European Commission

ERA Country Report 2024
Cyprus

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Report

Research and Innovation

ERA Country Report 2024: Cyprus

European Commission
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ERA Country Report 2024

Cyprus

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2025 Directorate-General for Research and Innovation EN

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Key takeaways

- Improved R&D performance: Despite low funding for RTDI (both GBARD and BERD) and limited human resources, Cyprus is making progress in research and innovation, with substantial growth of GERD BERD and R&D personnel and strong increases in the internationalisation of the research ecosystem.
- Limited participation in ERA Actions: Due to its small size and constrained resources, Cyprus has engaged in a lower than average number of ERA Actions.
- Alignment with national priorities: The ERA Actions align well with Cyprus's national priorities and have played a supportive role in advancing R&D efforts.
- Notable progress in 2024: Significant improvements were observed across most areas, particularly in Open Science, career development, and excellence policies.

1. National context

Cyprus is one of the smallest EU member states. Its research base is primarily concentrated in the public sector, including Higher Education Institutions and Public Research Centres. The goal is to create a diversified and resilient economic model, that prioritizes productive investments and the development of a strong, knowledge-based economy.

Cyprus has built a strong scientific and entrepreneurial base and is now hosting 12 universities, 20+ research organizations, and 7 Centres of Excellence. It has been ranked as a *Strong Innovator* in the European Innovation Scoreboard 2024 for the third consecutive year, distinguishing it as the only country from Southeastern Europe to achieve this status. Since 2017, Cyprus has demonstrated remarkable progress, with its innovation performance increasing by 39 percent – the highest growth among EU Member States during this period – while also leading across the EU in terms of linkages among ecosystem stakeholders.

Both GDP and R&D expenditure have grown in the past year. Its relative strengths include public-private co-publications, international scientific co-publications, and innovative SMEs collaborating with others. On the other hand, its relative weaknesses include direct and indirect government support for business R&D, R&D expenditure in the business sector, and innovation expenditures per person employed[1].

Table 1 Structural Key Indicators

Indicator	EU27	Cyprus		
	2023	2023	Average 2018-2020	Average 2021-2023
GDP in current prices, euro per capita	35 790.00	30 430.00	24 940.00	27 626.67
Gross Domestic Expenditure on R&D (GERD) as a share of GDP	2.27	0.75	0.72	0.77
Government Budget Allocations for R&D (GBARD) as share of GDP	0.73	0.46	0.40	0.44
Business Enterprise expenditure on R&D (BERD) as a share of GDP	1.52	0.31	0.31	0.32
Expenditure on R&D procurement as a percentage of GDP	0.06	0.02	/	0.02
Size of the population (million)	448.80	0.92	0.88	0.91
Researchers (in FTE) per million inhabitants	4 681.34	1 727.63	1 601.89	1 732.78
Share of female researchers, all sectors of performance (%)	33.71	/	37.63	/

Source: Annex 1

Indicators from the European Innovation Scoreboard show **strong improvement since 2023** in Environment-related technologies, Broadband penetration and Employed ICT specialists, but at the same time Strong **decreases since 2023** in venture capital expenditures, Non-R&D innovation expenditures, as well as Exports of medium and high technology products[2].

The **Deputy Ministry of Research, Innovation and Digital Policy** (DMRID)[3] of Cyprus was created in March 2020 as part of Cyprus's efforts to modernise its public administration and strengthen its capacity in research, innovation, and digital transformation. The **Research and**

[1] https://projects.research-and-innovation.ec.europa.eu/en/statistics/performance-indicators/european-innovation-scoreboard/eis-2024#/
[2] EIS Scoreboard, Country Profile Cyprus.
[3] Homepage - Deputy Ministry of Research, Innovation and Digital Policy - Gov.cy

Innovation Foundation (RIF)[4] is the executive agency responsible for policy implementation. Cyprus hosts a relatively dense public research ecosystem, comprising a network of public and private universities as well as research organisations, partly because of the structure of the economy (dominated by the service sector) and partly because there is no innovation culture in the economy.

The **National Research and Innovation Strategy for 2024-2026**[5] remains the main document with five Pillars setting priorities and targets of the R&I policy. The **Smart Specialisation Strategy 2023-2030** identifies sectoral priorities for R&D policy[6]. **The Digital Skills Action Plan**[7] contributes to the improvement of human resources and the digital transition. An overarching **Cyprus Vision 2035**[8] guides and coordinates specialised policies.

2. Status of the Implementation of the ERA Policy Agenda

Cyprus has committed initially to 11 out of 20 ERA Actions (see Table 2), which are reflecting the target and the priorities the national R&I policy. Eventually it is participating in 10 of the 18 ongoing actions. The selection of the ERA Actions in which Cyprus has committed has been prioritised due to the large number of ERA Actions and the limited resources of the policy making authority.

Table 2 Commitment to ERA Actions

<table>
<tr><td colspan="9">1: Deepening a truly functioning internal market for knowledge</td></tr>
<tr><td>1. Enable Open Science, including through EOSC</td><td>2. Propose an EU copyright and data legislative framework for research</td><td>3. Reform the Assessment System for research, researchers and institutions</td><td>4. Promote attractive research careers, talent circulation and mobility</td><td>5. Promote gender equality and foster inclusiveness</td><td>6. Protect academic freedom in Europe</td><td>7. Upgrade EU guidance for a better knowledge valorisation</td><td>8. Strengthen research infrastructures</td><td>9. Promote international cooperation</td></tr>
<tr><td colspan="5">2: Taking up together the challenges posed by the twin green and digital transition, and increasing society's participation in the ERA</td><td colspan="2">3: Amplifying access R&I excellence across the Union</td><td colspan="2">4: Advancing concerted research and innovation investments and reforms</td></tr>
<tr><td>10. Make EU R&I missions and partnerships key contributors to the ERA</td><td>11. An ERA for green transformation</td><td>12. Accelerate the green & digital transition of Europe's key industrial ecosystems</td><td>13. Empower Higher Education Institutions</td><td>14. Bring Science closer to citizens</td><td>16. Improve EU-wide access to excellence</td><td>17. Enhance public research institutions' strategic capacity</td><td colspan="2">19. Establish an ERA monitoring system</td></tr>
</table>

Source: European Commission (Note: Actions 15, 18 and 20 were not implemented)

Chapter 2 briefly summarises **new developments in Cyprus since the publication of the 2023 ERA Country Report**, based on the commitments to ERA Actions (Table 2). The findings are based on qualitative desk research and interviews.

[4] https://www.research.org.cy/en/
[5] https://www.gov.cy/dmrid/documents/stratigiki-ereynas-kai-kainotomias-2024-2026-2/
[6] https://www.gov.cy/media/sites/13/2024/04/%CE%A3%CF%84%CF%81%CE%B1%CF%84%CE%B7%CE%B3%CE%B9%CE%BA%CE%AE-%CE%88%CE%BE%CF%85%CF%80%CE%BD%CE%B7%CF%82-%CE%95%CE%BE%CE%B5%CE%B9%CE%B4%CE%AF%CE%BA%CE%B5%CF%85%CF%83%CE%B7%CF%82-2023-2030.pdf
[7] Digital Education Action Plan. https://education.ec.europa.eu/focus-topics/digital-education/action-plan
[8] https://www.mof.gov.cy/mof/dggrowth/dggrowth.nsf/natlongtermstrsust_en/natlongtermstrsust_en?OpenDocument

ERA Priority 1: Deepening a truly functioning internal market for knowledge

ERA Action 1) Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud (EOSC)	A National Policy Open Science (OS) was adopted in 2022... The influence exerted by ERA aided the adoption of a comprehensive OS policy. Each university and research centre has or is in the process of developing its own institutional open access policy, based on the principles and mandatory clauses of the National OS Policy. In 2024, the Ad Hoc Committee for OS (established and coordinated by the DMRID) developed the technical requirements for a National Repository. The creation of a national repository that is envisaged to act as an EOSC node is a project expected to be completed within the next two years.
ERA Action 4) Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and inter-sectoral mobility across the ERA	A scoping paper has been developed, and a call for tenders is planned to map the existing skills as well as identify the future skill needs in the country. This is expected to be completed by 2026 to inform the next policy cycle. RIF is funding several programmes to support researchers' careers by providing opportunities for two-way mobility between businesses and research area. This includes PhD and postdoctoral researcher positions in companies for the elaboration of R&I projects, summer job opportunities for students in innovative certified small and medium enterprises. A systematic effort is underway to map by 2026 the organisations that have adopted the European Charter for Researchers. In 2024 several events were organised to promote an R&I culture on the island, so that research professions can be made attractive to young people. The Scientific Visa scheme introduced also serves as a mechanism to attract scientists and researchers from third countries. The trend is growing rapidly; in 2024, 128 applications were received, of which 73 were approved so far, Egypt and India being the primary countries of origin.
ERA Action 5) Promote gender equality and foster inclusiveness, taking note of the Ljubljana declaration	The National Strategy includes gender equality as a target. A small number of actions are organized like digital education for rural women, training on equality for companies that receive state funding and training for the staff of the DMRID.
ERA Action 7) Upgrade EU guidance for better knowledge valorisation	Action 7 is highly important for Cyprus, and there are ambitious plans demonstrating progress in 2024. A range of tax incentives and blended finance mechanisms are in place to comprehensively support Research and Innovation (R&I) investments—both by companies and investors. These tools are strategically designed to optimize returns and accelerate innovation, and the impact is already visible: Cyprus is home to a growing number of startups, scaleups, tech companies, and active R&I investors. In January 2025, 33East announced the first close of its inaugural fund at €26 million, comprising €19 million from the Cyprus Equity Fund and €7 million from private investors, including a €2 million contribution from the Bank of Cyprus. The fund aims to invest in startups with connections to Cyprus, focusing on sectors such as enterprise software, fintech, gaming, marketplaces, logistics, digital health, and climate. Furthermore, a Knowledge Transfer Office operates within the Research and Innovation Foundation (in RIF) as a node with branches foreseen in all

universities and research centres. Good practices from the ERA were studied and have helped shape the national scheme. After extensive consultations a law modification has been prepared in 2024 by the competent Ministries. designed to modernise the spin-off regulatory framework, which is submitted to the House of Parliament.

ERA Action 8) Strengthen sustainability, accessibility and resilience of research infrastructures in the ERA

An online Research Infrastructures Platform was launched in 2024 with the aim of mapping all Cypriot research infrastructures and their equipment[9]. The platform will feature up-to-date data on all nationally funded research infrastructures, encompassing information about locations, areas of expertise, and available equipment. The introduction of this platform is expected to significantly enhance communication and cooperation among various stakeholders, including researchers and businesses. Additionally, the platform will provide access to information on the availability and internal access policies and procedures of the Research Performing Organizations. Furthermore, to support the sustainability of Research organisations and Infrastructures, a performance-based mechanism is being designed for managing and distributing DMRID funding for research and innovation (R&I) among publicly funded Research Institutions. A clear regulatory framework is currently being developed to establish rules and KPIs to ensure open access for anyone wishing to utilise national research infrastructures.

ERA Action 9) Promote a positive environment and level playing field for international cooperation based on reciprocity

There are 15 bilateral cooperation agreements. However, many are currently inactive. At present, the only active agreements are with Greece and Israel. An agreement was signed with Japan in 2024 and is expected to be implemented through a bilateral R&I program in the coming two years.

ERA Priority 2: Taking up together the green transition and digital transformation and other challenges with impact on society and increasing society's participation in the ERA

ERA Action 10) Make EU R&I missions (10.1) and partnerships (10.2) key contributors to the ERA

Cyprus currently participates in eight partnerships. The possibility of joining new partnerships will be considered following an evaluation of the impact of existing partnerships.

ERA Action 12) Accelerate the green/digital transition of Europe's key industrial ecosystems

The commitment of Cyprus on the green and digital transition is manifested by the competitive calls offered by the National Funding Agency RIF for green technologies and through the scheme offered by the Ministry of Energy, Commerce and Industry for the digital upgrade of companies. In 2024 two main strategy documents were updated: (a) the National Plan for Energy and Climate[10], which went through stakeholder consultation and ready to be formally submitted to the European Commission and (b) the National Plan for Climate Change, which is still

[9] https://cri.gov.cy/en/

[10] The draft used for the stakeholder consultation can be found here: https://commission.europa.eu/system/files/2023-07/Cyprus%20Draft%20Updated%20NECP%202021%202030%20%281%29.pdf

in a preliminary phase. A call for proposals was launched for smart cities with deadline 12 January 2024[11].

ERA Priority 3: Enhancing access to research and innovation excellence across the Union and enhancing interconnections between innovation ecosystems across the Union

ERA Action 16) Improve EU-wide access to excellence

The Chief Scientist of the Research and Innovation Council was asked to prepare policies for two new mechanisms: one for research organisations and one for impact. They would include evaluation mechanisms for research organisations to determine how state funding should be distributed taking excellence and sustainability into consideration. This is particularly important for the seven Centres of Excellence, which could not leverage the resources they expected and need a revised business model. Drafts of both policies are expected within 2025.
The Research Infrastructures Platform, mentioned under Action 8, is also intended to facilitate national and international collaborations. Likewise, the Scientific visa is regarded as a tool for fostering excellence,

ERA Priority 4: Advancing concerted research and innovation investments and reforms

ERA Action 19) Establish an efficient and effective ERA monitoring mechanism

Efforts to organise and systematically report on progress are ongoing, however there is potential to strengthen monitoring as capacity develops

3. Contribution of ERA Actions to national performance in reaching ERA objectives

This chapter provides a qualitative assessment of how the joint ERA Actions contributed to Cyprus' performance in achieving the ERA objectives as defined in the Pact for R&I during the period 2022-2024.

For Cyprus, ERA Priority 1 holds significant importance and is addressed through a range of initiatives focusing on ERA Actions 1, 4, 5, 7, 8, and 9, which aim to drive structural reforms and ensure public sector support for a well-functioning market. Unfortunately, many ERA Dashboard Indicators are missing for recent years, making it difficult to gain a comprehensive picture for 2024 and, in some cases, even for 2023.

For **Action 1 (Open Science)**, Cyprus lags behind the EU average in repositories and open datasets but in 2024 actions were initiated with the planning of the creation of a national EOSC node aiming at improving open science. The country has caught up and surpassed the EU average in the share of publications available in open access. Stakeholders report further efforts of policy acceleration in 2024.

[11] https://www.gov.cy/esoterika-themata/prokiryxi-anoiktou-diagonismou-gia-tis-exypnes-poleis-connectivity-and-management-of-the-cy-smart-city-platform/

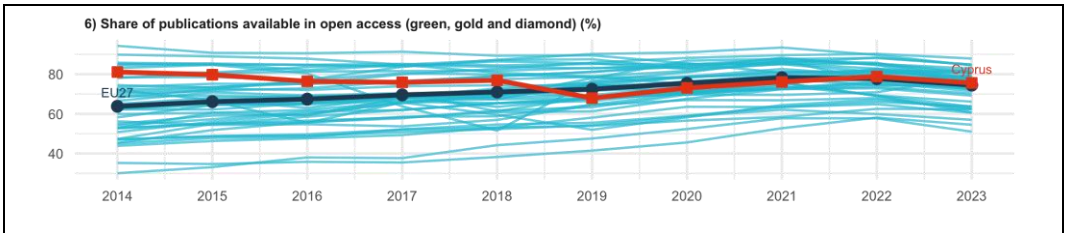
For **Action 4 (Careers)** the country performs poorly in producing new doctorate graduates per 1,000 inhabitants aged 25–34 and in 2023 the average ranking score of its top 10 universities was the lowest among all countries for which data were available. On a positive note, the number of ERC grants per 1,000 R&D personnel slightly exceeds the EU average. Funding for research careers (PhD and post doc) exists but policies remain path-dependent, with similar measures launched over the years by the RIF (PhDs in companies, post doc funding and funded summer job opportunities for students, events to promote R&I culture). There is no experimenting with new types of policies. In 2024 an effort started to map skills' needs and availability to help direct policy.

