Ecuador	--	Lebanon	--	Rwanda	--		

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Variable Data

Variable: TAI
Name: Technology Achievement Index
Units: Score **Reference Year:** circa 2000
Source: United Nations Development Program. Human Development Report 2001. New York: Oxford University Press, 2001, Table A2.1.
Logic: The higher a country's technology achievement index, the greater its ability to create technological solutions to environmental problems.

Methodology:

Mean 0.37 **Max** 0.74 **97.5 percentile cut-off value:** 0.74
Median 0.34 **Min** 0.07 **2.5 percentile cut-off value:** 0.07

Albania	--	Egypt	0.24	Liberia	--	Saudi Arabia	--
Algeria	0.22	El Salvador	0.25	Libya	--	Senegal	0.16
Angola	--	Estonia	--	Lithuania	--	Sierra Leone	--
Argentina	--	Ethiopia	--	Macedonia	--	Slovakia	0.45
Armenia	--	Finland	0.74	Madagascar	--	Slovenia	0.46
Australia	0.59	France	0.54	Malawi	--	Somalia	--
Austria	0.54	Gabon	--	Malaysia	0.40	South Africa	0.34
Azerbaijan	--	Gambia	--	Mali	--	South Korea	0.67
Bangladesh	--	Germany	0.58	Mauritania	--	Spain	0.48
Belgium	0.55	Ghana	0.14	Mexico	0.39	Sri Lanka	0.20
Benin	--	Greece	0.44	Moldova	--	Sudan	0.07
Bhutan	--	Guatemala	--	Mongolia	--	Sweden	0.70
Bolivia	0.28	Guinea	--	Morocco	--	Switzerland	--
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	0.07	Syria	0.24
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	0.31	Honduras	0.21	Namibia	--	Tanzania	0.08
Bulgaria	0.41	Hungary	0.46	Nepal	0.08	Thailand	0.34
Burkina Faso	--	Iceland	--	Netherlands	0.63	Togo	--
Burundi	--	India	0.20	New Zealand	0.55	Trin. and Tob.	0.33
Byelarus	--	Indonesia	0.21	Nicaragua	0.19	Tunisia	0.26
Cambodia	--	Iran	0.26	Niger	--	Turkey	--
Cameroon	--	Iraq	--	Nigeria	--	Turkmenistan	--
Canada	0.59	Ireland	0.57	North Korea	--	Uganda	--
Central Af. R.	--	Israel	0.51	Norway	0.58	Ukraine	--
Chad	--	Italy	0.47	Oman	--	United Ar. Em.	--
Chile	0.36	Ivory Coast	--	Pakistan	0.17	United King.	0.61
China	0.30	Jamaica	0.26	Panama	0.32	United States	0.73
Colombia	0.27	Japan	0.70	Papua N.G.	--	Uruguay	0.34
Congo	--	Jordan	--	Paraguay	0.25	Uzbekistan	--
Costa Rica	0.36	Kazakhstan	--	Peru	0.27	Venezuela	--
Croatia	0.39	Kenya	0.13	Philippines	0.30	Vietnam	--
Cuba	--	Kuwait	--	Poland	0.41	Zaire	--
Czech Rep.	0.47	Kyrgyzstan	--	Portugal	0.42	Zambia	--
Denmark	--	Laos	--	Romania	0.37	Zimbabwe	0.22
Dom. Rep.	0.24	Latvia	--	Russia	--		
Ecuador	0.25	Lebanon	--	Rwanda	--		

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Variable Data

Variable: TFR
Name: Total fertility rate
Units: Average Number of Births Per Woman **Reference Year:** 2001
Source: Population Reference Bureau, 2001 World Population Data Sheet, Washington, DC: PRB, 2001.
Logic: Fertility contributes significantly to population growth, and thus to pressure on natural resources. If fertility remains at high levels indefinitely, it is environmentally unsustainable.

Methodology:

Mean	3.42	Max	7.5	97.5 percentile cut-off value:	7.03
Median	2.9	Min	1.11	2.5 percentile cut-off value:	1.15

Albania	2.77	Egypt	3.52	Liberia	6.55	Saudi Arabia	5.74
Algeria	3.08	El Salvador	3.48	Libya	3.87	Senegal	5.70
Angola	6.90	Estonia	1.28	Lithuania	1.32	Sierra Leone	6.29
Argentina	2.62	Ethiopia	5.90	Macedonia	1.90	Slovakia	1.29
Armenia	1.13	Finland	1.72	Madagascar	5.84	Slovenia	1.21
Australia	1.74	France	1.89	Malawi	6.35	Somalia	7.25
Austria	1.30	Gabon	4.30	Malaysia	3.20	South Africa	2.90
Azerbaijan	2.00	Gambia	5.90	Mali	7.02	South Korea	1.48
Bangladesh	3.31	Germany	1.33	Mauritania	6.00	Spain	1.20
Belgium	1.61	Ghana	4.27	Mexico	2.80	Sri Lanka	2.10
Benin	6.32	Greece	1.30	Moldova	1.37	Sudan	4.90
Bhutan	5.60	Guatemala	4.81	Mongolia	2.20	Sweden	1.53
Bolivia	4.23	Guinea	5.53	Morocco	3.35	Switzerland	1.48
Bosnia and H.	1.56	Guinea-Bissau	5.75	Mozambique	5.62	Syria	4.06
Botswana	3.91	Haiti	4.70	Myanmar	3.30	Tajikistan	2.41
Brazil	2.40	Honduras	4.41	Namibia	5.00	Tanzania	5.55
Bulgaria	1.23	Hungary	1.33	Nepal	4.80	Thailand	1.80
Burkina Faso	6.80	Iceland	1.99	Netherlands	1.68	Togo	5.80
Burundi	6.48	India	3.20	New Zealand	2.01	Trin. and Tob.	1.70
Byelarus	1.31	Indonesia	2.70	Nicaragua	4.32	Tunisia	2.30
Cambodia	4.00	Iran	2.60	Niger	7.50	Turkey	2.50
Cameroon	5.20	Iraq	5.30	Nigeria	5.75	Turkmenistan	2.20
Canada	1.44	Ireland	1.89	North Korea	2.30	Uganda	6.86
Central Af. R.	5.07	Israel	3.01	Norway	1.84	Ukraine	1.11
Chad	6.60	Italy	1.25	Oman	6.14	United Ar. Em.	3.48
Chile	2.30	Ivory Coast	5.20	Pakistan	5.60	United King.	1.66
China	1.80	Jamaica	2.40	Panama	2.60	United States	2.08
Colombia	2.60	Japan	1.34	Papua N.G.	4.84	Uruguay	2.26
Congo	6.30	Jordan	3.60	Paraguay	4.30	Uzbekistan	2.70
Costa Rica	2.60	Kazakhstan	1.84	Peru	2.90	Venezuela	2.90
Croatia	1.38	Kenya	4.36	Philippines	3.54	Vietnam	2.33
Cuba	1.59	Kuwait	4.16	Poland	1.37	Zaire	7.04
Czech Rep.	1.14	Kyrgyzstan	2.40	Portugal	1.49	Zambia	6.08
Denmark	1.75	Laos	5.39	Romania	1.30	Zimbabwe	3.96
Dom. Rep.	3.06	Latvia	1.15	Russia	1.23		
Ecuador	3.30	Lebanon	2.50	Rwanda	5.80		

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Variable Data

Variable: TSP

Name: Urban TSP concentration

Units: Micrograms per Cubic Meter

Reference Year: MRYA 1990-1996

Source: World Resources Institute, World Resources 1998-99; World Bank, World Development Indicators 2000; WHO, Air Management Information System-AMIS 2.0, 1998; and Global Urban Observatory, Citibase, 1999.

Logic: Indicator of Urban Air Quality.

Methodology: The values were originally collected at the city level. The number of cities with data provided by each country varied. Within each country the values have been normalized by city population for the year 1995, then summed to give the total concentration for the given country.

