

Chapter 37

Report on Global Environment

Competitiveness of China

China is situated in the eastern part of the Eurasian continent, bordered by the DPRK to the east, Afghanistan and Pakistan to the west, Russia and Mongolia to the north, Myanmar, Laos and Vietnam to the south, India, Nepal and Bhutan to the south and southwest, and Kazakhstan, Kyrgyzstan, Tajikistan to the northwest. It covers 9326 thousand of square kilometers and has a population of 1344.13 million. Its GDP reaches \$7318.5 billion in 2011. Through the index system and evaluation model, the environment competitiveness index of China ranks at 87 in 133 countries.

Score:
48.03
Rank:
87

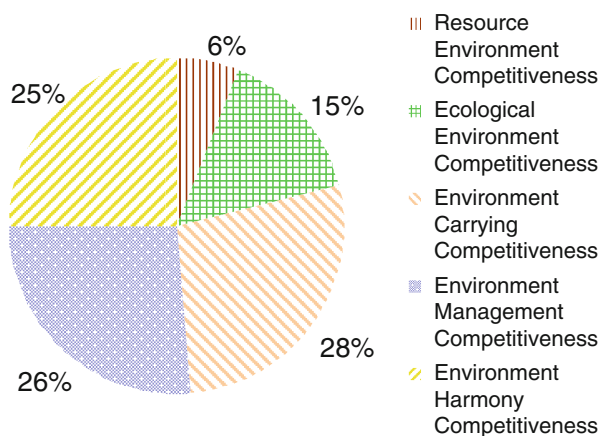


Fig. 37.1 Contribution of sub-index to GEC

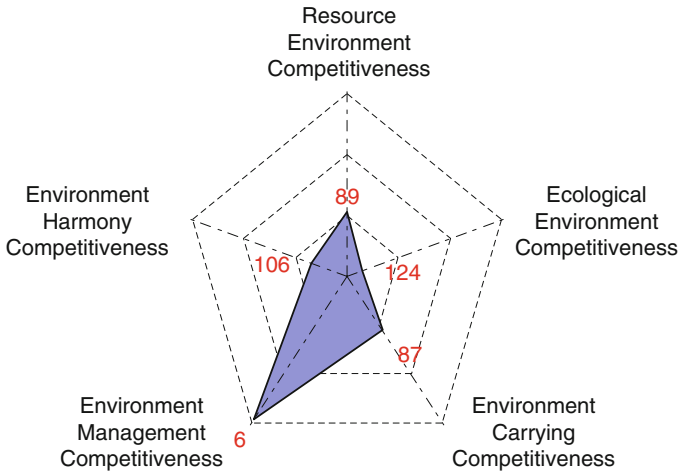


Fig. 37.2 Rank of sub-index of GEC

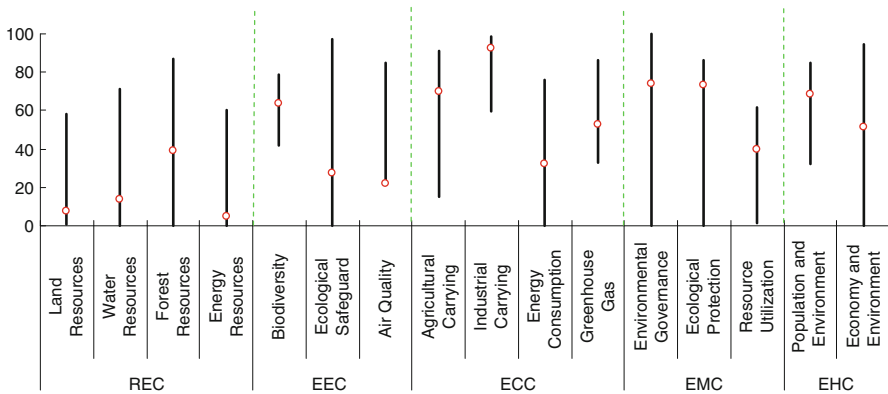


Fig. 37.3 Score and rank of the pillars of GEC

Table 37.1 Score and rank of all indicators of GEC

Indicators	Score	Rank	Indicators	Score	Rank
1 Resource Environment Competitiveness	14.76	89	Groundwater	12.76	56
1.1 Land Resources	7.71	105	Total internal renewable water resources	15.21	63
Land area per capita	1.23	106	1.3 Forest Resources	39.20	28
Percentage of arable land to total land area	20.17	67	Growing stock in forest and other wooded land	94.49	5
Arable land per capita	3.88	103	Proportion of land area covered by forest	26.32	73
1.2 Water Resources	13.41	71	Forest area per capita	1.09	84
Surface water	3.17	72	1.4 Energy Resources	4.50	76
Annual precipitation	22.51	83			

(continued)

Table 37.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
Fossil energy	1.20	32	Energy consumption per unit of land area	99.45	101
Energy production	1.67	43	Ratio of clean energy consumption	6.24	65
Proportion of combustible renewable and waste to total energy consumption	9.12	65	Elasticity of energy consumption	13.67	82
Net energy imports of the energy consumption	11.58	49	Elasticity of electric power consumption	9.52	104
2 Ecological Environment Competitiveness	36.09	124	3.4 Greenhouse Gas Growth rate of CO ₂ emissions	52.42	123
2.1 Biodiversity	63.46	8	Growth rate of Methane emissions	46.81	83
threatened fish species	46.70	128	Growth rate of Methane emissions	51.41	106
threatened mammal species	59.24	129	CO ₂ emissions per unit of land area	99.13	111
threatened plant species	78.18	128	CO ₂ emissions per unit of energy consumption	17.94	118
GEF benefits index for biodiversity	66.60	6	4 Environment Management Competitiveness	63.60	6
2.2 Ecological Safeguard	27.54	54	4.1 Environmental Governance	73.95	95
Terrestrial protected areas	44.84	38	Agricultural chemicals regulation	47.62	79
Marine protected areas	1.59	67	Percentage of the rural population with access to an improved water source	85.00	72
2.3 Air Quality	21.97	132	Percentage of the urban population with access to an improved water source	98.00	70
Inhalable particles (PM10)	56.93	110	4.2 Ecological Protection	73.50	4
Particulate matter (PM2.5)	37.02	130	Area of plantation and afforestation	100.00	1
Index of indoor air pollution	10.60	90	Biome protect	64.40	60
Nitrogen oxides emission	0.00	132	Overfishing of fishing resources	47.25	60
Sulfur dioxide emission	0.00	131	4.3 Resource Utilization	40.06	53
3 Environment Carrying Competitiveness	65.59	87	Utilization rate of water resources	0.79	42
3.1 Agricultural Carrying	69.92	45	Percentage of total internal renewable water resources to total water resources	78.84	43
Cereal yield per unit of arable land	58.11	19	Percentage of agricultural land to total land area	66.44	39
Fertilizer consumption per unit of arable land	60.49	122	Percentage of fossil fuel energy consumption to total energy consumption	14.17	84
Annual freshwater withdrawals for agriculture per unit of arable land	95.10	92			
3.2 Industrial Carrying	92.29	57			
Net exports of goods as a percentage of GDP	83.34	54			
Electric power consumption per unit of value added of industry	90.42	79			
SO ₂ emissions per unit of value added of industry	99.68	81			
Annual freshwater withdrawals for industry per value added of industry	95.73	85			
3.3 Energy Consumption	32.22	79			

(continued)

Table 37.1 (continued)

Indicators	Score	Rank	Indicators	Score	Rank
5 Environment Harmony Competitiveness	60.13	106	CO ₂ emissions per capita	85.47	86
5.1 Population and Environment	68.64	76	Energy consumption per capita	86.84	73
Percentage of population with access to Improved sanitation facilities	55.00	93	5.2 Economy and Environment	51.62	110
Motor vehicles per 1,000 people	90.00	49	Land resource utilization efficiency	0.23	43
Renewable internal freshwater resources per capita	2.53	78	Sulfur dioxide emissions per unit of GDP	81.83	109
SO ₂ emissions per capita	89.39	96	Carbon dioxide emissions per unit of GDP	53.37	124
			Energy consumption per unit of GDP	71.07	99

Table 37.2 Rank distribution of the individual indicators of GEC

Sub-index	Number of the individual indicators	Rank				
		1–10	11–30	31–60	61–100	101–133
Resource Environment Competitiveness	14	1	1	3	7	2
Ecological Environment Competitiveness	11	1	0	2	1	7
Environment Carrying Competitiveness	15	0	1	3	6	5
Environment Management Competitiveness	10	2	0	5	3	0
Environment Harmony Competitiveness	10	0	0	2	5	3
Total	60	4	2	15	22	17

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