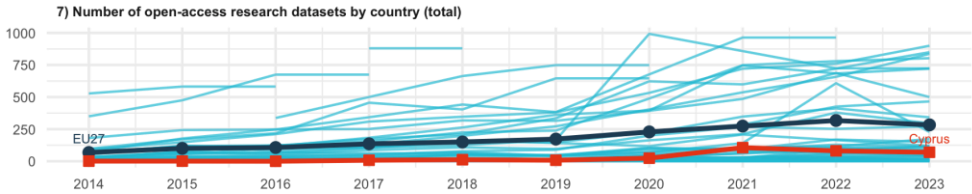
For **Action 5 (Gender Equality)**, policymakers report limited interest from the side of female researchers to apply for incentives offered for upgrading female skills. Cyprus underperforms in most ERA Dashboard Indicators except for the share of women authors in the top 10 percent most-cited publications and the proportion of women among doctoral graduates in narrow STEM fields. Despite its low performance, the country is making progress in the Women in Digital Index and the proportion of mixed-gender research teams. However, no recent data are available to assess progress on the Glass Ceiling Index.

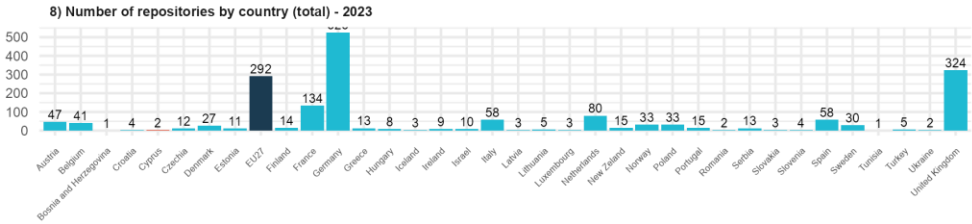
Action 7 (Knowledge Valorisation) is a focus of national policies including creating a nationwide support mechanism for knowledge transfer on which there was a major emphasis in 2024. ERA Dashboard Indicators suggest that Cyprus performs poorly and shows little progress over time. The evidence for this comes from (a) EIS indicators, which show strong decreases since 2023 in Venture capital expenditures, Non-R&D innovation expenditures and Exports of medium and high technology product, as well as (b) ERA Dashboard Indicators. For instance, Cyprus is among the lowest in best practice examples and methodologies for knowledge valorisation (ERA Dashboard Indicator 20) and well below EU average in the Number of PCT patent applications divided by GDP (ERA Dashboard Indicator 21) and in Patents by Universities and Research Organisations Cyprus (ERA Dashboard Indicator 25).

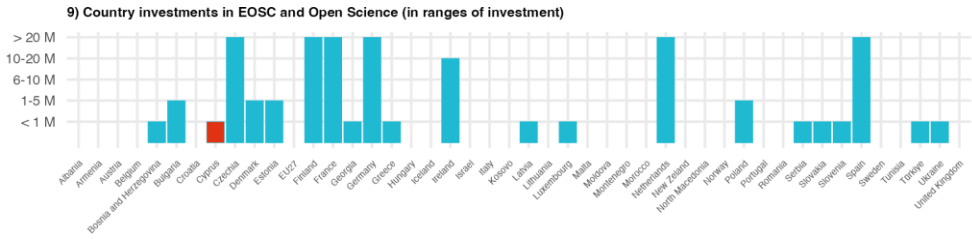
For **Action 9 (Global Approach)**, Cyprus scores highly and continues to improve compared to the EU average. It ranks very high, with an increasing gap, in international co-publications with non-EU partners per 1,000 public-sector researchers, demonstrating a remarkable lead over the EU average and it consistently outperformed the EU average in the share of foreign doctorate students as a percentage of all doctorate students. The same trend is observed in patents with foreign co-inventors. Cyprus does not invest heavily in European Research Infrastructures but participates in significantly more than its peers, showcasing a net benefit for the country.

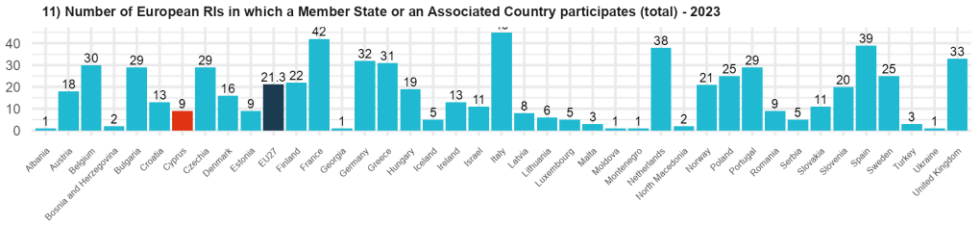
Figure 3-1 Indicators for ERA Priority 1

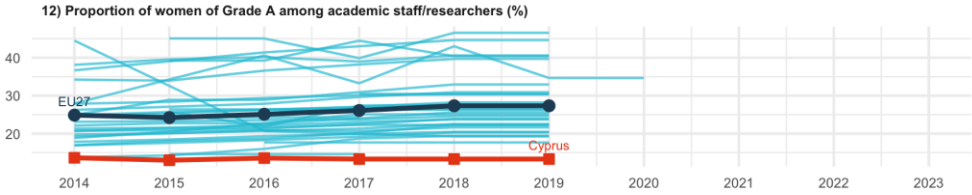


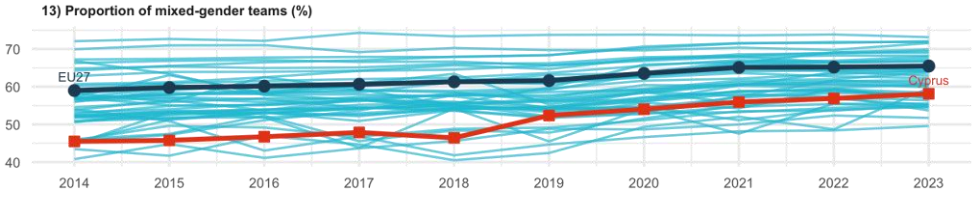

7) Number of open-access research datasets by country (total)
1000
750
500
250
0
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


8) Number of repositories by country (total) - 2023
500
400
300
200
100
0
47 41 1 4 2 12 27 11 292 14 134 13 8 3 9 10 58 3 5 3 80 15 33 33 15 2 13 3 4 58 30 1 5 2 324
Austria
Belgium
Bosnia and Herzegovina
Croatia
Cyprus
Czechia
Denmark
Estonia
EU27
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Netherlands
New Zeland
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Tunisia
Turkey
Ukraine
United Kingdom

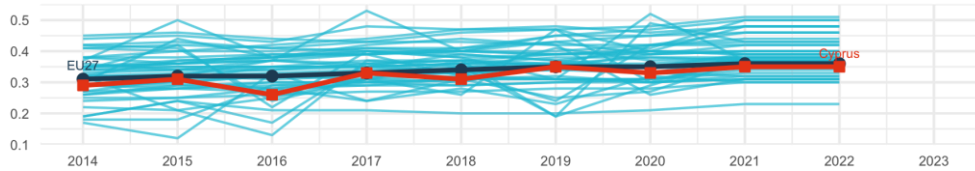

9) Country investments in EOSC and Open Science (in ranges of investment)
> 20 M
10-20 M
6-10 M
1-5 M
< 1 M
Albania
Armenia
Austria
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
EU27
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kosovo
Latvia
Lithuania
Luxembourg
Malta
Moldova
Montenegro
Morocco
Netherlands
New Zeland
North Macedonia
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Tunisia
Türkiye
Ukraine
United Kingdom


