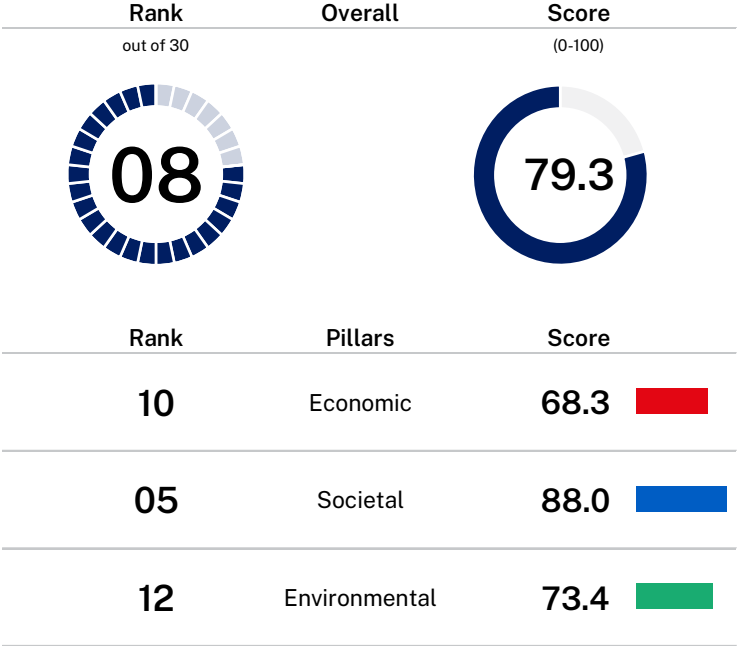# Sustainable Trade Index 2023

Japan

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)
08		**79.3**

Rank	Pillars	Score	
10	Economic	**68.3**	🟥
05	Societal	**88.0**	🟦
12	Environmental	**73.4**	🟩

Background information

Population, millions	125.17 (2022)	Large
Income, GDP per Capita US$	39,883 (2021)	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	03	2.50	2021	95.0	
1.02	Real GDP Growth per capita, % GDP	24	1.35	2021	64.7	
1.03	Growth in labor force, %	24	-0.02	2021	32.6	
1.04	Foreign direct investment, net inflows, % GDP	25	0.67	2020	1.9	
1.05	Gross fixed capital formation, % GDP	12	25.36	2020	42.9	
1.06	Tariff & non-tariff barriers	21	-	-	61.5	
1.06.01	Tariff barriers	21	-	-	71.0	
1.06.01.a	Tariff barriers in force	28	2,554	2021	49.9	
1.06.01.b	New tariff barriers 2022	20	1.00	2021	90.1	
1.06.01.c	Percentage of trade affected by tariff barrier (up to 2018)	05	3.04	2018	94.3	
1.06.02	Non-tariff barriers	20	-	-	55.3	
1.06.02.a	Non-tariff barriers in force	20	6,354	2021	96.5	
1.06.02.b	New non-tariff barriers 2022	16	536	2021	44.9	
1.06.02.c	Percentage of trade affected by non-tariff barrier (up to 2018)	13	55.08	2018	36.6	
1.07	Trade liberalization	10	-	-	67.5	
1.07.01	Regional Trade Agreements, number in force	07	18.00	2022	41.9	
1.07.02	Capital account liberalization, Index	01	2.31	2019	100.0	
1.07.03	Investment Freedom, Index	13	60.00	2022	61.5	
1.08	Exchange rate stability, parity change from national currency to SDR, 2022/2020	28	0.18	2021	60.2	
1.09	Domestic credit to private sector, % of GDP	03	196.62	2020	74.3	
1.10	Foreign trade and payments risk	28	-	-	7.0	
1.10.01	Country credit rating	11	47.00	2022	68.7	
1.10.02	Gross debt, % GDP	30	261.30	2021	0.0	
1.11	Trade costs	05	-	-	84.9	
1.11.01	Logistics performance, index	04	3.90	2018	78.9	
1.11.02	Corruption perceptions, index	06	73.00	2021	78.1	
1.11.03	Rule of law, index	05	91.35	2020	92.2	
1.12	Monetary policy intervention	26	-	-	43.4	
1.12.01	Current account balance, % GDP	21	2.10	2021	52.4	
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	26	0.91	2021	4.1	
1.13	Export concentration	11	-	-	63.0	
1.13.01	Export market concentration, Top 5 as % total	13	58.44	2021	59.2	
1.13.02	Export product concentration, Top 5 as % total	09	53.97	2021	69.6	
1.14	Exports of goods and services	05	-	-	78.3	
1.14.01	Merchandise exports, US$	03	746,920	2021	71.2	
1.14.02	Commercial services exports, US$	06	163,204	2021	78.1	
1.15	Technological innovation	05	-	-	61.5	
1.15.01	R&D expenditure, % GDP	04	3.27	2020	67.4	
1.15.02	Researchers in R&D, per capita	05	5.45	2020	62.5	
1.15.03	Patent applications, per million inhabitants	02	3,289.74	2020	63.6	
1.15.04	High-technology exports, % of manufactured exports	14	17.98	2020	24.4	
1.15.05	Scientific articles, per million people	10	802.66	2020	33.7	
1.16	Technological infrastructure	05	-	-	84.7	
1.16.01	Fixed internet speed, Mbps	05	138.81	2021	71.4	
1.16.02	Internet users, % population	15	82.91	2020	80.3	
1.16.03	Fixed broadband subscriptions (per 100 people)	07	36.25	2021	81.8	
1.16.04	Mobile subscriptions (per 100 people)	04	163.17	2020	58.4	

