

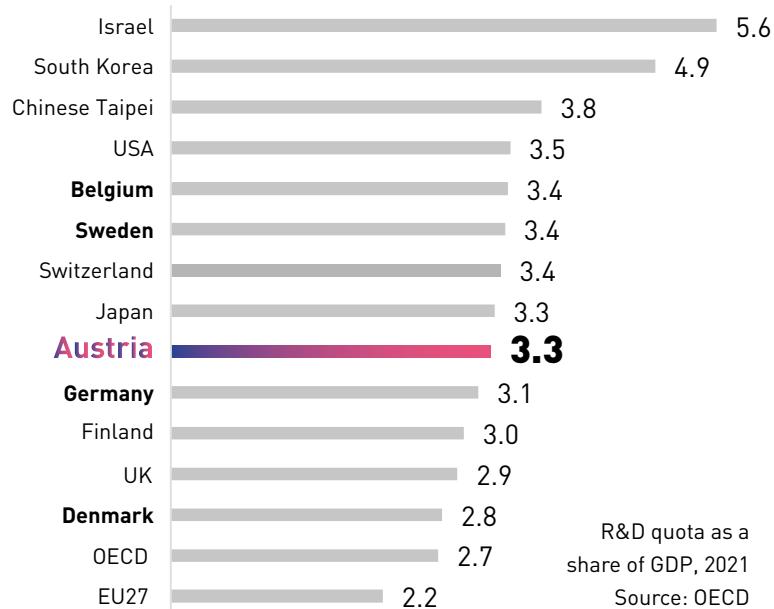
RTI ROAD MAP FOR AUSTRIA'S COMPETITIVE FUTURE

Research and the power to innovate are becoming increasingly important to Austria's competitiveness. The more effectively companies can turn research findings into innovative products, services and business models, the greater Austria can benefit from value creation and high-quality jobs. Austria must further its research and innovation ambitions in a targeted manner to become an international leader in this field.

Where we stand

Austria has the third highest R&D quota in the EU, after Belgium and Sweden. Austria's R&D quota has risen significantly: In 2000 it was 1.9%; in 2021 it had reached 3.3%. **In global comparison, Austria still lags behind.** According to OECD rankings, Israel has the highest level of R&D as a share of GDP, followed by South Korea, Chinese Taipei and the USA. Switzerland and Japan are also ahead of Austria.

Austria ranks 6th for **innovation performance** on the European Innovation Scoreboard and leads the group of "Strong Innovators". In terms of **patent activity as measured by GDP** – an important indicator of innovation performance – **Austria also ranks 6th in the EU (EIS)**. In other decisive factors such as **venture capital financing**, Austria lags far behind comparable countries.



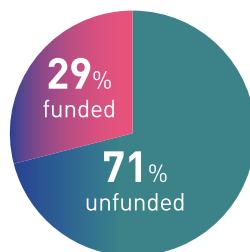
EU R&D: ECONOMIC DRIVER AND UNREALISED POTENTIAL

The 8th European Framework Programme for Research (Horizon 2020) has not only been a catalyst for scientific and technological advances, but also an important driver of economic growth. It is estimated that by 2040 the programme will contribute around EUR 429 billion to the EU's GDP.

Although R&D is a strong driver of GDP, currently insufficient financial resources are available in the 9th European Research Framework Programme (Horizon Europe). An EU Commission analysis states that 71% of the "high-quality proposals" cannot be funded for budgetary reasons.



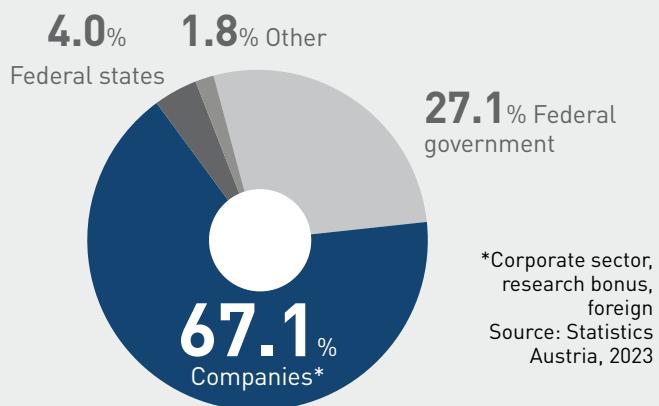
Source: EU Commission, 2024



Source: EU Commission, 2023

COMPANIES ACTIVELY ENGAGED

At around EUR 9.5 billion, in Austria companies are responsible for **two thirds of expenditure** on research and development (R&D).

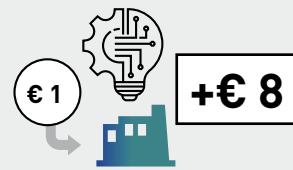


EU-wide, Austria has the third highest corporate expenditure on R&D. Only Belgian and Swedish companies invest a higher percentage of GDP in R&D.