Mean	156.77	Max	320	97.5 percentile cut-off value:	292.53
Median	162.27	Min	9	2.5 percentile cut-off value:	12.97

Albania	[80.32]	Egypt	[164]	Liberia	[239.79]	Saudi Arabia	[264.53]
Algeria	[196.39]	El Salvador	[148.34]	Libya	[195.6]	Senegal	[172.77]
Angola	[258.11]	Estonia	[102.12]	Lithuania	114.27	Sierra Leone	[313.84]
Argentina	50.01	Ethiopia	[203.49]	Macedonia	[85.72]	Slovakia	64.49
Armenia	[122.03]	Finland	49.90	Madagascar	[265.53]	Slovenia	[88.7]
Australia	43.22	France	14.16	Malawi	[209.72]	Somalia	[223.6]
Austria	45.70	Gabon	[156.86]	Malaysia	91.58	South Africa	[131.9]
Azerbaijan	[127.83]	Gambia	[257.87]	Mali	[237.59]	South Korea	83.79
Bangladesh	[180.37]	Germany	43.27	Mauritania	[213.77]	Spain	72.68
Belgium	77.91	Ghana	137.00	Mexico	279.00	Sri Lanka	[119.53]
Benin	[172.04]	Greece	178.00	Moldova	[156.68]	Sudan	[123.28]
Bhutan	[256.67]	Guatemala	272.33	Mongolia	[103.09]	Sweden	9.00
Bolivia	[221.69]	Guinea	[217.33]	Morocco	[210.42]	Switzerland	30.66
Bosnia and H.	[81.05]	Guinea-Bissau	[235.06]	Mozambique	[232.11]	Syria	[169.52]
Botswana	[174.19]	Haiti	[160.54]	Myanmar	[135.04]	Tajikistan	[126.5]
Brazil	106.20	Honduras	320.00	Namibia	[74.3]	Tanzania	[196.92]
Bulgaria	199.25	Hungary	63.74	Nepal	[181.89]	Thailand	223.00
Burkina Faso	[234.97]	Iceland	24.00	Netherlands	40.00	Togo	[216.25]
Burundi	[278.81]	India	277.45	New Zealand	27.32	Trin. and Tob.	[81.77]
Byelarus	18.40	Indonesia	271.00	Nicaragua	[242.38]	Tunisia	[129.14]
Cambodia	[225.02]	Iran	248.00	Niger	[265.52]	Turkey	11.35
Cameroon	[228.69]	Iraq	[262.06]	Nigeria	[236.38]	Turkmenistan	[180.9]
Canada	31.26	Ireland	[84.93]	North Korea	[170.73]	Uganda	[242.6]
Central Af. R.	[195.47]	Israel	[159.04]	Norway	10.25	Ukraine	[179.92]
Chad	[196.79]	Italy	86.91	Oman	[199.92]	United Ar. Em.	[184.8]
Chile	[88.79]	Ivory Coast	[229.84]	Pakistan	[271.62]	United King.	[75.82]
China	310.82	Jamaica	[188.92]	Panama	[124.73]	United States	[113.5]
Colombia	120.00	Japan	43.63	Papua N.G.	[222.59]	Uruguay	[126.27]
Congo	[259.5]	Jordan	[146.33]	Paraguay	[253.18]	Uzbekistan	[174.79]
Costa Rica	244.48	Kazakhstan	[198.85]	Peru	[155.82]	Venezuela	53.00
Croatia	71.00	Kenya	69.00	Philippines	200.00	Vietnam	[125.98]
Cuba	[126.35]	Kuwait	[176.31]	Poland	[135.1]	Zaire	[209.76]
Czech Rep.	58.39	Kyrgyzstan	[223.11]	Portugal	50.40	Zambia	[263.21]
Denmark	61.00	Laos	[249.82]	Romania	82.00	Zimbabwe	[176.65]
Dom. Rep.	[117.69]	Latvia	100.00	Russia	100.00		
Ecuador	125.73	Lebanon	[104.09]	Rwanda	[232.8]		

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Variable Data

Variable: U5MORT

Name: Under-5 mortality rate

Units: Deaths Per 1,000 Live Births

Reference Year: 1999

Source: United Nations Children's Fund. The State of the World's Children 2001, New York: UNICEF, 2001.

Logic: Under-5 mortality rate is a measure of the vulnerability of the most vulnerable population group.

Methodology: Deaths between birth and age five, divided by 1,000 live births

Mean	70.04	Max	316	97.5 percentile cut-off value:	252
Median	40.5	Min	4	2.5 percentile cut-off value:	4.58

Albania	35.00	Egypt	52.00	Liberia	235.00	Saudi Arabia	25.00
Algeria	41.00	El Salvador	42.00	Libya	22.00	Senegal	118.00
Angola	295.00	Estonia	21.00	Lithuania	22.00	Sierra Leone	316.00
Argentina	22.00	Ethiopia	176.00	Macedonia	26.00	Slovakia	10.00
Armenia	30.00	Finland	5.00	Madagascar	156.00	Slovenia	6.00
Australia	5.00	France	5.00	Malawi	211.00	Somalia	211.00
Austria	5.00	Gabon	143.00	Malaysia	9.00	South Africa	69.00
Azerbaijan	45.00	Gambia	75.00	Mali	235.00	South Korea	5.00
Bangladesh	89.00	Germany	5.00	Mauritania	183.00	Spain	6.00
Belgium	6.00	Ghana	101.00	Mexico	33.00	Sri Lanka	19.00
Benin	156.00	Greece	7.00	Moldova	34.00	Sudan	109.00
Bhutan	107.00	Guatemala	60.00	Mongolia	80.00	Sweden	4.00
Bolivia	83.00	Guinea	181.00	Morocco	53.00	Switzerland	4.00
Bosnia and H.	18.00	Guinea-Bissau	200.00	Mozambique	203.00	Syria	30.00
Botswana	59.00	Haiti	129.00	Myanmar	112.00	Tajikistan	74.00
Brazil	40.00	Honduras	42.00	Namibia	70.00	Tanzania	141.00
Bulgaria	17.00	Hungary	10.00	Nepal	104.00	Thailand	30.00
Burkina Faso	199.00	Iceland	5.00	Netherlands	5.00	Togo	143.00
Burundi	176.00	India	98.00	New Zealand	6.00	Trin. and Tob.	20.00
Byelarus	28.00	Indonesia	52.00	Nicaragua	47.00	Tunisia	30.00
Cambodia	122.00	Iran	46.00	Niger	275.00	Turkey	48.00
Cameroon	154.00	Iraq	128.00	Nigeria	187.00	Turkmenistan	71.00
Canada	6.00	Ireland	7.00	North Korea	30.00	Uganda	131.00
Central Af. R.	172.00	Israel	6.00	Norway	4.00	Ukraine	21.00
Chad	198.00	Italy	6.00	Oman	16.00	United Ar. Em.	9.00
Chile	12.00	Ivory Coast	171.00	Pakistan	112.00	United King.	6.00
China	41.00	Jamaica	11.00	Panama	27.00	United States	8.00
Colombia	31.00	Japan	[22.21]	Papua N.G.	112.00	Uruguay	17.00
Congo	108.00	Jordan	35.00	Paraguay	32.00	Uzbekistan	58.00
Costa Rica	14.00	Kazakhstan	42.00	Peru	52.00	Venezuela	23.00
Croatia	9.00	Kenya	118.00	Philippines	42.00	Vietnam	40.00
Cuba	8.00	Kuwait	12.00	Poland	10.00	Zaire	207.00
Czech Rep.	5.00	Kyrgyzstan	65.00	Portugal	6.00	Zambia	202.00
Denmark	5.00	Laos	111.00	Romania	24.00	Zimbabwe	90.00
Dom. Rep.	49.00	Latvia	21.00	Russia	22.00		
Ecuador	35.00	Lebanon	32.00	Rwanda	180.00		

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Variable Data

Variable: UND_NO
Name: Proportion of undernourished in total population
Units: Percentage of Total Population **Reference Year:** MRYA 1997-1999
Source: Food and Agriculture Organization, The State of Food Insecurity in the World 2001, Rome: FAO, 2001, <http://www.fao.org/docrep/003/y1500e/y1500e06.htm>.
Logic: This indicator represents a measure of the population vulnerability to malnutrition, famine or diseases, in addition to showing the incapacity of an economy to supply an adequate amount of food and to manage food resources.

