European Innovation Scoreboard 2023
Country profile
Switzerland
European Innovation Scoreboard 2023 – Country profile Switzerland

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European Innovation Scoreboard 2023

Country profile Switzerland

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The European Innovation Scoreboard report and annexes, and the indicators database are available at:
## European Innovation Scoreboard 2023

### Switzerland

**Performance relative to EU in 2023** | **Performance change 2016-2023** | **Performance change 2022-2023**
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**SUMMARY INNOVATION INDEX** | 139.6 | -0.6 | -1.8
Human resources | 190.1 | 0.8 | -4.1
Doctorate graduates | 218.7 | 11.4 | 0.0
Population with tertiary education | 153.8 | -6.0 | -6.0
Lifelong learning | 199.0 | -8.8 | -8.8
Knowledge research systems | 224.5 | -3.0 | -5.5
International scientific co-publications | 274.9 | 2.5 | 0.0
Most cited publications | 140.4 | -17.6 | -10.1
Foreign doctorate students | 330.5 | 25.4 | 0.0
**Digitalisation** | 136.2 | 0.0 | 0.0
Broadband penetration | N/A | N/A | N/A
People with above basic overall digital skills | 161.5 | 0.0 | 0.0
**Finance and support** | 84.7 | 24.4 | -0.1
R&D expenditures in the public sector | 128.1 | 11.3 | 0.0
Venture capital expenditures | 95.2 | 53.9 | -0.3
Government support for business R&D | 18.3 | 13.5 | 0.0
Firm investments | 150.4 | 4.7 | 0.0
R&D expenditure in the business sector | 144.4 | 4.8 | 0.0
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** | 134.7 | 7.0 | 7.0
Enterprises providing ICT training | N/A | N/A | N/A
Employed ICT specialists | 136.7 | 6.9 | 6.9
**Innovators** | 131.3 | -13.7 | 0.0
Product innovators (SMEs) | 128.9 | -40.6 | 0.0
Business process innovators (SMEs) | 133.4 | -14.9 | 0.0
**Linkages** | 194.3 | 15.5 | 2.5
Innovative SMEs collaborating with others | 80.4 | -11.5 | 0.0
Public-private co-publications | 468.0 | 0.0 | 0.0
Job-to-job mobility of HRST | 170.8 | 26.5 | 5.9
**Intellectual assets** | 133.2 | -14.2 | -11.7
PCT patent applications | 147.4 | -3.0 | -3.0
Trademark applications | 124.4 | -4.1 | -2.5
Design applications | 122.0 | -36.5 | -29.7
**Employment impacts** | 165.8 | -5.2 | 0.0
Employment in knowledge-intensive activities | 169.9 | 0.0 | 0.0
Employment in innovative enterprises | 162.4 | -10.1 | 0.0
**Sales impacts** | 98.7 | -9.9 | 0.6
Medium and high-tech goods exports | 74.9 | -2.7 | -0.9
Knowledge-intensive services exports | 120.1 | -10.5 | 0.8
Sales of innovative products | 109.6 | -46.4 | 0.0
**Environmental sustainability** | 125.0 | -1.6 | 0.5
Resource productivity | 192.0 | 11.5 | 0.0
Air emissions by fine particulate matter | 132.6 | 4.2 | 0.0
Environment-related technologies | 476.6 | -17.3 | 1.4

The second column shows performance relative to that of the EU in 2023. Colours next to the column show matching colour codes: dark green: above 125% of the performance of the EU in 2023; light green: between 100% and 125%; light orange: between 70% and 100%; dark orange: below 70%. The next columns show performance change over time between 2016 and 2023 and between 2022 and 2023, with scores relative to those of the EU in 2016. Positive (negative) performance changes are shown in green (red).

**SWITZERLAND** is an **Innovation Leader** with performance at 139.6% of the EU average. Performance is above the average of the Innovation Leaders. Performance is decreasing and is lower than the rate of increase of the EU (8.5%-points. The country’s performance lead over the EU is becoming smaller.

**Relative strengths**
- Public-private co-publications
- Foreign doctorate students
- International scientific co-publications
- Doctorate graduates
- Lifelong learning

**Relative weaknesses**
- Government support for business R&D
- Environment-related technologies
- Medium and high-tech goods exports
- Innovative SMEs collaborating with others
- Venture capital expenditures

**Strong increases since 2016**
- Venture capital expenditures
- Job-to-job mobility of HRST
- Foreign doctorate students

**Strong decreases since 2016**
- Sales of innovative products
- Product innovators
- Design applications

**Strong increases since 2022**
- Employed ICT specialists
- Job-to-job mobility of HRST
- Environment-related technologies

**Strong decreases since 2022**
- Design applications
- Most cited publications
- Lifelong learning
The graph on the left shows the evolution of innovation performance over time against the performance of the country in 2016. Innovation performance, after an initial increase, dropped in 2019, and then increased between 2020 and 2021, after which performance declined in 2022 and 2023, leading to a 0% performance increase in 2023.

The graphs below show the evolution of innovation performance in the different innovation dimensions against the performance of the country in 2016. Performance improved strongest for Finance and support. Performance declined for Research systems, Innovators, Intellectual assets, Employment impacts, Sales impacts and Environmental sustainability.

Structural differences with the EU are shown below:

- Switzerland has higher per capita income, but a slower growing economy. Business services takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Enterprise births, Entrepreneurial Activity, Top R&D spenders, and Buyer sophistication add positively to the innovation climate, FDI net inflows add negatively.
- Information on Innovation profiles is not available.
- Entrepreneurial training and government procurement are above the EU average as drivers of research and innovation.
- Information on Climate change related indicators is not available.

Performance is measured relative to that of the country in 2016 (=100).
This report provides the Country profile from the 2023 European Innovation Scoreboard for Switzerland.

Studies and reports