11) Number of European RIs in which a Member State or an Associated Country participates (total) - 2023
40
30
20
10
0
1 18 30 2 29 13 9 29 16 9 21 3 22 42 1 32 31 19 5 13 11 8 6 5 3 1 1 38 2 21 25 29 9 5 11 20 39 25 3 1 33
Albania
Austria
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
EU27
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Moldova
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Romania
Serbia
Slovakia
Slovenia
Spain
Sweden
Turkey
Ukraine
United Kingdom

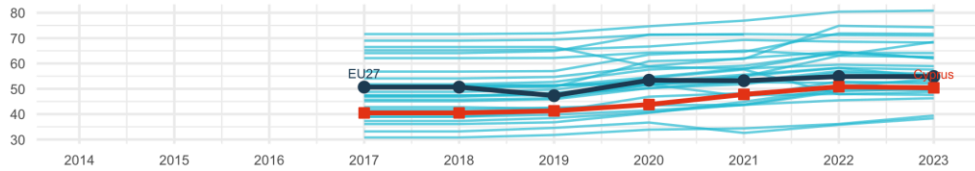

12) Proportion of women of Grade A among academic staff/researchers (%)
40
30
20
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


13) Proportion of mixed-gender teams (%)
70
60
50
40
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

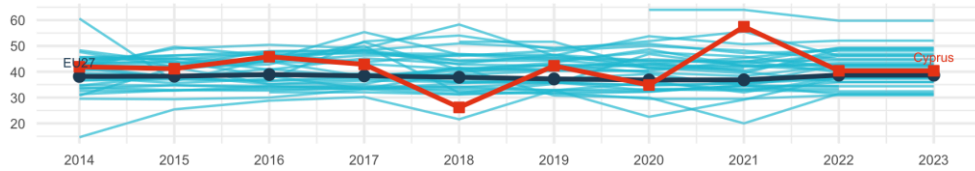
14) Proportion of women in authorships of the top 10% most cited publications (%)



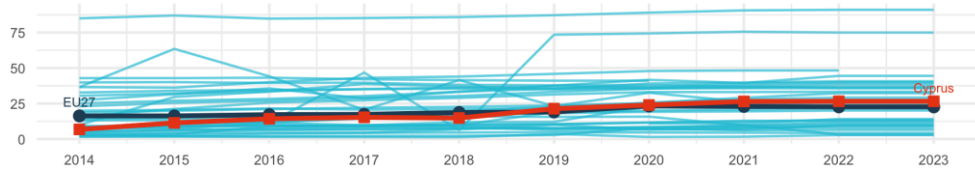
15) Women in Digital index (0-100)



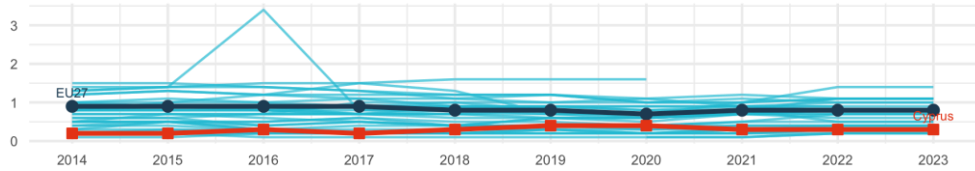
16) Proportion of women among doctoral graduates by narrow fields of STEM (%)



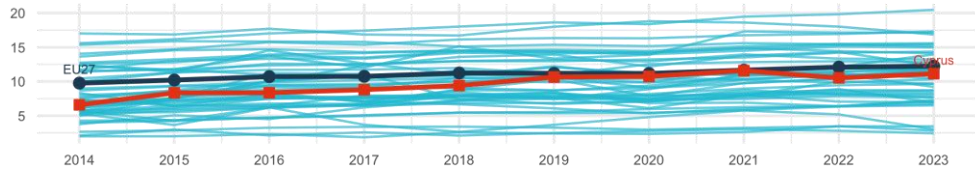
17) Share of foreign doctorate students as a percentage of all doctorate students (%)



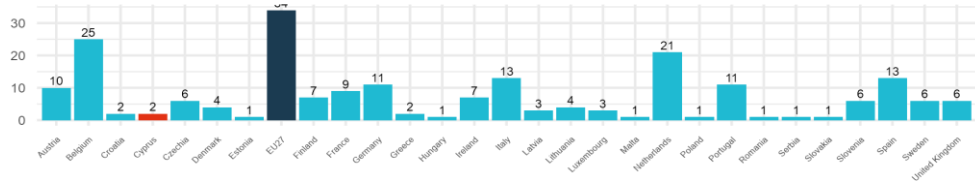
18) New doctorate graduates per 1,000 inhabitants aged 25-34

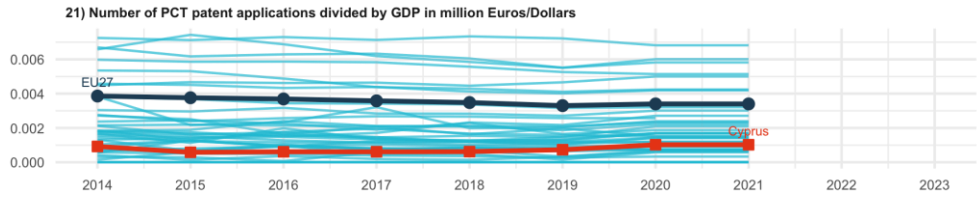


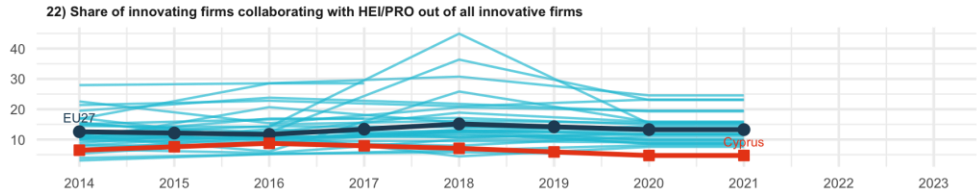
19) Share of public-private co-publications (%)

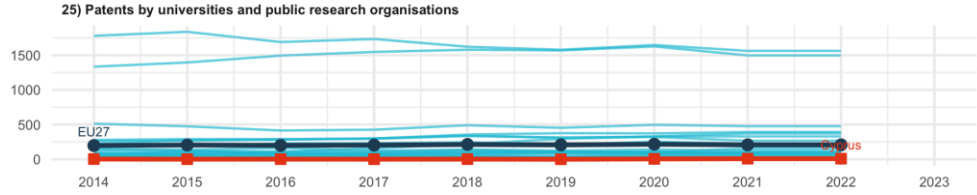


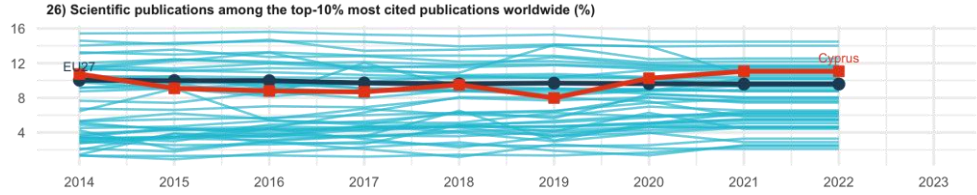
20) Best practice examples and methodologies for knowledge valorisation - 2023

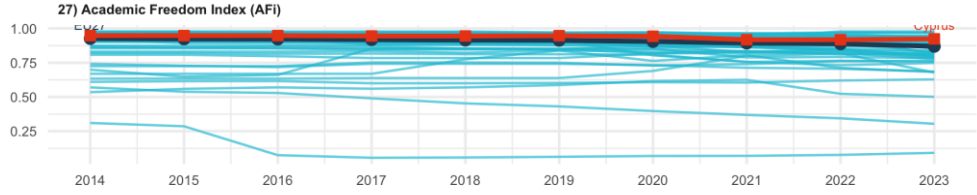


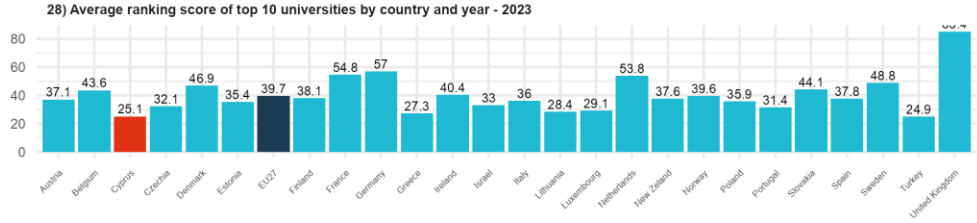

21) Number of PCT patent applications divided by GDP in million Euros/Dollars
0.006
0.004
0.002
0.000
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