Methodology:

Mean	16.52	Max	75	97.5 percentile cut-off value:	59.4
Median	11	Min	1	2.5 percentile cut-off value:	1

Albania	10.00	Egypt	4.00	Liberia	42.00	Saudi Arabia	1.00
Algeria	6.00	El Salvador	12.00	Libya	1.00	Senegal	24.00
Angola	51.00	Estonia	4.00	Lithuania	3.00	Sierra Leone	41.00
Argentina	1.00	Ethiopia	49.00	Macedonia	5.00	Slovakia	1.00
Armenia	35.00	Finland	1.00	Madagascar	40.00	Slovenia	1.00
Australia	1.00	France	1.00	Malawi	35.00	Somalia	75.00
Austria	1.00	Gabon	9.00	Malaysia	1.00	South Africa	[11.8]
Azerbaijan	37.00	Gambia	15.00	Mali	28.00	South Korea	1.00
Bangladesh	33.00	Germany	1.00	Mauritania	11.00	Spain	1.00
Belgium	1.00	Ghana	15.00	Mexico	5.00	Sri Lanka	23.00
Benin	15.00	Greece	1.00	Moldova	10.00	Sudan	21.00
Bhutan	[30.38]	Guatemala	22.00	Mongolia	[23.88]	Sweden	1.00
Bolivia	22.00	Guinea	34.00	Morocco	6.00	Switzerland	1.00
Bosnia and H.	4.00	Guinea-Bissau	[41.4]	Mozambique	54.00	Syria	1.00
Botswana	23.00	Haiti	56.00	Myanmar	7.00	Tajikistan	47.00
Brazil	10.00	Honduras	21.00	Namibia	33.00	Tanzania	46.00
Bulgaria	11.00	Hungary	1.00	Nepal	23.00	Thailand	21.00
Burkina Faso	24.00	Iceland	1.00	Netherlands	1.00	Togo	17.00
Burundi	66.00	India	23.00	New Zealand	1.00	Trin. and Tob.	13.00
Byelarus	1.00	Indonesia	6.00	Nicaragua	29.00	Tunisia	1.00
Cambodia	37.00	Iran	5.00	Niger	41.00	Turkey	1.00
Cameroon	25.00	Iraq	14.00	Nigeria	7.00	Turkmenistan	9.00
Canada	1.00	Ireland	1.00	North Korea	42.00	Uganda	28.00
Central Af. R.	43.00	Israel	1.00	Norway	1.00	Ukraine	5.00
Chad	34.00	Italy	1.00	Oman	[21]	United Ar. Em.	1.00
Chile	4.00	Ivory Coast	16.00	Pakistan	18.00	United King.	1.00
China	9.00	Jamaica	8.00	Panama	16.00	United States	1.00
Colombia	13.00	Japan	1.00	Papua N.G.	26.00	Uruguay	3.00
Congo	32.00	Jordan	5.00	Paraguay	13.00	Uzbekistan	4.00
Costa Rica	5.00	Kazakhstan	11.00	Peru	13.00	Venezuela	21.00
Croatia	15.00	Kenya	46.00	Philippines	24.00	Vietnam	19.00
Cuba	17.00	Kuwait	4.00	Poland	1.00	Zaire	64.00
Czech Rep.	1.00	Kyrgyzstan	11.00	Portugal	1.00	Zambia	47.00
Denmark	1.00	Laos	28.00	Romania	1.00	Zimbabwe	39.00
Dom. Rep.	25.00	Latvia	4.00	Russia	6.00		
Ecuador	5.00	Lebanon	1.00	Rwanda	40.00		

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Variable Data

Variable: VIENNA
Name: Levels of ratification under the Vienna Convention for the Protection of the Ozone Layer
Units: Index Ranging from 0 (No Participation) to 3 (High Levels of **Reference Year:** 2001
Source: United Nations Environment Program, The Ozone Secretariat, <http://www.unep.org/ozone/ratif.shtml>.
Logic: The number of protocols and amendments that a country has acceded to or ratified under the Vienna Convention is an indication of its commitment to fight ozone depletion

Methodology: The index assigned values as follows. Countries received a score of zero if they were not signatory to the Vienna Convention. They received a score of 1 if they had ratified the Montreal Protocol only. They received a score of 2 if they ratified the above plus the London Amendment. They received a score of 2.5 if they ratified the above plus the Copenhagen Amendment. They received a score of 3 if they ratified the above plus the Montreal Amendment.

Mean 2.36 **Max** 3 **97.5 percentile cut-off value:** 3
Median 2.5 **Min** 0 **2.5 percentile cut-off value:** 0.58

Albania	1.00	Egypt	3.00	Liberia	2.50	Saudi Arabia	2.50
Algeria	2.50	El Salvador	3.00	Libya	1.00	Senegal	3.00
Angola	1.00	Estonia	2.50	Lithuania	2.50	Sierra Leone	3.00
Argentina	3.00	Ethiopia	1.00	Macedonia	3.00	Slovakia	3.00
Armenia	1.00	Finland	3.00	Madagascar	1.00	Slovenia	3.00
Australia	3.00	France	2.50	Malawi	2.50	Somalia	3.00
Austria	3.00	Gabon	3.00	Malaysia	3.00	South Africa	2.50
Azerbaijan	3.00	Gambia	2.00	Mali	2.00	South Korea	3.00
Bangladesh	3.00	Germany	3.00	Mauritania	1.00	Spain	3.00
Belgium	2.50	Ghana	2.50	Mexico	2.50	Sri Lanka	3.00
Benin	2.50	Greece	2.50	Moldova	1.00	Sudan	1.00
Bhutan	0.00	Guatemala	1.00	Mongolia	2.50	Sweden	3.00
Bolivia	3.00	Guinea	2.00	Morocco	2.50	Switzerland	2.50
Bosnia and H.	1.00	Guinea-Bissau	0.00	Mozambique	2.50	Syria	3.00
Botswana	2.50	Haiti	3.00	Myanmar	2.00	Tajikistan	2.00
Brazil	2.50	Honduras	1.00	Namibia	2.00	Tanzania	2.00
Bulgaria	3.00	Hungary	3.00	Nepal	2.00	Thailand	2.50
Burkina Faso	2.50	Iceland	3.00	Netherlands	3.00	Togo	2.50
Burundi	3.00	India	2.00	New Zealand	3.00	Trin. and Tob.	3.00
Byelarus	2.00	Indonesia	2.50	Nicaragua	2.50	Tunisia	3.00
Cambodia	1.00	Iran	3.00	Niger	3.00	Turkey	2.50
Cameroon	2.50	Iraq	0.00	Nigeria	1.00	Turkmenistan	2.00
Canada	3.00	Ireland	2.50	North Korea	2.50	Uganda	3.00
Central Af. R.	1.00	Israel	2.50	Norway	3.00	Ukraine	2.00
Chad	2.50	Italy	3.00	Oman	2.50	United Ar. Em.	1.00
Chile	3.00	Ivory Coast	2.00	Pakistan	2.50	United King.	3.00
China	2.00	Jamaica	2.50	Panama	3.00	United States	2.50
Colombia	2.50	Japan	2.50	Papua N.G.	2.00	Uruguay	3.00
Congo	3.00	Jordan	3.00	Paraguay	3.00	Uzbekistan	3.00
Costa Rica	2.50	Kazakhstan	2.00	Peru	2.50	Venezuela	2.50
Croatia	3.00	Kenya	3.00	Philippines	2.50	Vietnam	2.50
Cuba	2.50	Kuwait	2.50	Poland	3.00	Zaire	2.50
Czech Rep.	3.00	Kyrgyzstan	1.00	Portugal	2.50	Zambia	2.00
Denmark	2.50	Laos	1.00	Romania	3.00	Zimbabwe	2.50
Dom. Rep.	1.00	Latvia	2.50	Russia	2.00		
Ecuador	2.50	Lebanon	3.00	Rwanda	1.00		

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Variable Data

Variable: VOCKM
Name: VOCs emissions per populated land area
Units: 1000 Metric Tons/Sq. Km. of Populated Land Area **Reference Year:** 2000
Source: Intergovernmental Panel on Climate Change: Special Report on Emissions Scenarios, Data Version 1.1, B1 Illustrative Marker Scenario with model IMAGE. Available at http://sres.ciesin.columbia.edu/final_data.html
Logic: Indicator of air pollution: emissions contribute to declines in air quality. The use of a Gridded dataset gives more detailed information about the distribution of pollution sources and permits a better estimate of total emissions within each country.

