hinrich foundation
advancing sustainable global trade

IMD / World Competitiveness Center

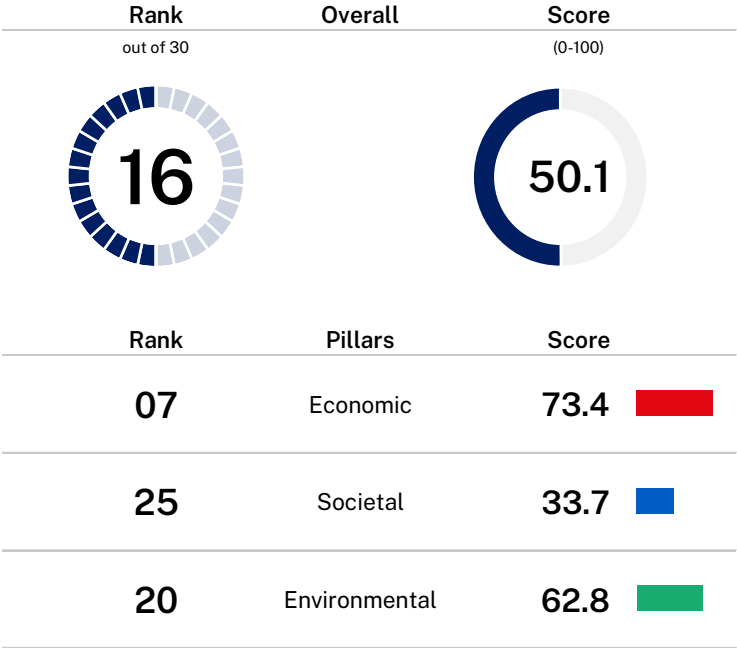# Sustainable Trade Index 2023
China

Sustainable Trade Index

The Hinrich-IMD Sustainable Trade Index measures 30 economies' readiness and capacity to participate in the global trading system in a manner that supports the long-term goals of economic growth, environmental protection, and societal development.

Overall and pillars

Rank	Overall	Score
out of 30		(0-100)
16		**50.1**

Rank	Pillars	Score	
07	Economic	**73.4**	🟥
25	Societal	**33.7**	🟦
20	Environmental	**62.8**	🟩

Background information

Population, millions	1412.55 (2022)	Large
Income, GDP per Capita US$	12,814 (2022)	Medium
Membership	APEC, RCEP	

Economic pillar

The Economic pillar measures an economy's ability to ensure and promote economic growth through international trade. In this category, economies receive scores for indicators that demonstrate a link between the trading system and economic growth.

Some indicators capture the quality of trade infrastructure, while others measure the ease of conducting international trade. We measure export diversification by evaluating an economy's bilateral trade destinations and how heavily its exports are concentrated by sector. Furthermore, we consider the technological infrastructure and innovation capabilities of an economy by assessing its emphasis on research and development investments and digital technologies.