Corporate R&D expenditure (by sector) as share of GDP in %, 2022;
Source: Eurostat

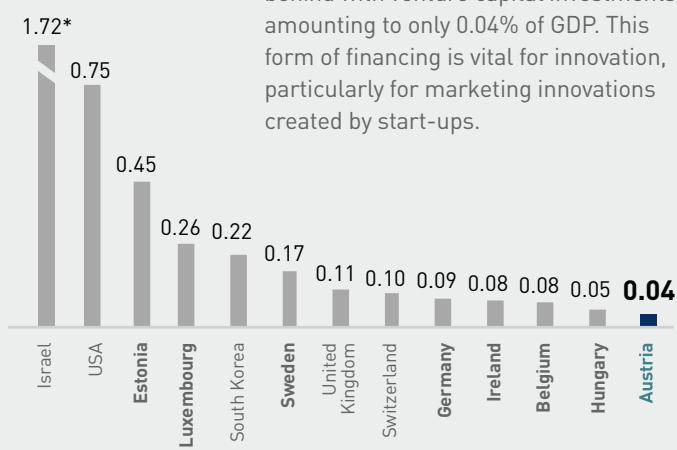
HUGE LEVERAGE THROUGH R&D FUNDING



Public R&D funding in Austria stimulates significant private R&D investment. A EUR 1 increase in direct R&D funding leads to a total increase in R&D expenditure in the corporate sector of around EUR 1.7 (WIFO). Over the past three years, **EUR 1 in foundation programme funding has yielded on average EUR 8 in additional income** (licensing and additional revenue) for businesses.

LACK OF VENTURE CAPITAL

In comparison with leading OECD countries, Austria lags significantly behind with venture capital investments amounting to only 0.04% of GDP. This form of financing is vital for innovation, particularly for marketing innovations created by start-ups.



Venture capital investments in % of GDP, 2022; Source: OECD; *2021



Where we are heading

Austria must **significantly enhance its research and location policy ambitions** to secure its future economic strength, social security standards and sustainability investments. It must realise the following objectives to boost its economic power, attractiveness as a location and resilience:

- Innovation leader, not follower: rank among the top 5 in the European Innovation Scoreboard by 2030
- Leader in research expenditure: increase R&D quota to at least 4% of GDP by 2030
- Desired location for key technologies: ecosystems for quantum, AI, semi-conductors, life sciences
- Committed to R&D without thematic restrictions: balanced policy mix of open and dedicated thematic instruments

- Brightest minds for RTI: priority lies in expanding key qualifications
- Focus on cutting-edge research: drive cutting-edge research to secure leadership in technology competence
- Location for radical innovations: increase attractiveness of location for radical innovations with potential to add significant value
- Short path to implementation: ideal framework conditions for testing and implementing innovations

Which **visionary technologies** could have a real impact on our future?

The [WKÖ's Innovation Map](#) offers answers:





Understanding the future

“Future Observatory” allows us to recognise future challenges and opportunities at an earlier stage – and to manage them better. Austrian companies can secure a market advantage by identifying technological potentials.

Establishing a Future Observatory

- The Future Observatory identifies concrete technological potentials, promotes collaboration and breaks down existing silos.
- The Future Observatory makes technological and scientific competence visible.

Best practice: Sitra

Sitra is a Finnish future fund directly controlled by the Finnish parliament, which invests around EUR 30 million each year in projects that increase the efficiency of the Finnish economy, improve education and research, and examine future development scenarios.

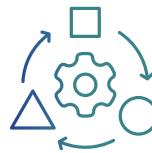
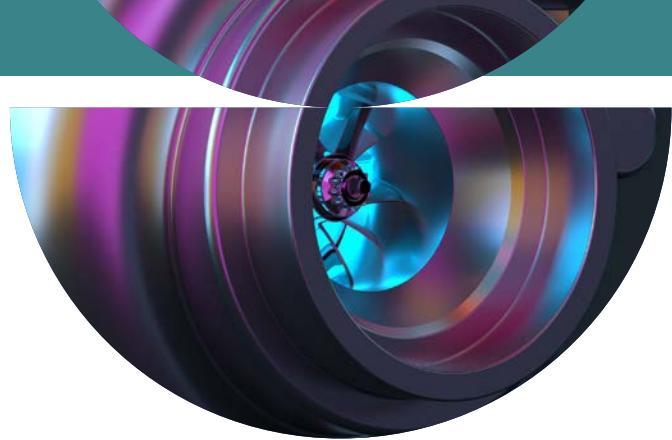
www.sitra.fi/en

Promoting future mindset & skills

- OffeActive, coordinated support for STEM subjects in general education
- Strengthen entrepreneurial education
- Promote international cooperation in education and research
- Prioritise new offerings to expand key STEM qualifications, e.g. at universities of applied sciences
- Qualification measures for skilled employees in companies
- Strengthen women's careers in the RTI sector

Research mindset: communicate innovation as a key issue for the future

- Create new (digital) spaces for science education (strengthen the DNAustria Initiative)
- Offer targeted support for scientists in the public sector
- Advertise Austria's RTI strengths as a location factor



Facilitating the future

Significantly increasing the budget for research and innovation is an investment in the future which will benefit the entire country. Our capacity to innovate is key to achieving top European rankings for economic performance and prosperity.