Methodology: The gridded emissions data, originally available as 1x1 degree cells, were summarized at the country level to give the total emissions for each country. Air pollution is generally greatest in densely populated areas. To take this into account, we used the Gridded Population of the World dataset available from CIESIN and calculated the total land area in each country inhabited with a population density of greater than 5 persons per sq. km. We then utilized this land area as the denominator for the emissions data.

Mean	2.35	Max	18.9	97.5 percentile cut-off value:	10.1
Median	1.555	Min	0.08	2.5 percentile cut-off value:	0.25

Albania	0.57	Egypt	7.94	Liberia	1.65	Saudi Arabia	4.10
Algeria	2.42	El Salvador	0.60	Libya	18.90	Senegal	1.20
Angola	1.94	Estonia	0.41	Lithuania	1.42	Sierra Leone	1.39
Argentina	0.82	Ethiopia	1.13	Macedonia	1.30	Slovakia	1.54
Armenia	2.41	Finland	0.47	Madagascar	0.71	Slovenia	1.48
Australia	3.34	France	3.74	Malawi	1.46	Somalia	0.50
Austria	3.13	Gabon	0.96	Malaysia	1.87	South Africa	1.62
Azerbaijan	1.87	Gambia	[2.46]	Mali	0.70	South Korea	2.78
Bangladesh	5.22	Germany	7.09	Mauritania	1.02	Spain	1.59
Belgium	9.46	Ghana	2.21	Mexico	2.51	Sri Lanka	1.12
Benin	1.08	Greece	1.80	Moldova	0.46	Sudan	1.70
Bhutan	0.60	Guatemala	2.17	Mongolia	0.58	Sweden	0.68
Bolivia	1.31	Guinea	0.71	Morocco	0.61	Switzerland	3.01
Bosnia and H.	1.52	Guinea-Bissau	0.83	Mozambique	0.93	Syria	1.97
Botswana	13.59	Haiti	0.28	Myanmar	1.07	Tajikistan	0.79
Brazil	2.02	Honduras	1.31	Namibia	9.40	Tanzania	1.57
Bulgaria	1.16	Hungary	2.67	Nepal	2.07	Thailand	1.82
Burkina Faso	1.21	Iceland	6.29	Netherlands	5.75	Togo	1.46
Burundi	2.29	India	3.19	New Zealand	0.57	Trin. and Tob.	[2.9]
Byelarus	1.24	Indonesia	1.65	Nicaragua	0.63	Tunisia	1.08
Cambodia	2.73	Iran	0.98	Niger	1.01	Turkey	1.08
Cameroon	1.26	Iraq	2.88	Nigeria	3.80	Turkmenistan	0.42
Canada	4.04	Ireland	1.43	North Korea	1.91	Uganda	2.46
Central Af. R.	3.29	Israel	2.34	Norway	0.76	Ukraine	2.04
Chad	0.96	Italy	3.59	Oman	1.45	United Ar. Em.	10.55
Chile	0.52	Ivory Coast	1.74	Pakistan	1.53	United King.	9.77
China	2.08	Jamaica	1.18	Panama	0.37	United States	2.81
Colombia	2.76	Japan	7.85	Papua N.G.	0.08	Uruguay	0.48
Congo	1.91	Jordan	0.91	Paraguay	2.26	Uzbekistan	0.74
Costa Rica	0.19	Kazakhstan	0.58	Peru	0.61	Venezuela	3.88
Croatia	1.50	Kenya	2.32	Philippines	2.21	Vietnam	2.21
Cuba	0.66	Kuwait	7.08	Poland	1.42	Zaire	1.00
Czech Rep.	2.82	Kyrgyzstan	0.77	Portugal	1.03	Zambia	2.55
Denmark	4.45	Laos	1.03	Romania	1.91	Zimbabwe	1.19
Dom. Rep.	0.45	Latvia	0.21	Russia	1.67		
Ecuador	2.39	Lebanon	5.61	Rwanda	5.13		

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Variable Data

Variable: WATCAP
Name: Water availability per capita
Units: Thousands Cubic Meters/Person **Reference Year:** 1961-1990 (avg.)
Source: Center for Environmental Systems Research, University of Kassel, WaterGAP 2.1B, 2001
Logic: The per capita volume of internal renewable water resources in a country is important for a variety of environmental services and to support the needs of the population.

Methodology: This variable measures internal renewable water (average annual surface runoff and groundwater recharge generated from endogenous precipitation, taking into account evaporation from lakes and wetlands) per capita. These data are derived from the WaterGAP 2.1 gridded hydrological model developed by the Center for Environmental Systems Research, University of Kassel, Germany. A special run of the model was performed in order to derive country-level estimates of internal renewable water resources. There are some problems, in that the size of the grid cells (0.5 x 0.5 degree) do not accurately capture small countries. It was felt, however, that the consistent definitions used, and the fact that the model itself is based on over 30 years of global hydrological data, mean that the data are more comparable than similar country water resources estimates published elsewhere.

Mean 14 **Max** 294.34 **97.5 percentile cut-off value:** 0.11
Median 2.795 **Min** -7.46 **2.5 percentile cut-off value:** 0

Albania	4.09	Egypt	-0.24	Liberia	58.85	Saudi Arabia	0.22
Algeria	0.39	El Salvador	1.59	Libya	0.60	Senegal	0.96
Angola	24.24	Estonia	7.40	Lithuania	5.10	Sierra Leone	21.97
Argentina	7.65	Ethiopia	2.17	Macedonia	2.55	Slovakia	2.24
Armenia	1.12	Finland	18.01	Madagascar	22.55	Slovenia	8.04
Australia	27.81	France	3.26	Malawi	1.55	Somalia	0.24
Austria	6.37	Gabon	176.37	Malaysia	20.24	South Africa	1.25
Azerbaijan	0.79	Gambia	0.40	Mali	0.40	South Korea	1.16
Bangladesh	0.60	Germany	1.35	Mauritania	0.18	Spain	2.33
Belgium	1.19	Ghana	1.87	Mexico	3.47	Sri Lanka	1.62
Benin	2.25	Greece	2.96	Moldova	1.83	Sudan	-0.53
Bhutan	14.08	Guatemala	14.03	Mongolia	16.32	Sweden	15.91
Bolivia	51.39	Guinea	10.13	Morocco	0.42	Switzerland	5.74
Bosnia and H.	7.91	Guinea-Bissau	19.15	Mozambique	5.81	Syria	0.35
Botswana	-7.46	Haiti	0.93	Myanmar	20.06	Tajikistan	5.56
Brazil	37.25	Honduras	13.09	Namibia	-1.94	Tanzania	3.64
Bulgaria	2.00	Hungary	1.17	Nepal	5.97	Thailand	3.50
Burkina Faso	0.86	Iceland	294.34	Netherlands	0.65	Togo	2.71
Burundi	0.65	India	1.56	New Zealand	79.81	Trin. and Tob.	1.58
Byelarus	2.79	Indonesia	10.96	Nicaragua	29.15	Tunisia	0.22
Cambodia	9.92	Iran	0.63	Niger	-0.33	Turkey	2.59
Cameroon	17.30	Iraq	-0.45	Nigeria	2.26	Turkmenistan	-0.49
Canada	84.51	Ireland	12.47	North Korea	2.11	Uganda	1.00
Central Af. R.	37.41	Israel	0.36	Norway	57.71	Ukraine	1.26
Chad	-3.28	Italy	2.04	Oman	0.93	United Ar. Em.	-0.91
Chile	19.56	Ivory Coast	6.87	Pakistan	0.23	United King.	3.10
China	1.72	Jamaica	3.24	Panama	30.79	United States	7.09
Colombia	45.56	Japan	2.60	Papua N.G.	154.61	Uruguay	24.24
Congo	53.89	Jordan	0.07	Paraguay	10.77	Uzbekistan	0.31
Costa Rica	23.35	Kazakhstan	3.63	Peru	47.55	Venezuela	33.83
Croatia	6.01	Kenya	1.51	Philippines	3.79	Vietnam	2.80
Cuba	2.01	Kuwait	-0.20	Poland	1.48	Zaire	21.00
Czech Rep.	1.45	Kyrgyzstan	5.47	Portugal	3.25	Zambia	10.01
Denmark	2.49	Laos	40.43	Romania	1.45	Zimbabwe	3.40
Dom. Rep.	1.92	Latvia	6.31	Russia	22.82		
Ecuador	30.37	Lebanon	0.66	Rwanda	0.95		