Indicators

		Rank	Value	Year	Score	
1.01	Consumer price inflation	01	1.90	2021	100.0	
1.02	Real GDP Growth per capita, % GDP	10	2.99	2021	74.4	
1.03	Growth in labor force, %	23	0.20	2021	35.7	
1.04	Foreign direct investment, net inflows, % GDP	16	1.88	2020	5.2	
1.05	Gross fixed capital formation, % GDP	01	41.87	2020	100.0	
1.06	Tariff & non-tariff barriers	28	-	-	33.5	
1.06.01	Tariff barriers	23	-	-	65.9	
1.06.01.a	Tariff barriers in force	22	742	2021	85.5	
1.06.01.b	New tariff barriers 2022	01	0.00	2021	100.0	
1.06.01.c	Percentage of trade affected by tariff barrier (up to 2018)	21	32.44	2018	37.3	
1.06.02	Non-tariff barriers	27	-	-	7.0	
1.06.02.a	Non-tariff barriers in force	26	179,228	2021	0.0	
1.06.02.b	New non-tariff barriers 2022	23	10,719	2021	9.7	
1.06.02.c	Percentage of trade affected by non-tariff barrier (up to 2018)	14	55.46	2018	36.1	
1.07	Trade liberalization	27	-	-	6.2	
1.07.01	Regional Trade Agreements, number in force	10	16.00	2022	35.5	
1.07.02	Capital account liberalization, Index	22	-1.23	2019	0.0	
1.07.03	Investment Freedom, Index	30	20.00	2022	0.0	
1.08	Exchange rate stability, parity change from national currency to SDR, 2022/2020	21	0.06	2021	86.2	
1.09	Domestic credit to private sector, % of GDP	04	178.13	2020	66.7	
1.10	Foreign trade and payments risk	10	-	-	58.4	
1.10.01	Country credit rating	10	48.00	2022	70.1	
1.10.02	Gross debt, % GDP	22	77.10	2021	71.1	
1.11	Trade costs	14	-	-	52.6	
1.11.01	Logistics performance, index	08	3.70	2018	68.4	
1.11.02	Corruption perceptions, index	14	45.00	2021	34.4	
1.11.03	Rule of law, index	16	53.85	2020	51.8	
1.12	Monetary policy intervention	24	-	-	44.3	
1.12.01	Current account balance, % GDP	23	2.30	2021	52.1	
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	16	-1.03	2021	5.5	
1.13	Export concentration	05	-	-	87.9	
1.13.01	Export market concentration, Top 5 as % total	03	41.02	2021	92.2	
1.13.02	Export product concentration, Top 5 as % total	07	47.32	2021	80.2	
1.14	Exports of goods and services	01	-	-	100.0	
1.14.01	Merchandise exports, US$	01	3,593,601	2021	100.0	
1.14.02	Commercial services exports, US$	03	422,333	2021	90.3	
1.15	Technological innovation	11	-	-	36.5	
1.15.01	R&D expenditure, % GDP	05	2.41	2020	48.8	
1.15.02	Researchers in R&D, per capita	12	1.58	2020	18.0	
1.15.03	Patent applications, per million inhabitants	06	1,089.20	2020	21.1	
1.15.04	High-technology exports, % of manufactured exports	07	29.96	2020	41.6	
1.15.05	Scientific articles, per million people	14	474.28	2020	19.8	
1.16	Technological infrastructure	12	-	-	74.2	
1.16.01	Fixed internet speed, Mbps	10	124.37	2021	63.5	
1.16.02	Internet users, % population	19	73.05	2020	67.5	
1.16.03	Fixed broadband subscriptions (per 100 people)	05	37.58	2021	84.8	
1.16.04	Mobile subscriptions (per 100 people)	17	121.54	2020	42.0	

Societal pillar

Social factors matter in an economy's capacity to trade internationally over the long term. Economies are measured on the environment that encourages and supports the development of human capital, such as the extent of education and labor standards.

This pillar also captures factors that influence public support for trade expansion. These include income inequality, political stability, goods produced by forced and child labor, and the government response to human trafficking.

Indicators

		Rank	Value	Year	Score	
2.01	Inequality (Gini coefficient)	12	38.20	2019	41.30	
2.02	Educational attainment	13	-	-	42.95	
2.02.01	Mean years of schooling	23	7.60	2019	32.95	
2.02.02	University education Index	04	42.82	2021	35.47	
2.02.03	Tertiary enrollment	14	63.60	2020	50.39	
2.03	Labor standards	24	-	-	50.00	
2.03.01	Gender non-discrimination in hiring	01	100.00	2022	100.00	
2.03.02	Freedom of association and assembly	28	0.25	2021	0.00	
2.04	Political stability and absence of violence	20	29.25	2020	26.40	
2.05	Goods produced by forced labor or child labor	29	-	-	24.45	
2.05.01	Goods produced by forced labor	29	-	-	24.45	
2.05.01.a	Goods produced by forced labor, number of goods categories	30	18.00	2021	0.00	
2.05.01.b	% population in forced labor	12	4.01	2018	75.84	
2.05.02	Goods produced by child labor, number of goods categories	20	6.00	2021	76.00	
2.06	Government response to human trafficking	28	-	-	20.18	
2.06.01	Government response to human trafficking, Criminalization	21	4.00	2021	40.00	
2.06.02	Government response to human trafficking, Strategy	24	39.74	2018	35.29	
2.06.03	Government response to human trafficking, Action	24	4.00	2021	0.00	
2.07	Trade in goods at risk of modern slavery	30	-	-	0.00	
2.07.01	Imports of goods at risk of modern slavery, US$ millions	27	39,080	2020	12.71	
2.07.02	Exports of goods at risk of modern slavery, US$ millions	30	592,377	2020	0.00	
2.08	Social mobility, Index	11	61.50	2020	62.94	
2.09	Life expectancy at birth	11	78.21	2021	63.91	
2.10	Uneven Economic Development	22	6.10	2023	36.84	

