

Sustainable Trade Index 2023

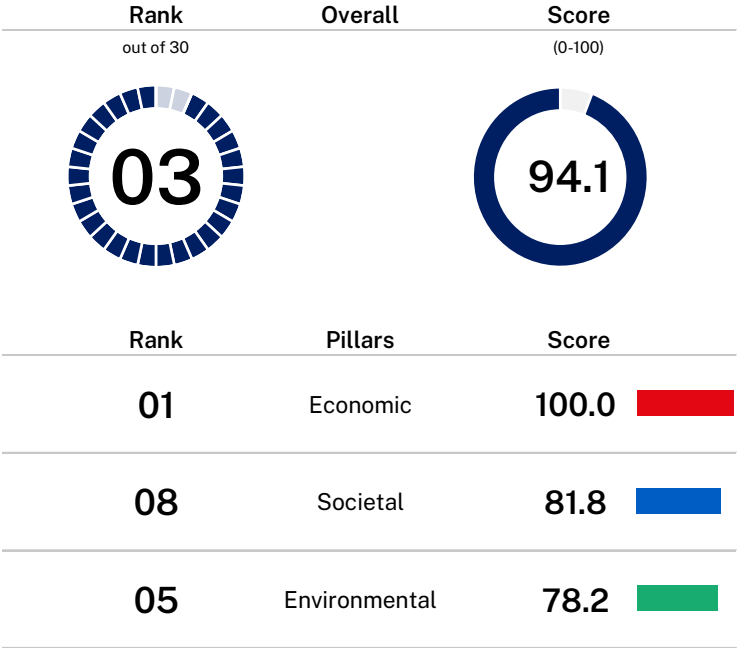
Singapore



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



Background information

Population, millions	5.64 (2022)	Small
Income, GDP per Capita US\$	82,808 (2022)	High
Membership	APEC, CPTPP, 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	13	6.10	2021	73.2	
1.02	Real GDP Growth per capita, % GDP	26	0.27	2021	58.4	
1.03	Growth in labor force, %	27	-0.46	2021	26.4	
1.04	Foreign direct investment, net inflows, % GDP	02	34.90	2020	93.9	
1.05	Gross fixed capital formation, % GDP	18	23.18	2020	35.4	
1.06	Tariff & non-tariff barriers	12	-	-	73.5	
1.06.01	Tariff barriers	15	-	-	87.0	
1.06.01.a	Tariff barriers in force	10	81	2021	98.4	
1.06.01.b	New tariff barriers 2022	22	6.00	2021	72.1	
1.06.01.c	Percentage of trade affected by tariff barrier (up to 2018)	02	0.15	2018	99.9	
1.06.02	Non-tariff barriers	14	-	-	62.3	
1.06.02.a	Non-tariff barriers in force	10	315	2021	99.8	
1.06.02.b	New non-tariff barriers 2022	03	7	2021	91.8	
1.06.02.c	Percentage of trade affected by non-tariff barrier (up to 2018)	25	77.35	2018	5.2	
1.07	Trade liberalization	02	-	-	92.2	
1.07.01	Regional Trade Agreements, number in force	03	27.00	2022	71.0	
1.07.02	Capital account liberalization, Index	01	2.31	2019	100.0	
1.07.03	Investment Freedom, Index	01	85.00	2022	100.0	
1.08	Exchange rate stability, parity change from national currency to SDR, 2022/2020	14	0.04	2021	91.1	
1.09	Domestic credit to private sector, % of GDP	11	130.64	2020	47.3	
1.10	Foreign trade and payments risk	14	-	-	55.5	
1.10.01	Country credit rating	01	60.00	2022	88.1	
1.10.02	Gross debt, % GDP	29	134.20	2021	49.0	
1.11	Trade costs	01	-	-	100.0	
1.11.01	Logistics performance, index	01	4.30	2018	100.0	
1.11.02	Corruption perceptions, index	02	83.00	2021	93.8	
1.11.03	Rule of law, index	01	98.56	2020	100.0	
1.12	Monetary policy intervention	01	-	-	100.0	
1.12.01	Current account balance, % GDP	28	19.30	2021	24.1	
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	01	-36.76	2021	100.0	
1.13	Export concentration	09	-	-	68.3	
1.13.01	Export market concentration, Top 5 as % total	10	52.12	2021	71.2	
1.13.02	Export product concentration, Top 5 as % total	11	55.61	2021	66.9	
1.14	Exports of goods and services	04	-	-	78.6	
1.14.01	Merchandise exports, US\$	10	515,802	2021	64.5	
1.14.02	Commercial services exports, US\$	05	290,903	2021	85.5	
1.15	Technological innovation	02	-	-	79.4	
1.15.01	R&D expenditure, % GDP	06	1.89	2019	37.8	
1.15.02	Researchers in R&D, per capita	02	7.29	2019	83.6	
1.15.03	Patent applications, per million inhabitants	04	1,790.61	2020	34.6	
1.15.04	High-technology exports, % of manufactured exports	03	55.26	2020	78.0	
1.15.05	Scientific articles, per million people	03	2,149.35	2020	90.6	
1.16	Technological infrastructure	03	-	-	87.6	
1.16.01	Fixed internet speed, Mbps	01	191.66	2021	100.0	
1.16.02	Internet users, % population	10	91.10	2020	90.9	
1.16.03	Fixed broadband subscriptions (per 100 people)	11	25.69	2021	57.8	
1.16.04	Mobile subscriptions (per 100 people)	05	147.48	2020	52.6	