2002 ESI: Annex 6

Variable Data

Variable: WATINC
Name: Water inflow availability per capita
Units: Thousands Cubic Meters/Person **Reference Year:** 1961-1990 (avg.)
Source: Center for Environmental Systems Research, University of Kassel, WaterGAP 2.1B, 2001
Logic: The sum of per capita internal water availability and the per capita volume of water flowing into a country provides a more complete assessment of a country's water resources, which are important for a variety of environmental services and to support the needs of the population.

Methodology: These data are derived from the WaterGAP 2.1 gridded hydrological model developed by the Center for Environmental Systems Research, University of Kassel, Germany. A special run of the model was performed in order to derive country-level estimates of inflow from other countries. There are some problems, in that the size of the grid cells (0.5 x 0.5 degree) do not accurately capture small countries. It was felt, however, that the consistent definitions used, and the fact that the model itself is based on over 30 years of global hydrological data, mean that the data are more comparable than similar country water resource estimates published elsewhere. In calculating the ESI, the base-10 logarithm of this variable was used.

Mean	11.53	Max	486.98	97.5 percentile cut-off value:	0.1
Median	1.395	Min	0	2.5 percentile cut-off value:	0

Albania	2.83	Egypt	1.25	Liberia	15.79	Saudi Arabia	0.00
Algeria	0.04	El Salvador	1.59	Libya	0.20	Senegal	1.68
Angola	110.82	Estonia	5.38	Lithuania	2.95	Sierra Leone	5.25
Argentina	18.72	Ethiopia	0.04	Macedonia	0.00	Slovakia	12.70
Armenia	0.56	Finland	2.35	Madagascar	0.00	Slovenia	6.53
Australia	0.00	France	0.79	Malawi	0.41	Somalia	2.93
Austria	4.75	Gabon	22.28	Malaysia	0.50	South Africa	0.11
Azerbaijan	2.25	Gambia	7.20	Mali	5.93	South Korea	0.09
Bangladesh	9.36	Germany	1.21	Mauritania	7.73	Spain	0.05
Belgium	0.59	Ghana	1.02	Mexico	0.67	Sri Lanka	0.00
Benin	6.93	Greece	1.24	Moldova	3.66	Sudan	4.28
Bhutan	5.96	Guatemala	1.40	Mongolia	2.45	Sweden	0.91
Bolivia	29.54	Guinea	10.13	Morocco	0.00	Switzerland	0.00
Bosnia and H.	8.78	Guinea-Bissau	0.14	Mozambique	8.97	Syria	1.83
Botswana	23.74	Haiti	0.13	Myanmar	3.64	Tajikistan	5.74
Brazil	16.44	Honduras	5.66	Namibia	49.89	Tanzania	1.20
Bulgaria	21.88	Hungary	10.56	Nepal	1.18	Thailand	5.02
Burkina Faso	0.10	Iceland	0.00	Netherlands	5.50	Togo	0.99
Burundi	0.97	India	0.39	New Zealand	0.00	Trin. and Tob.	0.00
Byelarus	2.02	Indonesia	0.32	Nicaragua	2.71	Tunisia	0.22
Cambodia	36.37	Iran	0.42	Niger	5.90	Turkey	0.18
Cameroon	2.88	Iraq	3.09	Nigeria	0.83	Turkmenistan	11.28
Canada	4.73	Ireland	1.39	North Korea	0.45	Uganda	1.16
Central Af. R.	21.29	Israel	0.00	Norway	2.53	Ukraine	0.56
Chad	8.65	Italy	0.05	Oman	0.00	United Ar. Em.	0.91
Chile	1.13	Ivory Coast	1.33	Pakistan	0.68	United King.	0.03
China	0.12	Jamaica	0.00	Panama	0.00	United States	1.36
Colombia	39.23	Japan	0.00	Papua N.G.	0.93	Uruguay	235.85
Congo	486.98	Jordan	0.17	Paraguay	99.41	Uzbekistan	2.54
Costa Rica	2.25	Kazakhstan	4.30	Peru	19.17	Venezuela	27.47
Croatia	27.60	Kenya	0.81	Philippines	0.00	Vietnam	6.07
Cuba	0.00	Kuwait	0.00	Poland	0.23	Zaire	8.87
Czech Rep.	0.58	Kyrgyzstan	0.00	Portugal	2.33	Zambia	5.74
Denmark	0.00	Laos	36.45	Romania	7.74	Zimbabwe	3.77
Dom. Rep.	0.13	Latvia	7.10	Russia	1.48		
Ecuador	1.22	Lebanon	0.00	Rwanda	0.95		

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Variable Data

Variable: WATSTR
Name: Percent of country's territory under severe water stress
Units: Percent of Land Area **Reference Year:** 1961-1990 (avg.)
Source: Center for Environmental Systems Research, University of Kassel, WaterGap 2.1, 2000
Logic: The regional distribution of water availability relative to population and consumption needs is as important as its overall water availability. This variable captures the percent of the territory that is under water stress, which will affect the availability of water for environmental services and human well-being.

Methodology: These data are derived from the WaterGap 2.1 gridded hydrological model developed by the Center for Environmental Systems Research, University of Kassel, Germany. The modelers derived grid cell by grid cell estimates for every country of whether the water consumption exceeds 40 percent of the water available in that particular grid cell. These were then converted to land area equivalents, and the percentage of the territory under severe water stress was calculated.

Mean 25.49 **Max** 100 **97.5 percentile cut-off value:** 98.81
Median 3.3 **Min** 0 **2.5 percentile cut-off value:** 0

