

Sustainable Trade Index 2023

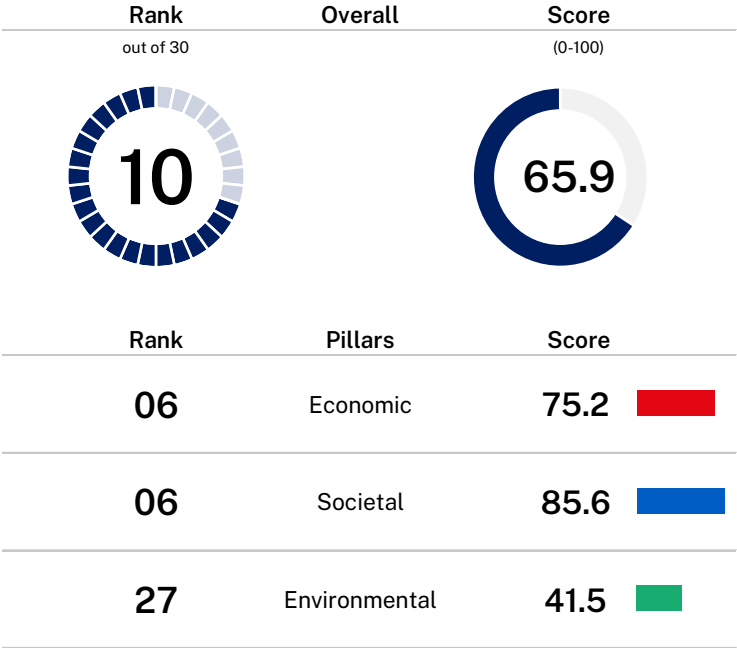
Taiwan



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	23.33 (2022)	Medium
Income, GDP per Capita US\$	33,186 (2021)	High
Membership	APEC	

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	04	2.90	2021	92.0	
1.02	Real GDP Growth per capita, % GDP	13	2.63	2021	72.3	
1.03	Growth in labor force, %	28	-0.55	2021	25.2	
1.04	Foreign direct investment, net inflows, % GDP	23	0.70	2020	2.0	
1.05	Gross fixed capital formation, % GDP	10	26.00	2020	45.1	
1.06	Tariff & non-tariff barriers	04	-	-	99.2	
1.06.01	Tariff barriers	08	-	-	98.5	
1.06.01.a	Tariff barriers in force	13	120	2021	97.7	
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)	-	-	-	-	
1.06.02	Non-tariff barriers	02	-	-	100.0	
1.06.02.a	Non-tariff barriers in force	03	21	2021	100.0	
1.06.02.b	New non-tariff barriers 2022	01	2	2021	100.0	
1.06.02.c	Percentage of trade affected by non-tariff barrier (up to 2018)	-	-	-	-	
1.07	Trade liberalization	16	-	-	35.4	
1.07.01	Regional Trade Agreements, number in force	29	5.00	2022	0.0	
1.07.02	Capital account liberalization, Index	-	-	-	-	
1.07.03	Investment Freedom, Index	09	70.00	2022	76.9	
1.08	Exchange rate stability, parity change from national currency to SDR, 2022/2020	07	0.03	2021	92.9	
1.09	Domestic credit to private sector, % of GDP	-	-	-	-	
1.10	Foreign trade and payments risk	03	-	-	78.3	
1.10.01	Country credit rating	06	54.00	2022	79.1	
1.10.02	Gross debt, % GDP	04	27.50	2021	90.2	
1.11	Trade costs	07	-	-	81.0	
1.11.01	Logistics performance, index	04	3.90	-	78.9	
1.11.02	Corruption perceptions, index	09	68.00	2021	70.3	
1.11.03	Rule of law, index	09	87.98	2020	88.6	
1.12	Monetary policy intervention	28	-	-	27.1	
1.12.01	Current account balance, % GDP	27	13.40	2021	33.8	
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	28	2.21	2021	3.2	
1.13	Export concentration	18	-	-	41.8	
1.13.01	Export market concentration, Top 5 as % total	22	69.70	2021	37.9	
1.13.02	Export product concentration, Top 5 as % total	16	63.80	2021	53.7	
1.14	Exports of goods and services	11	-	-	66.9	
1.14.01	Merchandise exports, US\$	11	477,778	2021	63.1	
1.14.02	Commercial services exports, US\$	10	58,181	2021	64.8	
1.15	Technological innovation	03	-	-	78.3	
1.15.01	R&D expenditure, % GDP	02	3.78	2020	78.2	
1.15.02	Researchers in R&D, per capita	03	7.18	2020	82.3	
1.15.03	Patent applications, per million inhabitants	03	2,340.62	2019	45.3	
1.15.04	High-technology exports, % of manufactured exports	-	-	-	-	
1.15.05	Scientific articles, per million people	09	1,194.90	2020	50.3	
1.16	Technological infrastructure	10	-	-	76.4	
1.16.01	Fixed internet speed, Mbps	07	130.81	2021	67.0	
1.16.02	Internet users, % population	12	89.00	2020	88.2	
1.16.03	Fixed broadband subscriptions (per 100 people)	10	29.43	2020	66.3	
1.16.04	Mobile subscriptions (per 100 people)	16	124.57	2020	43.3	

