Global Adaptation Index - GaIn™ 2011

A ranking of countries based on their adaptive capacity to climate change and global trends. Produced by Global Adaptation Institute www.globaladaptationinsitute.org

GaIn™ Ranking	Category	Gain Total Score	Readiness							Total Score (scaled to 60)	Vulnerability												Total Score (scaled to 40)
			ECONOMIC	SOCIAL		GOVERNANCE			AWARENESS		BIOPHYSICAL EXPOSURE				SOCIO-ECONOMIC EXPOSURE				ADAPTIVE CAPACITY				
	Indicator		Economy	Human Dev	Infrastructure	Accountability	Stability & Nonviolence	Gov. effective	Adaptometer		Water	Food	Health	Coast	Water	Food	Health	Coast	Water	Food	Health	Coast	
	Index		IEF_2011	HDI_2010	#mobile/100c	WGI_2011va	WGI_2011npv	WGI_2011g	TBD		Precipitation model	Yield loss	Clim. disaster	Seal level %area	Annual fresh water	Rural %pop	#Doctors/nurse	Seal level pop	Access sanitation	Depth hunger	Infant mort.	$ppp/area	
	Weight		0,33	0,27	0,07	0,11	0,11	0,11	0		-0,11	0,11	0,07	0,04	0,11	0,11	-0,07	0,04	-0,11	0,11	0,07	-0,04	
1	NEW ZEALAND	56,39	82,35	0,91	108,22	96,68	84,91	97,62		60	7,89	-3,66	0,01	2,5	0,65	13,44	12,56	12,5	100	40	4,9	9,11	3,61
2	CANADA	55,56	80,77	0,89	66,32	95,26	85,38	96,67		57,78	13,63	3,49	0,01	2,2	1,61	19,6	13,77	3,2	100	20	5,7	3,38	2,23
3	SWITZERLAND	55,41	81,95	0,87	116,33	99,53	92,45	98,1		59,9	3,67	8,32	0	0	6,36	26,52	18,69	0	100	120	4	1000	4,48
4	NORWAY	55,32	70,28	0,94	110,12	100	91,51	94,76		55,32	12,65	-18,14	0	2,1	0,57	22,52	22,62	3,7	100	110	2,9	13,14	0
5	SWEDEN	53,66	71,87	0,88	118,14	98,58	88,21	98,57		55,04	12,93	-18,14	0	1,6	1,73	15,46	17,41	3,5	100	130	2,3	28,86	1,37
6	FINLAND	53,61	74,04	0,87	128,54	97,16	95,75	99,05		56,39	13,6	-18,14	0	0,9	2,31	36,7	20,97	2,7	100	130	2,7	27,51	2,77
7	DENMARK	53,05	78,64	0,87	124,91	99,05	85,85	99,52		57,97	8,84	-18,14	0	20,5	21,17	13,32	16,69	16,9	100	120	3,7	13,47	4,92
8	AUSTRIA	51,82	71,88	0,85	129,74	93,36	89,15	93,81		54,01	4,05	8,32	0,01	0	3,84	32,84	16,97	0	100	20	3,4	1000	2,2
9	SINGAPORE	51,32	87,18	0,85	131,74	34,6	90,09	100		58,32	-4,76	38,94	0	16,7		0	7,24	10,4	100		2,3	1,236.26	7
10	LUXEMBOURG	51,3	76,23	0,85	144,68	97,63	96,23	96,19		57,27	-5,18	8,32	0	0		17,56	14,86	0	100	100	1,9	1000	5,97
11	ICELAND	48,59	68,2	0,87	107,97	96,21	91,98	93,33		52,45	8,3	33,36	0	2	0,09	7,74	21,17	5,2	100	40	1,9	1,66	3,86
12	IRELAND	48,22	78,7	0,89	121,04	92,42	84,43	88,1		57,42	1,88	8,32	0	3,8	2,31	38,66	21,36	6	100	110	3	34,91	9,2
13	UNITED KINGDOM	46,1	74,53	0,85	125,98	91,94	54,72	90,95		52,9	3,12	6,49	0,01	5	6,58	10,06	16,52	6,5	100	110	4,9	66,61	6,8
14	UNITED STATES	45,55	77,84	0,9	88,87	85,78	58,96	89,05		54,63	3,01	7,49	0,03	2,3	17,12	18,3	14,71	6,2	99,14	100	6,7	41,85	9,08
15	GERMANY	44,25	71,79	0,88	128,51	93,84	76,89	91,9		53,9	5,25	4,83	0,01	4,3	43,97	26,36	16,69	3,6	100	110	3,7	93,72	9,65
16	AUSTRALIA	43,48	82,47	0,94	103,21	94,79	76,42	95,24		59,88	-4,91	38,94	0,87	1,5	4,86	11,26	11,03	15,6	100	50	4,9	4,2	16,41
17	CZECH REPUBLIC	42,95	70,42	0,84	132,19	82,46	81,13	79,05		51,19	5,05	8,32	0,03	0	19,62	26,5	16,93	0	99,44	200	3,1	1000	8,24
18	ESTONIA	42,12	75,2	0,81	188,3	85,31	66,98	84,76		53,75	8,36	13,56	0	2,6	1,24	30,54	15,16	1,7	97,19	180	4,4	5,63	11,63
19	BELGIUM	42,11	70,15	0,87	110,4	94,31	74,06	90,48		52,08	-3,99	11,15	0	10,1	10	2,64	14,29	15,1	100	110	3,9	62,34	9,97
20	URUGUAY	41,09	70	0,77	105,21	84,83	78,3	71,9		48,24	12,69	40,6	0,02	3	5,34	7,7	9,21	3,8	100	0	11,7	3,87	7,14
21	SLOVAKIA	40,61	69,49	0,82	102,1	72,51	78,77	76,67		48,7	1,62	8,32	0,01	0		43,44	13,01	0	100	90	6,6	1000	8,09
22	NETHERLANDS	38,77	74,68	0,89	125,43	98,1	83,02	94,29		56,09	0,16	11,65	0,02	57,5	72,18	18,18	21,57	63	100	130	4	15,25	17,32
23	JAPAN	37,24	72,81	0,88	86,45	81,04	83,49	86,67		52,77	3,7	9,48	0,02	4,4	20,57	33,52	12,03	7,5	100	210	2,5	119,6	15,54
24	HUNGARY	36,67	66,58	0,8	121,78	79,62	67,92	73,81		47,04	-1,28	8,32	0,01	0	127,33	32,5	14,42	0	100	0	5,4	1000	10,38
25	FRANCE	36,51	64,59	0,87	93,09	90,52	65,57	90		48,4	-3,29	11,15	0,06	1,9	22,39	22,64	14,71	3	100	110	3,3	112,55	11,89
26	LATVIA	35,35	65,83	0,77	98,58	70,14	61,32	69,52		44,17	6,72	13,56	0	1,5	1,79	31,88	11,35	5	86,79	0	7,9	6,48	8,82