Albania	19.50	Egypt	88.10	Liberia	0.00	Saudi Arabia	88.30
Algeria	71.00	El Salvador	0.00	Libya	83.70	Senegal	5.00
Angola	0.00	Estonia	0.30	Lithuania	0.40	Sierra Leone	0.00
Argentina	23.30	Ethiopia	24.70	Macedonia	91.60	Slovakia	0.00
Armenia	84.60	Finland	2.10	Madagascar	1.70	Slovenia	0.00
Australia	8.00	France	19.40	Malawi	0.00	Somalia	26.90
Austria	0.00	Gabon	0.00	Malaysia	1.60	South Africa	68.50
Azerbaijan	95.40	Gambia	--	Mali	2.70	South Korea	49.80
Bangladesh	22.10	Germany	1.10	Mauritania	6.90	Spain	72.30
Belgium	93.90	Ghana	0.00	Mexico	43.80	Sri Lanka	39.50
Benin	0.00	Greece	58.00	Moldova	6.30	Sudan	31.10
Bhutan	0.00	Guatemala	0.00	Mongolia	8.10	Sweden	0.60
Bolivia	14.00	Guinea	0.00	Morocco	81.50	Switzerland	0.00
Bosnia and H.	0.00	Guinea-Bissau	0.00	Mozambique	13.60	Syria	99.60
Botswana	14.20	Haiti	0.00	Myanmar	0.00	Tajikistan	93.20
Brazil	0.30	Honduras	0.00	Namibia	17.80	Tanzania	0.00
Bulgaria	45.90	Hungary	0.00	Nepal	98.10	Thailand	0.60
Burkina Faso	0.00	Iceland	0.00	Netherlands	36.00	Togo	0.00
Burundi	0.00	India	80.20	New Zealand	0.00	Trin. and Tob.	100.00
Byelarus	0.00	Indonesia	1.40	Nicaragua	0.30	Tunisia	89.00
Cambodia	0.00	Iran	87.50	Niger	40.50	Turkey	61.70
Cameroon	0.00	Iraq	86.90	Nigeria	17.80	Turkmenistan	92.90
Canada	0.90	Ireland	0.00	North Korea	2.80	Uganda	0.00
Central Af. R.	0.00	Israel	100.00	Norway	0.40	Ukraine	17.00
Chad	2.30	Italy	26.30	Oman	49.20	United Ar. Em.	74.00
Chile	41.10	Ivory Coast	0.00	Pakistan	76.30	United King.	21.00
China	44.70	Jamaica	0.00	Panama	0.00	United States	31.30
Colombia	1.00	Japan	9.50	Papua N.G.	0.00	Uruguay	0.00
Congo	--	Jordan	82.60	Paraguay	0.00	Uzbekistan	87.10
Costa Rica	0.00	Kazakhstan	60.40	Peru	23.60	Venezuela	2.40
Croatia	0.00	Kenya	1.10	Philippines	10.40	Vietnam	2.80
Cuba	24.60	Kuwait	97.70	Poland	0.00	Zaire	0.00
Czech Rep.	0.00	Kyrgyzstan	93.00	Portugal	54.70	Zambia	0.00
Denmark	7.70	Laos	0.00	Romania	1.70	Zimbabwe	16.20
Dom. Rep.	4.50	Latvia	0.00	Russia	3.80		
Ecuador	1.20	Lebanon	82.10	Rwanda	0.00		

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Variable Data

Variable: WATSUP

Name: Percent of population with access to clean water

Units: Percent of Population

Reference Year: 2000

Source: World Health Organization and the United Nations Children's Fund, Global Water Supply and Sanitation Assessment 2000, New York: WHO and UNICEF, 2000.

Logic: The percentage of population with access to improved sources of drinking water supply is directly related to the capacity of a country to provide a healthy environment, reducing the risks associated with water-borne diseases and exposure to pollutants.

Methodology:

Mean	77.52	Max	100	97.5 percentile cut-off value:	100
Median	82.095	Min	24	2.5 percentile cut-off value:	29.15

Albania	[62.62]	Egypt	95.00	Liberia	[43.88]	Saudi Arabia	95.00
Algeria	94.00	El Salvador	74.00	Libya	72.00	Senegal	78.00
Angola	38.00	Estonia	[82.44]	Lithuania	[55.64]	Sierra Leone	28.00
Argentina	79.00	Ethiopia	24.00	Macedonia	[90.6]	Slovakia	100.00
Armenia	[76.88]	Finland	100.00	Madagascar	47.00	Slovenia	100.00
Australia	100.00	France	[91.68]	Malawi	57.00	Somalia	[57.71]
Austria	100.00	Gabon	70.00	Malaysia	[83.12]	South Africa	86.00
Azerbaijan	[78.73]	Gambia	62.00	Mali	65.00	South Korea	92.00
Bangladesh	97.00	Germany	[87.43]	Mauritania	37.00	Spain	[86.96]
Belgium	[87.99]	Ghana	64.00	Mexico	86.00	Sri Lanka	83.00
Benin	63.00	Greece	[90.49]	Moldova	100.00	Sudan	75.00
Bhutan	62.00	Guatemala	92.00	Mongolia	60.00	Sweden	100.00
Bolivia	79.00	Guinea	49.00	Morocco	82.00	Switzerland	100.00
Bosnia and H.	[69.83]	Guinea-Bissau	48.00	Mozambique	60.00	Syria	80.00
Botswana	95.00	Haiti	46.00	Myanmar	68.00	Tajikistan	[81.92]
Brazil	87.00	Honduras	90.00	Namibia	77.00	Tanzania	54.00
Bulgaria	100.00	Hungary	99.00	Nepal	81.00	Thailand	80.00
Burkina Faso	53.00	Iceland	[96.52]	Netherlands	100.00	Togo	54.00
Burundi	65.00	India	88.00	New Zealand	[91.83]	Trin. and Tob.	86.00
Byelarus	100.00	Indonesia	76.00	Nicaragua	79.00	Tunisia	80.00
Cambodia	30.00	Iran	95.00	Niger	59.00	Turkey	83.00
Cameroon	62.00	Iraq	85.00	Nigeria	57.00	Turkmenistan	[86.58]
Canada	100.00	Ireland	[96.92]	North Korea	100.00	Uganda	50.00
Central Af. R.	60.00	Israel	[86.57]	Norway	100.00	Ukraine	[81.12]
Chad	27.00	Italy	[92.59]	Oman	39.00	United Ar. Em.	[82.5]
Chile	94.00	Ivory Coast	77.00	Pakistan	88.00	United King.	100.00
China	75.00	Jamaica	71.00	Panama	87.00	United States	100.00
Colombia	91.00	Japan	[94.59]	Papua N.G.	42.00	Uruguay	98.00
Congo	51.00	Jordan	96.00	Paraguay	[78.23]	Uzbekistan	85.00
Costa Rica	98.00	Kazakhstan	91.00	Peru	77.00	Venezuela	84.00
Croatia	[93.58]	Kenya	49.00	Philippines	87.00	Vietnam	56.00
Cuba	95.00	Kuwait	[81.02]	Poland	[81.9]	Zaire	45.00
Czech Rep.	[84.5]	Kyrgyzstan	77.00	Portugal	[82.19]	Zambia	64.00
Denmark	100.00	Laos	90.00	Romania	58.00	Zimbabwe	85.00
Dom. Rep.	79.00	Latvia	[89.85]	Russia	99.00		
Ecuador	71.00	Lebanon	100.00	Rwanda	41.00		

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Variable Data

Variable: WBCSD

Name: Number of World Business Council on Sustainable Development members, per GDP

Units: Members per Billion Dollars GDP

Reference Year: 2001

Source: World Business Council on Sustainable Development, List of Members,
<http://www.wbcsd.org/aboutus/members.htm>.

Logic: The WBCSD is a prominent private-sector organization promoting the principles of sustainable development and encouraging high standards of environmental management within firms.

Methodology:

Mean	2.98	Max	61.93	97.5 percentile cut-off value:	41.96
Median	0	Min	0	2.5 percentile cut-off value:	0

