European Innovation Scoreboard 2023
Country profile
Italy
European Innovation Scoreboard 2023 – Country profile Italy

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European Innovation Scoreboard 2023
Country profile Italy

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for the European Commission, Directorate-General for Research and Innovation under

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

**Performance relative to EU in 2023**

<table>
<thead>
<tr>
<th>Summary Innovation Index</th>
<th>90.3</th>
<th>15.6</th>
<th>-5.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
<td>62.1</td>
<td>-4.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Doctorate graduates</td>
<td>85.2</td>
<td>-11.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Population with tertiary education</td>
<td>26.0</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Lifelong learning</td>
<td>77.5</td>
<td>-3.3</td>
<td>-3.3</td>
</tr>
</tbody>
</table>

**Attractive research systems**

| 106.2 | 25.9 | 6.5 |

**International scientific co-publications**

| 88.2 | 46.7 | 0.8 |

**Most cited publications**

| 126.4 | 18.9 | 11.0 |

**Foreign doctorate students**

| 87.9 | 22.4 | 1.5 |

**Doctorate graduates**

| 85.2 | -11.4| 0.0 |

**Population with tertiary education**

| 26.0 | 5.4 | 5.4 |

**Lifelong learning**

| 77.5 | -3.3 | -3.3 |

**Digitalisation**

| 77.9 | 19.3 | 10.8 |

**Broadband penetration**

| 74.7 | 36.3 | 21.2 |

**People with above basic overall digital skills**

| 82.4 | 0.0 | 0.0 |

**Firm investments**

| 72.3 | 0.0 | 0.0 |

**R&D expenditure in the public sector**

| 67.2 | 6.6 | -1.5 |

**Non-R&D Innovation expenditures**

| 67.2 | -1.5 | 0.0 |

**R&D expenditure in the business sector**

| 59.7 | 6.2 | -1.5 |

**Non-R&D expenditures**

| 59.7 | 6.2 | -1.5 |

**R&D expenditure in the business sector**

| 59.7 | 6.2 | -1.5 |

**R&D expenditure in the business sector**

| 59.7 | 6.2 | -1.5 |

**Firm investments**

| 72.3 | 11.3 | 18.5 |

**R&D expenditure in the public sector**

| 67.2 | 16.6 | 0.0 |

**Venture capital expenditures**

| 56.6 | 5.9 | -3.7 |

**Entrepreneurship support**

| 79.8 | 63.2 | -44.6 |

**Government support for business R&D**

| 79.8 | 63.2 | -44.6 |

**Performance change 2016-2023**

| 9.6 | -5.6 | -5.6 |

**Performance change 2022-2023**

| 8.5 | -0.9 | -5.6 |

**Relative strengths**

- Resource productivity
- Design applications
- Public-private co-publications
- Most cited publications
- Business process innovators

**Relative weaknesses**

- Population with tertiary education
- Job-to-job mobility of HRST
- Venture capital expenditures
- R&D expenditure in the business sector
- Environment-related technologies

**Strong increases since 2016**

- Innovative SMEs collaborating with others
- Public-private co-publications
- Government support for business R&D

**Strong decreases since 2016**

- Environment-related technologies
- Doctorate graduates
- Design applications

**Strong increases since 2022**

- Enterprises providing ICT training
- Broadband penetration
- Most cited publications

**Strong decreases since 2022**

- Government support for business R&D
- Business process innovators
- Product innovators
The graph on the left shows the evolution of innovation performance over time against the performance of the country in 2016. Innovation performance increased strongly in 2021 and continued to increase in 2022, after which it declined strongly in 2023, leading to a 19% performance increase.

The graphs below show the evolution of innovation performance in the different innovation dimensions against the performance of the country in 2016. Performance increased most strongly for Innovators and Linkages. Performance declined for Human resources.

**Structural differences** with the EU are shown below:

- Italy has lower per capita income, but a faster growing economy. Manufacturing and business services take up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Enterprise births, and Buyer sophistication add positively to the innovation climate. Entrepreneurial Activity, FDI net inflows, and Top R&D spenders add negatively.
- Italy has higher shares of In-house product innovators with market novelties and Non-innovators without disposition to innovate.
- Entrepreneurial training is above the EU, while government procurement is below the EU as drivers of research and innovation.
- Italy shows strong performance on Climate change related indicators with an above average share of material resources coming from recycled waste materials, an above average reduction in greenhouse gas emissions, and an above average score on environmental innovation.
This report provides the Country profile from the 2023 European Innovation Scoreboard for Italy.

*Studies and reports*