Environmental pillar

The Environmental pillar measures the extent to which an economy's trade supports sustainable resources. The factors include measurements of non-renewable natural resources in trade and the management of externalities that arise from economic growth and participation in the global trading system.

While an economy's capacity to participate in the global trading system is dependent on economic development, achieving sustainable trade requires prudent stewardship of natural resources and limiting externalities in an economy's economic calculus to promote its overall environmental capital. The indicators chosen in this section measure an economy's environmental capital and include indicators for air and water pollution. In terms of future impact, we measure national environmental standards, carbon emissions, and share of natural resources in exports.

Indicators

		Rank	Value	Year	Score	
3.01	Air pollution, PM2.5 micrograms per cubic metre	27	34.84	2019	32.19	
3.02	Deforestation, Index	21	0.00	2020	15.56	
3.03	% of wastewater treated	15	61.67	2020	61.05	
3.04	Energy intensity, energy consumed for each 1'000 US$ of GDP in MTOE	20	149.00	2019	62.54	
3.05	Ecological footprint	16	3.80	2018	58.84	
3.06	Renewable energy, %	18	10.00	2020	13.23	
3.07	Environmental standards in trade, count	01	-	-	100.00	
3.07.01	Convention: Hazardous Wastes	01	2	2021	100.00	
3.07.02	Convention: Prevention of Marine Pollution	01	2	2021	100.00	
3.07.03	Convention: Protection of the Ozone Layer (Vienna)	01	2	2021	100.00	
3.07.04	Convention on Climate Change (Kyoto)	01	2	2021	100.00	
3.07.05	The International Timber Agreement	01	2	2021	100.00	
3.07.06	Convention: International Trade in Endangered Species	01	2	2021	100.00	
3.07.07	Convention: Prior Informed Consent - Hazardous Chemicals (Rotterdam)	01	2	2021	100.00	
3.08	Transfer emissions, million tonnes carbon	28	251.84	2019	0.00	
3.09	Share of natural resources in trade, %	08	11.27	2020	87.78	
3.10	Carbon	07	-	-	77.69	
3.10.1	Carbon pricing	01	2	2022	100.00	
3.10.2	CO2 emissions per capita	22	8.73	2019	47.48	

About us

Global trade has helped lift hundreds of millions of people around the world out of poverty, but the benefits of trade do not come without their risks. If an economy is unprepared for the consequences of trade growth, it may result in labor disruption, environmental degradation, and worsening inequality. Proactive and responsible government policy and farsighted corporate decision-making can harness the benefits of trade and mitigate its excesses.

The Hinrich Foundation and the IMD World Competitiveness Center have combined their expertise to build the Hinrich-IMD Sustainable Trade Index, a framework for policy makers, business executives, and civil society leaders to understand and advance sustainable global trade.

hinrich foundation
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The Hinrich Foundation is an Asia based philanthropic organization that works to advance mutually beneficial and sustainable global trade.

We believe sustainable global trade strengthens relationships between nations and improves people's lives. We support original research and education programs that build understanding and leadership in global trade. Our approach is independent, fact-based and objective. We are an authoritative source of knowledge, sharp analysis and fresh thinking for policymakers, business, media and scholars engaged in global trade.

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IMD / World Competitiveness Center

IMD is an independent academic institution with Swiss roots and global reach, founded over 75 years ago by business leaders for business leaders. Since its creation, IMD has been a pioneering force in developing leaders who transform organizations and contribute to society.

The IMD World Competitiveness Center is dedicated to the advancement of knowledge on world competitiveness and offers benchmarking services for countries and companies using the latest and most relevant data on the subject. The Center has pioneered research on how nations and enterprises compete to lay the foundations for future prosperity.

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