Albania	0.00	Egypt	0.00	Liberia	0.00	Saudi Arabia	0.00
Algeria	6.93	El Salvador	0.00	Libya	0.00	Senegal	0.00
Angola	0.00	Estonia	0.00	Lithuania	0.00	Sierra Leone	0.00
Argentina	2.19	Ethiopia	0.00	Macedonia	0.00	Slovakia	0.00
Armenia	0.00	Finland	35.27	Madagascar	0.00	Slovenia	0.00
Australia	9.15	France	6.21	Malawi	0.00	Somalia	0.00
Austria	0.00	Gabon	0.00	Malaysia	0.00	South Africa	2.73
Azerbaijan	0.00	Gambia	0.00	Mali	0.00	South Korea	3.04
Bangladesh	0.00	Germany	4.76	Mauritania	0.00	Spain	2.97
Belgium	0.00	Ghana	0.00	Mexico	3.91	Sri Lanka	0.00
Benin	0.00	Greece	0.00	Moldova	0.00	Sudan	0.00
Bhutan	0.00	Guatemala	0.00	Mongolia	0.00	Sweden	10.52
Bolivia	0.00	Guinea	0.00	Morocco	0.00	Switzerland	58.42
Bosnia and H.	0.00	Guinea-Bissau	0.00	Mozambique	0.00	Syria	0.00
Botswana	0.00	Haiti	0.00	Myanmar	0.00	Tajikistan	0.00
Brazil	2.59	Honduras	0.00	Namibia	0.00	Tanzania	0.00
Bulgaria	0.00	Hungary	0.00	Nepal	0.00	Thailand	2.86
Burkina Faso	0.00	Iceland	0.00	Netherlands	22.03	Togo	0.00
Burundi	0.00	India	0.00	New Zealand	14.55	Trin. and Tob.	0.00
Byelarus	0.00	Indonesia	0.00	Nicaragua	0.00	Tunisia	0.00
Cambodia	0.00	Iran	0.00	Niger	0.00	Turkey	0.00
Cameroon	0.00	Iraq	0.00	Nigeria	0.00	Turkmenistan	0.00
Canada	11.91	Ireland	0.00	North Korea	0.00	Uganda	0.00
Central Af. R.	0.00	Israel	0.00	Norway	48.59	Ukraine	0.00
Chad	0.00	Italy	2.41	Oman	0.00	United Ar. Em.	0.00
Chile	7.67	Ivory Coast	0.00	Pakistan	0.00	United King.	10.31
China	0.24	Jamaica	0.00	Panama	0.00	United States	4.64
Colombia	0.00	Japan	6.47	Papua N.G.	0.00	Uruguay	0.00
Congo	0.00	Jordan	0.00	Paraguay	0.00	Uzbekistan	0.00
Costa Rica	37.06	Kazakhstan	0.00	Peru	0.00	Venezuela	0.00
Croatia	61.93	Kenya	0.00	Philippines	0.00	Vietnam	0.00
Cuba	0.00	Kuwait	0.00	Poland	0.00	Zaire	0.00
Czech Rep.	0.00	Kyrgyzstan	0.00	Portugal	19.54	Zambia	0.00
Denmark	22.33	Laos	0.00	Romania	0.00	Zimbabwe	0.00
Dom. Rep.	0.00	Latvia	0.00	Russia	1.96		
Ecuador	0.00	Lebanon	0.00	Rwanda	0.00		

2002 ESI: Annex 6

Variable Data

Variable: WEFAGR

Name: Compliance with environmental agreements (WEF survey)

Units: Survey Responses Ranging from 1 (Strongly Disagree) to 7 **Reference Year:** 2000

Source: Michael E. Porter et al, The Global Competitiveness Report 2001. Oxford: Oxford University Press, 2001.

Logic: Where compliance is a high priority, other things equal, global obligations are more effectively honored.

Methodology: Response to the statement: "Compliance with international environmental agreements is a high priority."

Mean	4.45	Max	6.72	97.5 percentile cut-off value:	6.68
Median	4.38	Min	2.68	2.5 percentile cut-off value:	2.75

Albania	--	Egypt	4.42	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	3.02	Libya	--	Senegal	--
Angola	--	Estonia	5.42	Lithuania	4.33	Sierra Leone	--
Argentina	3.07	Ethiopia	--	Macedonia	--	Slovakia	4.80
Armenia	--	Finland	6.72	Madagascar	--	Slovenia	4.71
Australia	5.42	France	5.67	Malawi	--	Somalia	--
Austria	6.33	Gabon	--	Malaysia	4.04	South Africa	4.34
Azerbaijan	--	Gambia	--	Mali	--	South Korea	4.48
Bangladesh	2.95	Germany	6.27	Mauritania	--	Spain	4.87
Belgium	5.46	Ghana	--	Mexico	3.94	Sri Lanka	3.30
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	2.68	Mongolia	--	Sweden	6.54
Bolivia	3.35	Guinea	--	Morocco	--	Switzerland	5.89
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	4.16	Honduras	3.13	Namibia	--	Tanzania	--
Bulgaria	3.88	Hungary	4.97	Nepal	--	Thailand	4.04
Burkina Faso	--	Iceland	5.86	Netherlands	6.18	Togo	--
Burundi	--	India	3.71	New Zealand	5.79	Trin. and Tob.	3.49
Byelarus	--	Indonesia	3.65	Nicaragua	2.86	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	3.94
Cameroon	--	Iraq	--	Nigeria	3.38	Turkmenistan	--
Canada	5.65	Ireland	4.83	North Korea	--	Uganda	--
Central Af. R.	--	Israel	4.04	Norway	6.06	Ukraine	3.69
Chad	--	Italy	5.37	Oman	--	United Ar. Em.	--
Chile	4.47	Ivory Coast	--	Pakistan	--	United King.	5.69
China	4.98	Jamaica	3.98	Panama	4.04	United States	5.22
Colombia	3.83	Japan	5.51	Papua N.G.	--	Uruguay	4.30
Congo	--	Jordan	4.50	Paraguay	2.78	Uzbekistan	--
Costa Rica	4.59	Kazakhstan	--	Peru	3.07	Venezuela	3.19
Croatia	--	Kenya	--	Philippines	3.33	Vietnam	4.49
Cuba	--	Kuwait	--	Poland	4.59	Zaire	--
Czech Rep.	5.26	Kyrgyzstan	--	Portugal	4.50	Zambia	--
Denmark	6.67	Laos	--	Romania	4.12	Zimbabwe	3.12
Dom. Rep.	3.80	Latvia	4.46	Russia	3.16		
Ecuador	3.06	Lebanon	--	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: WEEGOV

Name: Environmental governance

Units: Principal Components of Several Survey Questions

Reference Year: 2001

Source: Michael E. Porter et al, The Global Competitiveness Report 2001. Oxford: Oxford University Press, 2001.

Logic: Effective governance is vital for environmental sustainability.

Methodology: This represents the principal component of responses to several WEF survey questions touching on aspects of environmental governance: air pollution regulations, chemical waste regulations, clarity and staility of regulations, flexibility of regulations, environmental regulatory innovation, leadership in environmental policy, stringency of environmental regulations, consistency of regulation enforcement, environmental regulatory stringency, toxic waste disposal regulations, and water pollution regulations.

Mean	-0.02	Max	2.08	97.5 percentile cut-off value:	1.84
Median	-0.135	Min	-1.65	2.5 percentile cut-off value:	-1.56

Albania	--	Egypt	-0.13	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	-1.50	Libya	--	Senegal	--
Angola	--	Estonia	0.32	Lithuania	-0.16	Sierra Leone	--
Argentina	-0.82	Ethiopia	--	Macedonia	--	Slovakia	0.24
Armenia	--	Finland	2.08	Madagascar	--	Slovenia	0.36
Australia	1.25	France	1.30	Malawi	--	Somalia	--
Austria	1.61	Gabon	--	Malaysia	0.11	South Africa	-0.09
Azerbaijan	--	Gambia	--	Mali	--	South Korea	0.01
Bangladesh	-1.53	Germany	1.67	Mauritania	--	Spain	0.43
Belgium	1.10	Ghana	--	Mexico	-0.51	Sri Lanka	-0.82
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	-1.65	Mongolia	--	Sweden	1.77
Bolivia	-1.19	Guinea	--	Morocco	--	Switzerland	1.66
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	-0.14	Honduras	-1.48	Namibia	--	Tanzania	--
Bulgaria	-0.65	Hungary	0.30	Nepal	--	Thailand	-0.32
Burkina Faso	--	Iceland	1.42	Netherlands	1.70	Togo	--
Burundi	--	India	-0.55	New Zealand	1.12	Trin. and Tob.	-0.84
Byelarus	--	Indonesia	-0.45	Nicaragua	-1.38	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	-0.51
Cameroon	--	Iraq	--	Nigeria	-1.21	Turkmenistan	--
Canada	1.31	Ireland	0.64	North Korea	--	Uganda	--
Central Af. R.	--	Israel	0.14	Norway	1.26	Ukraine	-1.08
Chad	--	Italy	0.59	Oman	--	United Ar. Em.	--
Chile	-0.16	Ivory Coast	--	Pakistan	--	United King.	1.28
China	-0.63	Jamaica	-0.17	Panama	-0.67	United States	1.44
Colombia	-0.51	Japan	1.12	Papua N.G.	--	Uruguay	-0.04
Congo	--	Jordan	0.01	Paraguay	-1.46	Uzbekistan	--
Costa Rica	-0.19	Kazakhstan	--	Peru	-1.07	Venezuela	-0.86
Croatia	--	Kenya	--	Philippines	-1.08	Vietnam	-1.20
Cuba	--	Kuwait	--	Poland	0.06	Zaire	--
Czech Rep.	0.29	Kyrgyzstan	--	Portugal	0.09	Zambia	--
Denmark	1.56	Laos	--	Romania	-0.58	Zimbabwe	-0.75
Dom. Rep.	-1.17	Latvia	0.12	Russia	-0.59		
Ecuador	-1.52	Lebanon	--	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: WEFPRI