READINESS INDICATORS

Economic

ability to provide a hospitable financial and regulatory investment environment.

Index of Economic Freedom [Heritage Foundation]

This indicator reflects the ease of entrepreneurs to adapt to changing incentives or conditions. Factors include ease of establishing and conducting business, and access to capital. An improved score indicates that a country is better able to utilize investment capital for adapting to climate change.

Governance

strong institutions will ensure that investments more effectively meet the needs of the population.

Voice & Accountability [WB] As biophysical systems change, this reflects how responsive and effective the government is in meeting the changing needs of its people in terms of natural resource allocation and investment.

Political Stability & Absence of Violence [WB] Improving this indicator creates greater assurance to investors that their invested capital will grow without significant interruption or not become obsolete through political upheaval.

Government Effectiveness [WB] Captures perceptions of the quality of public services and effectiveness of government in meeting public policy goals. Improving this indicator reflects a country's improved ability to address the changing needs of its citizens as the climate changes.

Social

the human and physical capital available to transform investments into effective projects and climate resilient enterprises.

Human Development Index [UNDP] This index reflects the health and education of a nation's people. An improving index score indicates that a country's population will more likely have improved skills and resources for adaptation.

Mobile cellular subscriptions (per 100 people) [WB] An indicator for access and knowledge. It reflects a society's ability to communicate quickly, economic enablement (e.g. microfinance), and crisis response

Adaptometer

utilizing contacts in private sector, NGOs, national and local governments, and universities, surveys/polling can provide predictive indicators to compliment published data

Urban planning Are contingency plans in place?

Adaptation policy Does the national government understand climate implications?

VULNERABILITY INDICATORS

Biophysical impacts

the level of adverse biophysical impacts for a given magnitude of climate change

Future precipitation [CRU] median % increase in precipitation from 9 climate models.

Crop yields [Wheeler] predicted yield decrease per country.

Clim disasters [CRED] people affected by climatic events (floods, fires, droughts, and storms) in recent decades.

Sea level area % [PLACE] amount of coastline below 5 meters reflects likelihood of physical impacts on coasts as sea level rise and storm surges move further inland.

Socioeconomic exposure

the importance of a climate-sensitive system or sector for a country

Annual freshwater withdrawal [WB] measured as % of internal resources, countries already straining water resources will be particularly affected by significant alterations in precipitation patterns (coupled with population growth).

Rural % of total population [WB] rural populations are typically more dependent upon local agriculture for basic sustenance.

Doctor/Nurse numbers [WB] per 1,000. People in a country with a low ratio of medical providers will have greater exposure to disease and deaths from natural disasters and disease.

Population at sea level [PLACE] a higher number of citizens in coastal zones (<5m) will be exposed to higher economic costs, infrastructure damage, and morbidity.

Socioeconomic adaptive capacity

the availability of economic, social, and institutional resources [for specific sectors] to cope with and adapt to the impacts of climate change

Access to sanitation [WB] a useful measure of how well-equipted a country is to address current and future water distribution and access challenges.

Hunger [WB] basic indicator of whether a country's food systems and infrastructure are working effectively.

Infant mortality [WB] indicates the degree to which the health system is delivering basic services.

Coastal zone wealth [Noble] measured as purchasing power parity divided by coastal area. Indicates the resources available to invest in coastal protection.