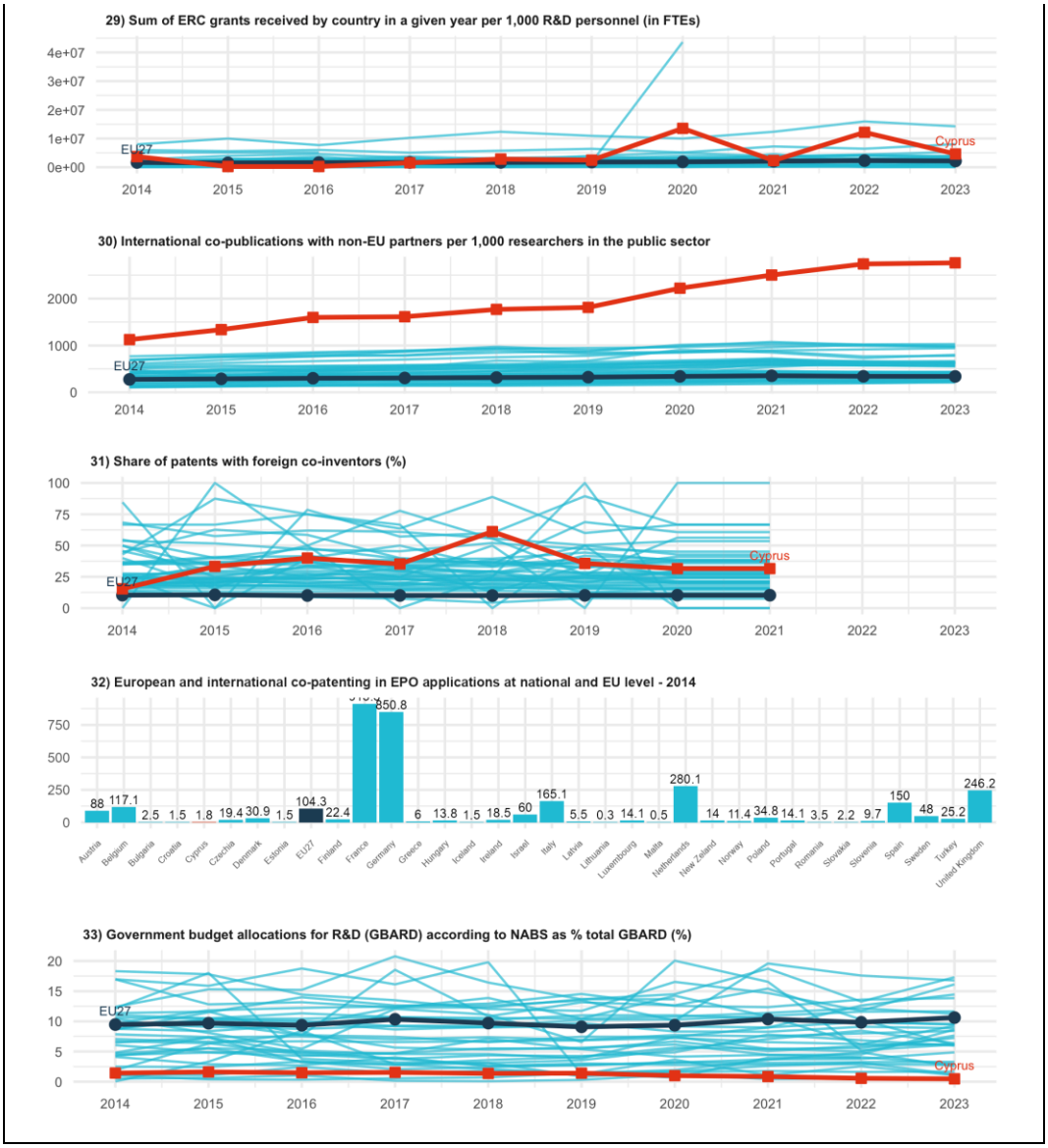

22) Share of innovating firms collaborating with HEI/PRO out of all innovative firms
40
30
20
10
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


25) Patents by universities and public research organisations
1500
1000
500
0
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


26) Scientific publications among the top-10% most cited publications worldwide (%)
16
12
8
4
EU27
Cyprus
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


27) Academic Freedom Index (AFi)
1.00
0.75
0.50
0.25
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023


28) Average ranking score of top 10 universities by country and year - 2023
80
60
40
20
0
37.1
43.6
25.1
32.1
46.9
35.4
39.7
38.1
54.8
57
27.3
40.4
33
36
28.4
29.1
53.8
37.6
39.6
35.9
31.4
44.1
37.8
48.8
24.9
Austria
Belgium
Cyprus
Czechia
Denmark
Estonia
EU27
Finland
France
Germany
Greece
Ireland
Israel
Italy
Lithuania
Luxembourg
Netherlands
New Zealand
Norway
Poland
Portugal
Slovakia
Spain
Sweden
Turkey
United Kingdom