Name: Private sector environmental innovation

Units: Principal Components of Several Survey Questions

Reference Year: 2001

Source: Michael E. Porter et al, The Global Competitiveness Report 2001. Oxford: Oxford University Press, 2001.

Logic: Private sector innovation contributes to solutions to environmental problems.

Methodology: This represents the principal component of responses to several WEF survey questions touching on several aspects of private sector environmental innovation: environmental competitiveness, prevalence of environmental management systems, and private sector cooperation with government.

Mean	-0.03	Max	2.63	97.5 percentile cut-off value:	2.08
Median	-0.07	Min	-2.55	2.5 percentile cut-off value:	-1.82

Albania	--	Egypt	0.04	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	-1.54	Libya	--	Senegal	--
Angola	--	Estonia	-0.18	Lithuania	-0.50	Sierra Leone	--
Argentina	-1.23	Ethiopia	--	Macedonia	--	Slovakia	0.14
Armenia	--	Finland	2.63	Madagascar	--	Slovenia	-0.22
Australia	0.86	France	0.92	Malawi	--	Somalia	--
Austria	1.19	Gabon	--	Malaysia	0.43	South Africa	0.27
Azerbaijan	--	Gambia	--	Mali	--	South Korea	0.18
Bangladesh	-0.86	Germany	1.04	Mauritania	--	Spain	0.60
Belgium	0.97	Ghana	--	Mexico	-0.41	Sri Lanka	-1.06
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	-1.07	Mongolia	--	Sweden	1.90
Bolivia	-1.49	Guinea	--	Morocco	--	Switzerland	1.85
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	0.31	Honduras	-0.62	Namibia	--	Tanzania	--
Bulgaria	-0.84	Hungary	-0.08	Nepal	--	Thailand	0.05
Burkina Faso	--	Iceland	1.01	Netherlands	1.92	Togo	--
Burundi	--	India	-0.76	New Zealand	0.62	Trin. and Tob.	-0.06
Byelarus	--	Indonesia	-0.23	Nicaragua	-0.66	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	-0.94
Cameroon	--	Iraq	--	Nigeria	0.25	Turkmenistan	--
Canada	1.54	Ireland	0.69	North Korea	--	Uganda	--
Central Af. R.	--	Israel	-0.31	Norway	0.82	Ukraine	-1.35
Chad	--	Italy	-0.18	Oman	--	United Ar. Em.	--
Chile	-0.80	Ivory Coast	--	Pakistan	--	United King.	0.90
China	0.04	Jamaica	0.44	Panama	0.29	United States	0.97
Colombia	-0.38	Japan	1.44	Papua N.G.	--	Uruguay	0.29
Congo	--	Jordan	0.25	Paraguay	-1.57	Uzbekistan	--
Costa Rica	0.13	Kazakhstan	--	Peru	-0.95	Venezuela	-1.56
Croatia	--	Kenya	--	Philippines	-0.61	Vietnam	-0.75
Cuba	--	Kuwait	--	Poland	-0.19	Zaire	--
Czech Rep.	-0.59	Kyrgyzstan	--	Portugal	-0.45	Zambia	--
Denmark	0.75	Laos	--	Romania	-2.55	Zimbabwe	0.05
Dom. Rep.	-0.36	Latvia	-0.50	Russia	-1.60		
Ecuador	-0.71	Lebanon	--	Rwanda	--		

2002 ESI: Annex 6

Variable Data

Variable: WEFSUB

Name: Subsidies for energy or materials usage (WEF survey)

Units: Survey Responses Ranging from 1 (Strongly Disagree) to 7 **Reference Year:** 2001

Source: Michael E. Porter et al, The Global Competitiveness Report 2001. Oxford: Oxford University Press, 2001.

Logic: Subsidies encourage wasteful consumption of energy and materials.

Methodology: Response to the statement "No government subsidies for energy or materials usage are present."

Mean	4.42	Max	5.94	97.5 percentile cut-off value:	5.91
Median	4.42	Min	2.6	2.5 percentile cut-off value:	2.74

Albania	--	Egypt	4.00	Liberia	--	Saudi Arabia	--
Algeria	--	El Salvador	4.50	Libya	--	Senegal	--
Angola	--	Estonia	4.43	Lithuania	4.47	Sierra Leone	--
Argentina	4.78	Ethiopia	--	Macedonia	--	Slovakia	3.40
Armenia	--	Finland	5.94	Madagascar	--	Slovenia	4.49
Australia	5.00	France	5.89	Malawi	--	Somalia	--
Austria	5.56	Gabon	--	Malaysia	3.74	South Africa	4.56
Azerbaijan	--	Gambia	--	Mali	--	South Korea	4.09
Bangladesh	3.79	Germany	5.28	Mauritania	--	Spain	4.74
Belgium	5.46	Ghana	--	Mexico	3.83	Sri Lanka	3.90
Benin	--	Greece	--	Moldova	--	Sudan	--
Bhutan	--	Guatemala	3.71	Mongolia	--	Sweden	5.38
Bolivia	5.31	Guinea	--	Morocco	--	Switzerland	5.26
Bosnia and H.	--	Guinea-Bissau	--	Mozambique	--	Syria	--
Botswana	--	Haiti	--	Myanmar	--	Tajikistan	--
Brazil	4.53	Honduras	3.80	Namibia	--	Tanzania	--
Bulgaria	4.31	Hungary	4.66	Nepal	--	Thailand	4.00
Burkina Faso	--	Iceland	5.00	Netherlands	5.50	Togo	--
Burundi	--	India	3.72	New Zealand	5.71	Trin. and Tob.	4.27
Byelarus	--	Indonesia	3.30	Nicaragua	4.11	Tunisia	--
Cambodia	--	Iran	--	Niger	--	Turkey	4.38
Cameroon	--	Iraq	--	Nigeria	2.86	Turkmenistan	--
Canada	5.14	Ireland	4.60	North Korea	--	Uganda	--
Central Af. R.	--	Israel	4.57	Norway	4.55	Ukraine	3.34
Chad	--	Italy	5.00	Oman	--	United Ar. Em.	--
Chile	5.55	Ivory Coast	--	Pakistan	--	United King.	4.94
China	4.19	Jamaica	4.56	Panama	4.84	United States	4.92
Colombia	4.38	Japan	4.77	Papua N.G.	--	Uruguay	4.70
Congo	--	Jordan	4.24	Paraguay	2.79	Uzbekistan	--
Costa Rica	4.41	Kazakhstan	--	Peru	4.88	Venezuela	3.77
Croatia	--	Kenya	--	Philippines	3.95	Vietnam	4.26
Cuba	--	Kuwait	--	Poland	4.31	Zaire	--
Czech Rep.	4.35	Kyrgyzstan	--	Portugal	4.37	Zambia	--
Denmark	4.96	Laos	--	Romania	2.60	Zimbabwe	4.06
Dom. Rep.	3.66	Latvia	4.29	Russia	3.73		
Ecuador	2.90	Lebanon	--	Rwanda	--		