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)	-	-	-	-	
2.02	Educational attainment	11	-	-	58.11	
2.02.01	Mean years of schooling	04	13.37	2019	94.96	
2.02.02	University education Index	11	15.97	2021	13.23	
2.02.03	Tertiary enrollment	13	64.62	2019	51.38	
2.03	Labor standards	17	-	-	64.56	
2.03.01	Gender non-discrimination in hiring	24	50.00	2022	33.33	
2.03.02	Freedom of association and assembly	02	0.81	2021	95.79	
2.04	Political stability and absence of violence	04	86.32	2020	87.82	
2.05	Goods produced by forced labor or child labor	01	-	-	100.00	
2.05.01	Goods produced by forced labor	01	-	-	100.00	
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	01	1.14	2018	100.00	
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	19	-	-	49.62	
2.06.01	Government response to human trafficking, Criminalization	21	4.00	2021	40.00	
2.06.02	Government response to human trafficking, Strategy	21	43.59	2018	44.12	
2.06.03	Government response to human trafficking, Action	09	2.00	2021	66.67	
2.07	Trade in goods at risk of modern slavery	17	-	-	51.49	
2.07.01	Imports of goods at risk of modern slavery, US$ millions	28	60,201	2020	9.14	
2.07.02	Exports of goods at risk of modern slavery, US$ millions	01	0	2020	100.00	
2.08	Social mobility, Index	01	76.10	2020	100.00	
2.09	Life expectancy at birth	02	84.78	2021	96.57	
2.10	Uneven Economic Development	05	2.90	2023	92.98	

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	08	12.95	2019	84.55	
3.02	Deforestation, Index	27	0.00	2020	8.27	
3.03	% of wastewater treated	06	91.67	2020	91.53	
3.04	Energy intensity, energy consumed for each 1'000 US$ of GDP in MTOE	04	60.00	2019	89.43	
3.05	Ecological footprint	20	4.61	2018	47.81	
3.06	Renewable energy, %	22	7.10	2019	9.39	
3.07	Environmental standards in trade, count	25	-	-	40.77	
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)	28	1	2021	63.09	
3.07.05	The International Timber Agreement	19	1	2021	50.00	
3.07.06	Convention: International Trade in Endangered Species	29	0	2021	0.00	
3.07.07	Convention: Prior Informed Consent - Hazardous Chemicals (Rotterdam)	24	1	2021	50.00	
3.08	Transfer emissions, million tonnes carbon	02	-39.55	2019	25.61	
3.09	Share of natural resources in trade, %	13	13.88	2020	84.67	
3.10	Carbon	06	-	-	78.12	
3.10.1	Carbon pricing	01	2	2022	100.00	
3.10.2	CO2 emissions per capita	21	8.60	2019	48.29	

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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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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