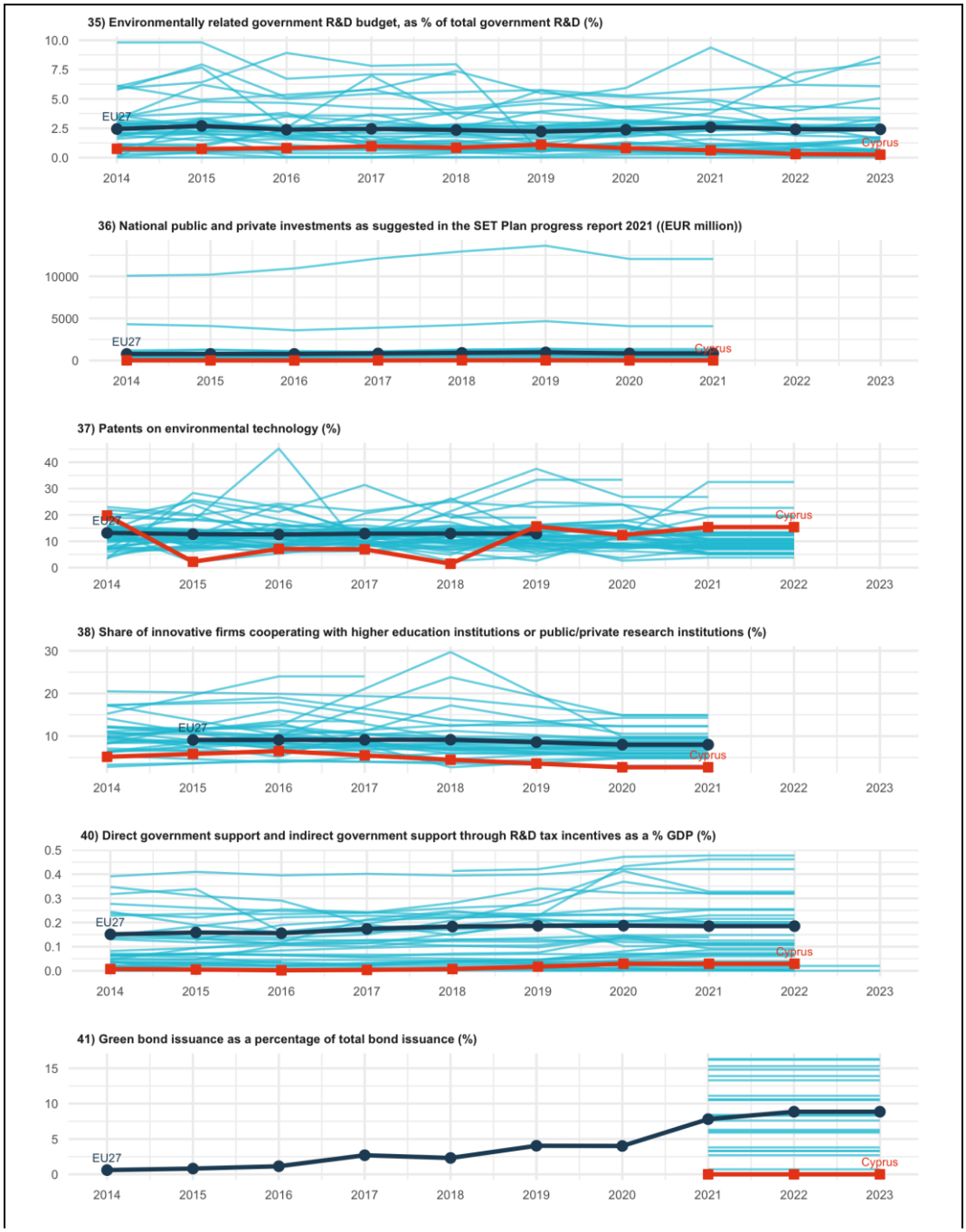


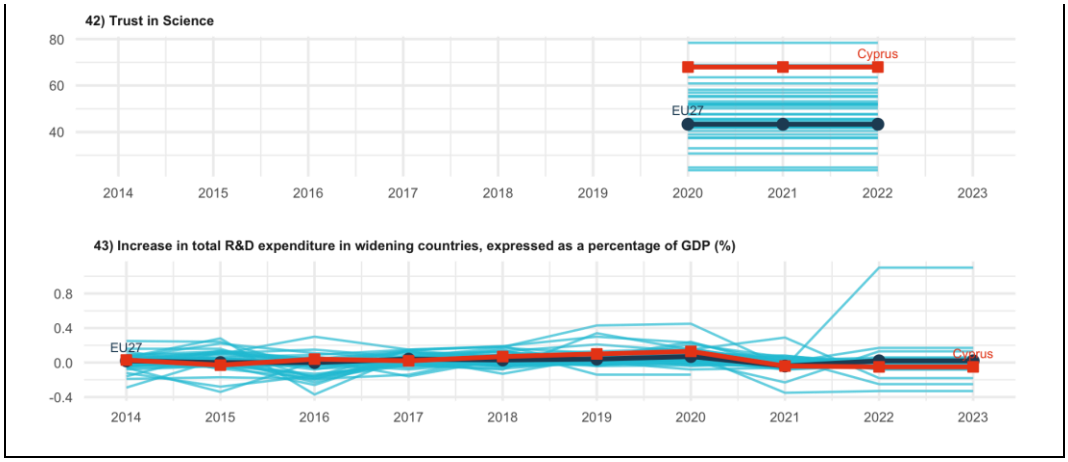
Source: Annex 1

Regarding ERA Priority 2, Cyprus places greater emphasis on competitiveness over social undertakings, and this limits the allocation of resources for missions and the twin transition. Most ERA Dashboard Indicators demonstrate a low and often declining position of Cyprus in that respect. Despite these challenges, policies in 2024 have maintained incentives for the digital transformation of businesses and for fostering research in green technologies. Additionally, two policy documents are under discussion to update the country's Energy and Climate policies, signalling a potential shift towards addressing these critical areas more robustly in the future. Gross Domestic Expenditure on R&D (GBAORD) per full-time equivalent (FTE) researcher in the public sector has continuously declined since its peak in 2019 and fell below the EU average in 2022. Spending on environmental R&D has also remained below the EU average, with Cyprus only achieving a near-average position among

Widening countries. The sole area where Cyprus surpasses the EU average is in Trust in Science. However, for many ERA Dashboard Indicators, recent data from 2023 and 2024 are unavailable, hampering a comprehensive assessment of recent progress.

Figure 3-2 Indicators for ERA Priority 2

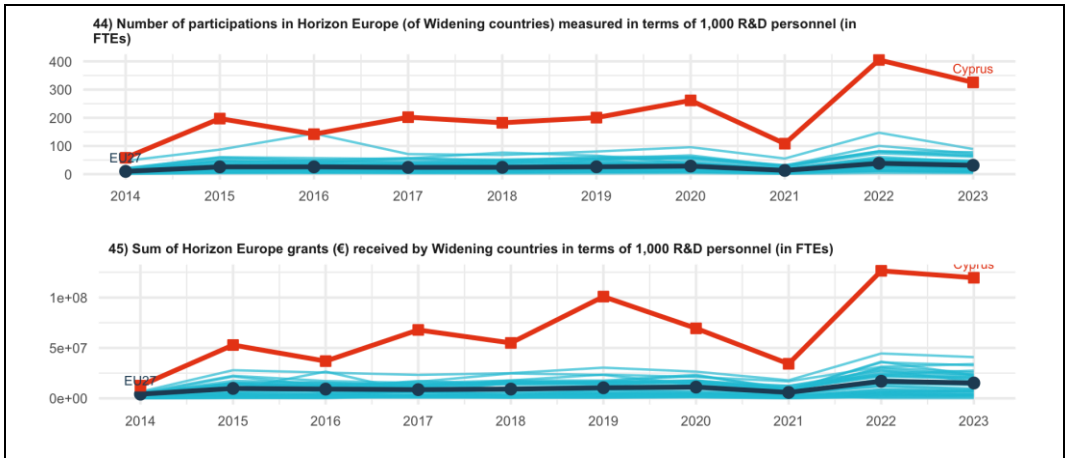




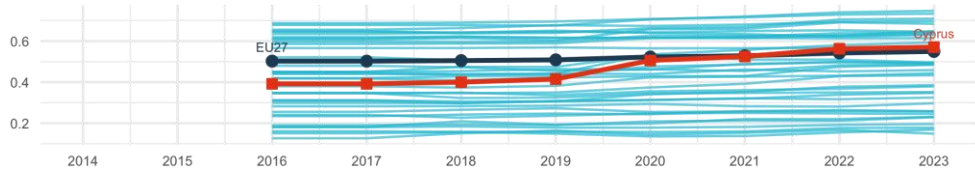
Source: Annex 1

Under **ERA Priority 3** Cyprus is focusing on **Action 16** (Access to excellence), where it performs well compared to other Widening countries. Both in terms of numbers of participation in Horizon Europe and in terms of sum of Horizon Europe grants both measured in terms of 1,000 R&D personnel Cyprus outperforms the other Widening countries by orders of magnitude. It also significantly outperforms its peers in the number of Seal of Excellence projects per 1,000 R&D personnel. However, the excellence scoring is largely due to public research; in terms of shares of patents the country is below the Widening country average in patents registered together with partners from other EU countries and partners from non-Widening countries per institution. The same applies to share of innovative enterprises that cooperate with PROs in other countries and the share of public R&D expenditure financed by the private sector. Policy documents were under preparation in 2024, and an evaluation mechanism is launched to help more effectively support excellence policies. The current priority for national policies is to find solutions for the seven Centres of Excellence created in recent years and struggling to cover their operational costs.

