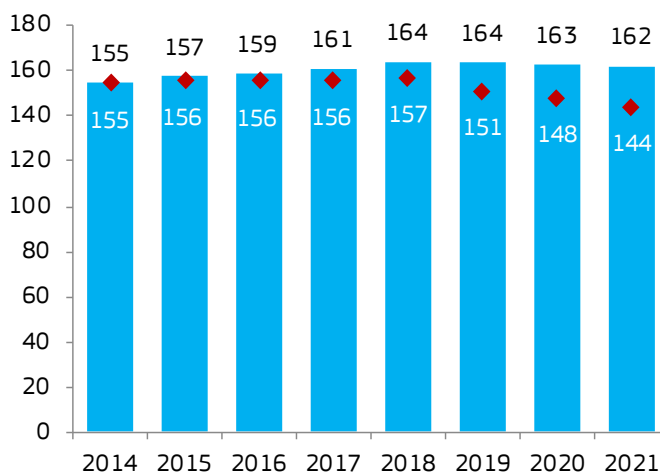




Switzerland is an Innovation Leader.

Over time, performance relative to the EU has decreased.



■ Relative to EU in base year ◆ Relative to EU in same year

Structural differences with the EU are shown in the table below including, compared to the EIS 2020, new information on different types of (innovating) enterprises (Innovation profiles) and environmental indicators.

	CH	EU
Performance and structure of the economy		
GDP per capita (PPS)	49,400	30,800
Average annual GDP growth (%)	-1.7	-2.5
Employment share Manufacturing (NACE C) (%)	9.3	16.5
of which High and Medium high-tech (%)	41.1	37.9
Employment share Services (NACE G-N) (%)	44.9	41.2
of which Knowledge-intensive services (%)	41.0	35.1
Turnover share SMEs (%)	29.6	36.5
Turnover share large enterprises (%)	54.1	45.7
Foreign-controlled enterprises – share of value added (%)	n/a	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	4.1	1.0
Total Entrepreneurial Activity (TEA) (%)	8.5	6.7
FDI net inflows (% GDP)	3.4	2.0
Top R&D spending enterprises per 10 million population	22.8	16.2
Buyer sophistication (1 to 7 best)	5.0	3.7
Innovation profiles		
In-house product innovators with market novelties	n/a	10.7
In-house product innovators without market novelties	n/a	12.3
In-house business process innovators	n/a	11.0
Innovators that do not develop innovations themselves	n/a	11.6
Innovation active non-innovators	n/a	3.3
Non-innovators with potential to innovate	n/a	19.9
Non-innovators without disposition to innovate	n/a	31.3
Governance and policy framework		
Ease of starting a business (0 to 100 best)	76.6	76.5
Basic school entrepreneurial education and training	2.4	2.0
Govt. procurement of advanced tech. products	3.8	3.5
Rule of law (-2.5 to 2.5 best)	1.9	1.1
Climate change indicators		
Circular material use rate	n/a	11.7
Greenhouse gas emissions intensity of energy consumption	n/a	86.6
Demography		
Population size	8.5	446.7
Average annual population growth (%)	0.7	0.1
Population density	213.6	108.8

Switzerland's strengths are in *Attractive research systems*, *Human resources* and *Intellectual assets*. The top-3 indicators include International scientific co-publications, Foreign doctorate students, and Lifelong learning.

Most recently innovation performance has declined, mostly due to reduced performance for Government support for business R&D, Employment in knowledge-intensive activities, Knowledge-intensive services exports, and Environment-related technologies.

Switzerland	Relative to EU		
	2021 in	2014 in	
SUMMARY INNOVATION INDEX	144.2	154.6	162.3
Human resources	210.1	199.8	222.6
Doctorate graduates	203.8	157.4	180.4
Population with tertiary education	164.1	168.6	211.6
Lifelong learning	278.8	306.7	306.7
Attractive research systems	208.0	220.2	234.1
International scientific co-publications	211.4	234.9	277.2
Most cited publications	153.8	166.1	151.2
Foreign doctorate students	297.3	314.9	353.1
Digitalisation	152.9	156.5	211.4
Broadband penetration	133.5	102.0	202.5
People with above basic overall digital skills	181.8	222.2	222.2
Finance and support	79.2	70.0	94.4
R&D expenditures in the public sector	63.6	117.5	61.4
Venture capital expenditures	160.4	60.2	269.8
Government support for business R&D	14.2	11.9	16.4
Firm investments	78.5	187.3	94.9
R&D expenditure in the business sector	80.9	175.6	89.8
Non-R&D Innovation expenditures	N/A	N/A	N/A
Innovation expenditures per employee	N/A	N/A	N/A
Use of information technologies	168.9	159.7	195.2
Enterprises providing ICT training	N/A	N/A	N/A
Employed ICT specialists	157.1	171.4	209.5
Innovators	132.6	196.9	181.5
Product innovators (SMEs)	122.7	221.6	173.1
Business process innovators (SMEs)	141.9	175.1	188.8
Linkages	160.2	192.4	216.0
Innovative SMEs collaborating with others	76.3	99.6	111.8
Public-private co-publications	293.5	287.2	329.1
Job-to-job mobility of HRST	142.9	187.2	205.1
Intellectual assets	177.3	155.7	153.6
PCT patent applications	221.7	210.3	192.4
Trademark applications	132.3	140.3	138.9
Design applications	195.2	122.6	133.8
Employment impacts	170.1	183.6	173.3
Employment in knowledge-intensive activities	164.6	192.0	180.0
Employment in innovative enterprises	174.6	177.6	168.5
Sales impacts	103.5	104.0	105.4
Medium and high tech goods exports	91.3	66.3	100.0
Knowledge-intensive services exports	101.2	102.3	107.2
Sales of innovative products	126.9	155.5	110.3
Environmental sustainability	125.3	127.7	130.5
Resource productivity	196.1	227.7	290.4
Air emissions by fine particulate matter	126.6	131.6	134.6
Environment-related technologies	40.3	63.4	30.3

The colours show normalised performance in 2021 relative to that of the EU in 2021: dark green: above 125%; light green: between 100% and 125%; yellow: between 70% and 100%; orange: below 70%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.