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)	01	27.40	2020	100.00	
2.02	Educational attainment	09	-	-	61.88	
2.02.01	Mean years of schooling	09	12.30	2019	83.50	
2.02.02	University education Index	14	12.23	2021	10.13	
2.02.03	Tertiary enrollment	05	89.81	2021	76.09	
2.03	Labor standards	04	-	-	93.70	
2.03.01	Gender non-discrimination in hiring	01	100.00	2022	100.00	
2.03.02	Freedom of association and assembly	04	0.77	2021	87.39	
2.04	Political stability and absence of violence	07	72.17	2020	72.59	
2.05	Goods produced by forced labor or child labor	08	-	-	93.83	
2.05.01	Goods produced by forced labor	08	-	-	93.83	
2.05.01.a	Goods produced by forced labor, number of goods categories	17	1.00	2021	94.44	
2.05.01.b	% population in forced labor	04	1.69	2018	95.42	
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	07	-	-	80.09	
2.06.01	Government response to human trafficking, Criminalization	-	-	-	-	
2.06.02	Government response to human trafficking, Strategy	17	47.30	2018	52.62	
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	22	-	-	30.61	
2.07.01	Imports of goods at risk of modern slavery, US\$ millions	16	9,306	2020	24.56	
2.07.02	Exports of goods at risk of modern slavery, US\$ millions	21	1,402	2020	45.48	
2.08	Social mobility, Index	-	-	-	-	
2.09	Life expectancy at birth	-	-	2021	-	
2.10	Uneven Economic Development	-	-	-	-	

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	11	16.24	2019	76.68	
3.02	Deforestation, Index	29	0.00	2020	3.84	
3.03	% of wastewater treated	13	64.50	2020	63.92	
3.04	Energy intensity, energy consumed for each 1'000 US\$ of GDP in MTOE	16	114.00	2019	73.11	
3.05	Ecological footprint	-	-	-	-	
3.06	Renewable energy, %	26	1.80	2020	2.38	
3.07	Environmental standards in trade, count	27	-	-	25.00	
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)	29	0	2021	0.00	
3.07.04	Convention on Climate Change (Kyoto)	30	0	2021	0.00	
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)	26	0	2021	0.00	
3.08	Transfer emissions, million tonnes carbon	14	-3.59	2019	19.72	
3.09	Share of natural resources in trade, %	10	11.95	2020	86.97	
3.10	Carbon	27	-	-	13.60	
3.10.1	Carbon pricing	13	0	2022	0.00	
3.10.2	CO2 emissions per capita	24	12.07	2019	25.81	

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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