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)	09	37.50	2020	45.11	
2.02	Educational attainment	10	-	-	60.81	
2.02.01	Mean years of schooling	11	11.92	2019	79.46	
2.02.02	University education Index	16	9.69	2021	8.03	
2.02.03	Tertiary enrollment	03	93.13	2020	79.35	
2.03	Labor standards	25	-	-	47.89	
2.03.01	Gender non-discrimination in hiring	21	75.00	2022	66.67	
2.03.02	Freedom of association and assembly	22	0.42	2021	29.11	
2.04	Political stability and absence of violence	01	97.64	2020	100.00	
2.05	Goods produced by forced labor or child labor	07	-	-	94.91	
2.05.01	Goods produced by forced labor	07	-	-	94.91	
2.05.01.a	Goods produced by forced labor, number of goods categories	01	0.00	2021	100.00	
2.05.01.b	% population in forced labor	07	2.13	2018	91.64	
2.05.02	Goods produced by child labor, number of goods categories	01	0.00	2021	100.00	
2.06	Government response to human trafficking	17	-	-	58.26	
2.06.01	Government response to human trafficking, Criminalization	26	3.00	2021	20.00	
2.06.02	Government response to human trafficking, Strategy	15	47.44	2018	52.94	
2.06.03	Government response to human trafficking, Action	01	1.00	2021	100.00	
2.07	Trade in goods at risk of modern slavery	10	-	-	58.55	
2.07.01	Imports of goods at risk of modern slavery, US\$ millions	19	12,139	2020	22.36	
2.07.02	Exports of goods at risk of modern slavery, US\$ millions	01	0	2020	100.00	
2.08	Social mobility, Index	04	74.60	2020	96.19	
2.09	Life expectancy at birth	05	82.75	2021	86.49	
2.10	Uneven Economic Development	06	3.40	2023	84.21	

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	09	14.01	2019	82.01	
3.02	Deforestation, Index	06	0.01	2020	54.66	
3.03	% of wastewater treated	01	100.00	2020	100.00	
3.04	Energy intensity, energy consumed for each 1'000 US\$ of GDP in MTOE	03	53.00	2019	91.54	
3.05	Ecological footprint	24	5.93	2018	29.80	
3.06	Renewable energy, %	27	1.20	2020	1.59	
3.07	Environmental standards in trade, count	20	-	-	50.00	
3.07.01	Convention: Hazardous Wastes	01	2	2021	100.00	
3.07.02	Convention: Prevention of Marine Pollution	15	0	2021	0.00	
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	21	0	2021	0.00	
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	04	-30.93	2019	24.01	
3.09	Share of natural resources in trade, %	15	21.45	2020	75.65	
3.10	Carbon	08	-	-	74.33	
3.10.1	Carbon pricing	01	2	2022	100.00	
3.10.2	CO2 emissions per capita	23	9.71	2019	41.11	

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
advancing sustainable global trade

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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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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