Future budget – action to grow and strengthen the technology campaign

- Increase RTI-pact budgets by around 10% annually
- Continue special funds such as the transformation campaign and the climate and stimulus package
- Initiatives to strengthen technological sovereignty
- Adequately fund open themed programmes such as foundation programmes

Attractive research financing is a pull factor for Austria as a business location

- Continue the Future Fund Austria through 2025 and beyond, and increase to EUR 200 million annually
- Consolidate proven balance of direct funding and research bonuses

Tapping into new ideas: enhance research and technology infrastructure

- Targeted expansion of research and technology infrastructures for science and business
- Expand high-performance computing (HPC) infrastructure in Austria
- Intensify commitment to the European Strategy Forum for Research Infrastructures
- Promote technology infrastructure

Research excellence to enhance innovation dynamism

- Targeted investments in areas of strength in addition to thematically open programmes
- Complete implementation of excellent=austria initiative
- Launch pan-regional clusters and hubs

Accompanying measures support the broad implementation of research findings

- Expand low-threshold formats which promote interdisciplinary exchange (e.g. knowledge transfer, innovation check)
- Service and accompanying measures (e.g. AI service point)

Drive the transformation with RTI

- Make public procurement which enhances innovation the norm
- Examine synergies between R&D and investment programmes
- Use individual programme funding for thematic programmes
- Expand key technologies in the energy and mobility sectors
- Use digitalisation as a lever for climate protection and sustainable transformation of the economy ("Twin Transformation")
- Drive the AI implementation plan and secure budgetary resources
- Strengthen the Climate and Energy Fund's RTI initiatives

Encourage innovation-friendly regulation and sandboxes

- Pass national sandbox legislation
- Promptly fulfil European requirements for setting up sandboxes
- Active involvement at EU level in dialogue on future issues and their regulation at an early stage
- More effectively use the existing guidelines, codes of practices and tools to fulfil the regulation requirements in the innovation process
- Promote interdisciplinary exchange to develop standards

Key to greater innovation: reduce bureaucracy in research, increase efficiency

- Simplified funding portfolio (fewer programmes with higher budgets)
- Testing new and more efficient submission and evaluation procedures



Science and business can serve as powerful motors of innovation in developed innovation and technology ecosystems. This allows research findings to be converted into marketable products faster and better.

Creating powerful innovation and technology ecosystems

- Identify and strategically promote Austria's areas of strength
- Drive the build-up of expertise through DIHs and a new funding system for data use & AI
- Drive the establishment of entire value chains, e.g. in AI, quantum technologies and the life sciences

Best practice: WASP

The Wallenberg AI, Autonomous Systems and Software Program (WASP) is Sweden's leading research programme for AI, autonomous systems and software. With its focus on interdisciplinary cooperation, strategic basic research, international faculty recruitment, and with a dynamic structure which responds to a constantly changing world, this is a powerful innovation and technology ecosystem.

<https://wasp-sweden.org/>

Take part in the Digital Europe Programme and continue to prioritize (e)DIHs

- Robust financing for (e)DIHs
- Expand AI offerings

Expand intersectoral cooperation and mobility

- Long-term financing for non-university research institutions
- Expand endowed professorships
- Encourage dual degree programmes
- Substantial funding for established instruments (e.g. CD labs, COMET, Bridge)

Expand the Third Mission: spin-offs & start-ups as drivers of innovation

- Establish a fund for radical innovation to drive transformative projects
- Continue tried and tested initiatives such as the Spin-off Fellowships programme
- Expand synergies between technical and business expertise

Actively shape the European research landscape

- Sufficient financing for the successor programme to Horizon Europe (at least EUR 200 billion)
- Focus next ERA Policy Agenda on fewer but widely supported priorities
- Expand involvement in EU initiatives such as IPCEIs, partnerships and missions

Encourage multidimensional cooperation, broaden the innovation basis

- Implement the Open Innovation Strategy and Creative Economy Strategy
- Expand low-threshold formats to bring SMEs into the innovation process

The detailed RTI road map for Austria's competitive future is available here:

