



#### European Innovation Scoreboard 2023 - Country profile Austria

European Commission

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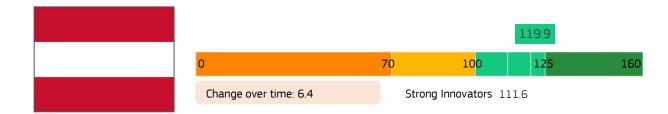
# European Innovation Scoreboard 2023 Country profile Austria

# The report was prepared by

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The European Innovation Scoreboard report and annexes, and the indicators database are available at: https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard\_en



Austria	relative to EU	5 -	change
	in 2023	2016-2023	2022-2023
SUMMARY INNOVATION INDEX	119.9	6.4	0.6
Human resources	124.1	4.7	4.7
Doctorate graduates	129.7	0.0	0.0
Population with tertiary education	106.4	4.2	4.2
Lifelong learning	138.2	13.2	13.2
Attractive research systems	153.5	24.7	-1.3
International scientific co-publications	181.9	73.2	-4.4
Most cited publications	105.5	-11.1	-4.2
Foreign doctorate students	214.5	61.8	8.2
Digitalisation	89.4	-1.2	-1.6
Broadband penetration	59.6	-2.4	-3.2
People with above basic overall digital skills	130.4	0.0	0.0
Finance and support	121.3	26.3	9.4
R&D expenditures in the public sector	129.7	12.9	-1.6
Venture capital expenditures	71.7	32.2	3.6
Government support for business R&D	176.0	38.4	30.6
Firm investments	107.5	2.6	4.0
R&D expenditure in the business sector	150.7	1.5	-0.8
Non-R&D Innovation expenditures	64.5	-9.7	2.8
Innovation expenditures per employee	100.9	14.7	9.8
Use of information technologies	99.9	-32.1	16.3
Enterprises providing ICT training	86.8	-83.4	15.3
Employed ICT specialists	113.3	17.2	17.2
Innovators	124.2	14.8	-17.8
Product innovators (SMEs)	115.2	8.5	-14.4
Business process innovators (SMEs)	132.0	21.6	-21.4
Linkages	174.9	22.1	-14.8
Innovative SMEs collaborating with others	146.6	-50.0	5.4
Public-private co-publications	380.1	141.6	-16.8
Job-to-job mobility of HRST	110.4	32.4	-32.4
Intellectual assets	140.6	-3.1	-6.8
PCT patent applications	119.1	-4.4	-1.3
Trademark applications	133.7	17.1	-3.4
Design applications	178.9	-17.2	-16.5
Employment impacts	122.0	1.3	0.0
Employment in knowledge-intensive activities	1.7	0.0	0.0
Employment in innovative enterprises	132.1	2.4	0.0
Sales impacts	93.6	11.0	1.5
Medium and high-tech goods exports	98.0	5.8	8.7
Knowledge-intensive services exports	82.7	19.2	7.6
Sales of innovative products	98.8	8.9	-17.1
Environmental sustainability	109.0	2.4	2.8
Resource productivity	87.3	19.5	9.3
Air emissions by fine particulate matter	122.9	7.3	-0.5
Environment-related technologies	110.6	-14.9	-0.5 2.5
Environment related technologies	110.6	-14.9	2.5

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).

**AUSTRIA** is a **Strong Innovator** with performance at 119.9% of the EU average. Performance is above the average of the Strong Innovators. Performance is increasing at a rate lower than that 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
Design applications
Government support for business R&D

#### Relative weaknesses

Broadband penetration Non-R&D Innovation expenditures Venture capital expenditures Knowledge-intensive services exports Enterprises providing ICT training

# Strong increases since 2016

Public-private co-publications International scientific co-publications Foreign doctorate students

#### Strong decreases since 2016

Enterprises providing ICT training Innovative SMEs collaborating with others Design applications

### Strong increases since 2022

Government support for business R&D Employed ICT specialists Enterprises providing ICT training

# Strong decreases since 2022

Job-to-job mobility of HRST Business process innovators Sales of innovative products



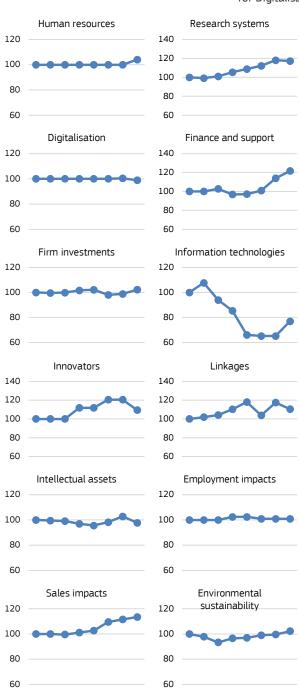
The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance did not change between 2016 and 2021, and accelerated in 2021, leading to a 5% performance increase in 2023.

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 Innovators, Linkages and Sales impacts. Performance improved strongest for Finance and support. Performance declined for Digitalisation, Information technologies and Intellectual assets.

# Structural differences with the EU are shown below:

- Austria has higher per capita income, but a slower growing economy. Business services takes up a larger share of the economy.
- Enterprise births, Top R&D spenders, and Buyer sophistication add positively to the innovation climate, Entrepreneurial Activity, and FDI net inflows add negatively.
- Austria has higher shares of In-house product innovators with market novelties and In-house business process innovators.
- Entrepreneurial training and government procurement are below the EU as drivers of research and innovation.
- Austria's performance on climate change indicators is varied, with notably above-average performance in environmental innovation.

innovation.		
	AT	EU
Performance and structure of the economy		
GDP per capita (PPS)	40,500	32,600
Average annual GDP growth (%)	4.0	4.4
Employment share Manufacturing (NACE C) (%)	16.1	16.4
of which High and Medium high-tech (%)	38.8	38.0
Employment share Services (NACE G-N) (%)	41.9	41.1
of which Knowledge-intensive services (%)	33.3	35.8
Turnover share SMEs (%)	n/a	34.1
Turnover share large enterprises (%)	n/a	49.6
Foreign-controlled enterprises – share of value added (%)	14.2	11.8
Business and entrepreneurship		•
Enterprise births (10+ employees) (%)	1.1	1.0
Total Entrepreneurial Activity (TEA) (%)	6.2	6.8
FDI net inflows (% GDP)	-1.0	2.1
Top R&D spending enterprises per 10 mln. population	41.2	20.3
Buyer sophistication (1 to 7 best)	3.8	3.7
Innovation profiles		
In-house product innovators with market novelties	20.1	12.2
In-house product innovators without market novelties	10.2	12.8
In-house business process innovators	19.9	16.5
Innovators that do not develop innovations themselves	6.7	6.5
Innovation active non-innovators	2.9	4.1
Non-innovators with potential to innovate	12.2	17.2
Non-innovators without disposition to innovate	27.9	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	73.7	64.0
Basic school entrepreneurial education and training	2.9	3.3
Govt. procurement of advanced tech. products	3.4	3.5
Rule of law (-2.5 to 2.5 best)	1.8	1.0
Climate change indicators		
Circular material use rate	11.5	11.8
Greenhouse gas emissions intensity of energy consumption	83.4	82.8
Eco-Innovation Index	143.1	100.0
Demography		
Population size	8.9	447.1
Average annual population growth (%)	0.4	-0.1
Population density	107.2	108.8



Performance is measured relative to that of the country in 2016 (=100).

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This report provides the Country profile from the 2023 European Innovation Scoreboard for Austria.

Studies and reports