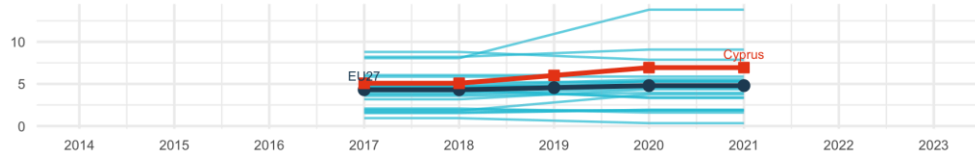
Figure 3-3 Indicators for ERA Priority 3



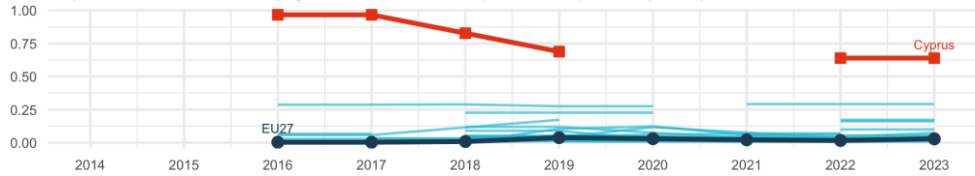
46) Summary Innovation Index (Widening countries)



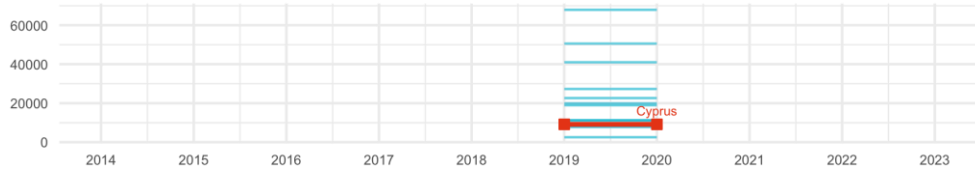
47) Share of enterprises using public funds from different governance levels (local or regional, national, and EU) for R&I activities (%)



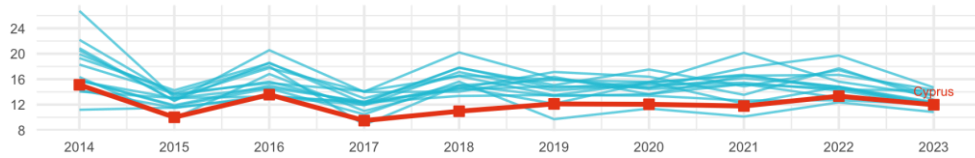
48) Number of Seal of Excellence projects on the InvestEU Portal per 1,000 R&D personnel (in FTEs)



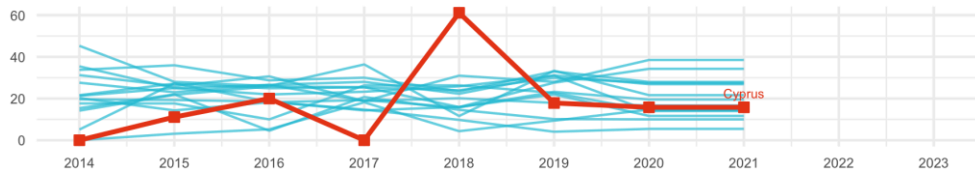
49) Number of collaboration networks of RPOs in Widening countries with other EU countries

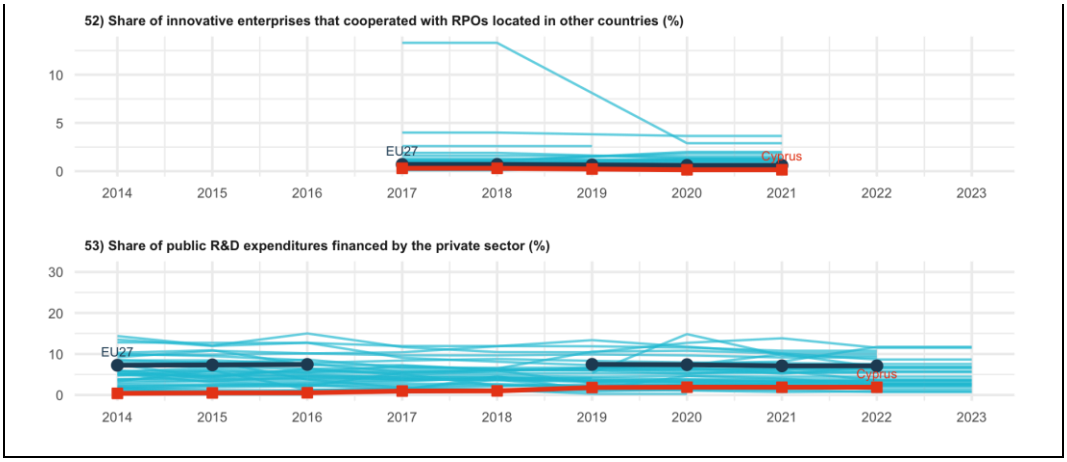


50) Average number of partners from non-widening countries per institution from a Widening country participating in the Horizon programme each year



51) Share of patents registered by a Widening country together with partners from other EU countries (%)

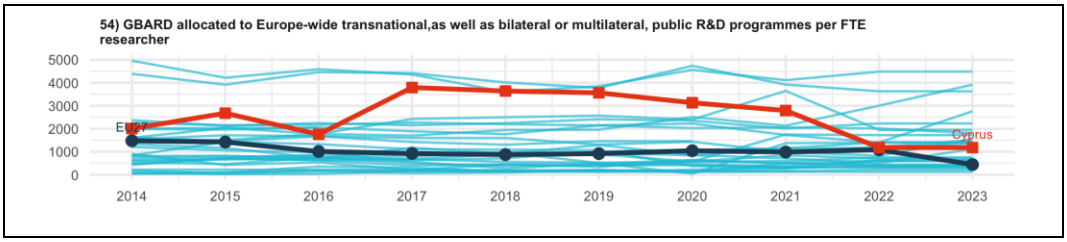




Source: Annex 1

For ERA Priority 4, Cyprus has limited resources for proactive monitoring of initiatives. The national administration uses the various monitoring platforms developed by the EU and expects to be more directly involved once the Deputy Ministry will be adequately staffed.

Figure 3-4 Indicators for ERA Priority 4



Source: Annex 1

4. Effects of ERA Action implementation on the national R&I system

This chapter presents a qualitative assessment of the ERA Action commitments of Cyprus and their alignment with identified national R&I priorities, including the quantitative performance in the ERA Dashboard. The ERA objectives are highly correlated with the Cypriot Strategy for R&I 2024-2026 across four pillars: A) Supporting Excellence in Research Organisations including access and the valorisation of their knowledge; B) Linking R&I with businesses by supporting innovation and entrepreneurship as well as attracting foreign high-tech investments; C) Improving human resources as a leverage for developing the ecosystem; and D) Make Cyprus a global R&I leader. A fifth pillar includes the thematic priorities: Technological Priorities with emphasis on Digital technologies and advanced materials; Ecosystems of agrifood, merchant marine and renewable energies; Emerging priorities represented by Space and Catalysts in the areas of Health and Environment.

ERA Priority 1 and in particular Action 8 correlates highly with Pillar A of the National Strategy and helps set in motion its third objective, namely the exploitation of knowledge produced in national research and technology infrastructures. Similarly, **Action 4** coincides with Pillar C, and investments in the enhancement of research careers are helping improve

the profiles and abilities of Cypriot researchers. **Action 9** is correlated with the national Pillar D, making Cyprus a global R&I leader. The Dashboard confirms improvements in shares of top scientific publications and ERC grants. Conversely**, Actions 1 and 5** are not explicitly mentioned in the National Plan but contribute to its objectives and are viewed positively by Cypriot policy makers. **ERA Priority 2** coincides indirectly with Pillar B of the National Strategy since the missions, partnerships and twin transition are expected to benefit competitiveness in the long run. The Dashboard does not indicate a strong influence either towards mission participation or towards the green transition. **ERA Priority 3 Action 16** Access to excellence corresponds to Pillar A and Pillar D of the national strategy while there is no direct correspondence of **ERA Priority 4** which is addressed internally by the Deputy Ministry.

ERA has contributed significantly to **Pillar A** because ERA Actions 8, 9 and 16 are aligned with **World-Class Research Organisations and Infrastructure** since they constribute to modernising research infrastructures (RI) and have a global outreach**.** Cyprus performs well in ESFRI; given the size of the country, European RIs offer a unique opportunity for Cyprus researchers to access modern infrastructures. **Pillar B Connecting R&I with Business, Enhancing Business Success** is highly important for Cyprus, since it is one of its weakest points. Good practices from ERA regarding TTO and ideas on reforms for spin offs are helping national policies. Cyprus lags significantly behind in the engagement of high tech business success. Joining more actions under Priority 1 would further stimulate progress in this highly relevant area. **ERA Actions 4 and 5** are relevant for **Pillar C Human Resources as a Lever for Ecosystem Development. Regarding Pillar D:** Cyprus as an R&I Leader in the EU and Internationally **Action 9 of ERA Priority 1** contributes to the global outreach. Conversely the **Thematic Pillar**: Targeted Investments to Promote Growth is not covered by ERA but Cyprus benefits in its priority themes from EU Framework Programmes funding.

5. Conclusions

Cyprus has adopted an ambitious R&I policy dedicating public funding and establishing an appropriate governance system. Universities and research organisations are highly active and perform well above average compared to other Widening Countries. Although the research system has progressed rapidly, knowledge valorisation and innovation remain a challenge. These characteristics have shaped the ERA Actions adopted by Cyprus.

Several actions that fully align with national priorities are pursued in a path-dependent manner. Actions 4 (Careers), 5 (Gender Equality), and 9 (Global Approach) correspond to key national priorities and co-evolve, with Cyprus benefiting from ERA opportunities. However, due to limitations in human resources, the country has not been as active as it would have liked. In 2024, national initiatives in these areas continued replicating past programmes.

Actions emphasising collaborations are beneficial for Cyprus which excels in several ERA Dashboard Indicators. Actions 8 (Research Infrastructures), 10 (Missions) and 16 (Access to Excellence) align with national priorities. ERA Dashboard Indicators suggest that these Actions provide significant value. Moreover, Action 1 (Open Science) has gained significant traction thanks to ERA. Both policymakers and stakeholders now view Open Science as a foundational step. Action 7 (Knowledge Valorisation), traditionally a weak point in the national economy, is being actively pursued and is benefiting from shared ideas, discussions, and best practices. In 2024, emphasis was placed on continuing the organisation of the Network of Technology Transfer Offices and preparing legislation to modernise the spin-off regulatory framework. In 2025, Cyprus aims at accelerating progress.

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Annex 1 – List of ERA Dashboard Indicators

The indicators used in the report are taken from the ERA Dashboard 2024. The full ERA Dashboard Report and the supporting Data Replication Package can be downloaded at https://european-research-area.ec.europa.eu/era-monitoring-reports. However, *GDP (in million €)*, *Size of the population (million)*, and *Share of female researchers, all sectors of performance (%)* were added to provide additional context and directly retrieved from the Eurostat website.

Additionally, EU and country averages are for 2023, except *Share of female researchers, all sectors of performance (%)* (2021).

Table 1 Structural Key Indicators:

Indicator number	Indicator	Source
/	GDP in euro per capita, current prices	Eurostat https://doi.org/10.2908/TEC00001
1	Gross Domestic Expenditure on R&D (GERD) as a share of GDP	Eurostat
2	Government Budget Allocations for R&D (GBARD) as share of GDP	Eurostat
4	Business Enterprise Expenditure on R&D (BERD) as a share of GDP	Eurostat
5.2	Expenditure on R&D procurement as a percentage of GDP	EC/European Innovation Procurement Observatory
/	Size of the population (million)	Eurostat, https://doi.org/10.2908/TPS00001
3	Researchers (in FTE) per million inhabitants	Eurostat
/	Share of female researchers, all sectors of performance (%)	Eurostat, https://doi.org/10.2908/TSC00005

Figure 3.1 Indicators for ERA Priority 1

Indicator number	Indicator	Source
6	Share of publications available in open access (green, gold, and diamond)	OpenAIRE
7	Number of open-access research datasets by country	OpenAIRE
8	Number of repositories by country	EOSC - Re3data
9	Country investments in EOSC and Open Science (in ranges of investment)	EOSC Observatory
10	Share of national public R&D expenditure committed to European research infrastructures	ESFRI
11	Number of European RIs in which a Member State or an Associated Country participates	ESFRI
12	Proportion of women of Grade A among academic staff/researchers	Women in Science - She Figures
13	(Corrected) Proportion of mixed-gender teams	EC_Scopus
14	(Corrected) Proportion of women in authorships of the top 10% most cited publications	EC_Scopus
15	Women in Digital index (0-100)	EC-Women in Digital Scoreboard

16	Proportion of women among doctoral graduates by narrow fields of STEM	Eurostat
17	Share of foreign doctorate students as a percentage of all doctorate students	Eurostat
18	New doctorate graduates per 1,000 inhabitants aged 25-34	Eurostat
19	Share of public-private co-publications	EC_Scopus
20	(Cumulative number of) Best practice examples and methodologies for knowledge valorisation	Knowledge Valorisation Platform
21	Number of PCT patent applications divided by GDP in million Euros/Dollars	OECD, Eurostat & World Bank
22	Share of innovating firms collaborating with HEI/PRO out of all innovative firms	Eurostat CIS (own calculations)
23	Business enterprise researchers as % of total researchers	OECD
24	Business enterprise researchers in full-time equivalent per thousand employment in industry	OECD
25	Patents by universities and public research organisations	EPO PATSTAT - Fraunhofer ISI calculations
26	% of scientific publications among the top-10% most cited publications worldwide	EC_Scopus
27	Academic Freedom Index (AFi)	V-Dem Varieties of Democracy
28	Average ranking score of top 10 universities by country and year	QS World University Ranking
29	Sum of ERC grants received by country in a given year per 1,000 R&D personnel (in FTEs)	EC-ERC
30	International co-publications with non-EU partners per 1,000 researchers in the public sector	EC_ScienceMetrix and Eurostat/OECD
31	Share of patents with foreign co-inventors	OECD
32	European and international co-patenting in EPO applications at national and EU level	Eurostat
33	Government budget allocations for R&D (GBARD) according to NABS as % total GBARD	Eurostat

Figure 3.2 Indicators for ERA Priority 2

Indicator number	Indicator	Source
34	Note: The ERA Dashboard Indicator 34 was removed from the Dashboard in January 2025. As a consequence, the indicator has also been omitted from the Country Report, while, however, keeping the original numbering of the indicators.	
35	Environmentally related government R&D budget, as % of total government R&D	Eurostat
36	National public and private investments as suggested in the SET Plan progress report 2021 (EUR million)	SETIS R&I data
37	% Patents on environmental technology	OECD
38	Share of innovative firms cooperating with higher education institutions or public/private research institutions	Eurostat CIS
39	Enterprises that purchased or licensed-in patents or other IPRs from public research organisations, universities or higher education institutions	Eurostat CIS

40	Direct government support and indirect government support through R&D tax incentives as a % GDP	OECD
41	Green bond issuance as a percentage of total bond issuance	Eurostat - EEA
42	Trust in Science	Eurobarometer 95.2
43	Increase in total R&D expenditure in widening countries, expressed as a percentage of GDP	Eurostat, OECD, UNESCO

Figure 3.3 Indicators for ERA Priority 3

Indicator number	Indicator	Source
44	*Number of participations in Horizon Europe (of Widening countries) measured in terms of 1,000 R&D personnel (in FTEs)*	Cordis - Eurostat
45	*Sum of Horizon Europe grants (€) received by Widening countries in terms of 1,000 R&D personnel (in FTEs)*	Cordis - Eurostat
46	*Summary Innovation Index (Widening countries)*	EC_EIS
47	*Share of enterprises using public funds from different governance levels (local or regional, national, and EU) for R&I activities*	Eurostat CIS
48	*Number of Seal of Excellence projects on the InvestEU Portal per 1,000 R&D personnel (in FTEs)*	EC - Invest EU
49	*Number of collaboration networks of RPOs in Widening countries with other EU countries*	Cordis - Horizon Dashboard
50	*Average number of partners from non-widening countries per institution from a Widening country participating in the Horizon programme each year*	Cordis - Eurostat
51	*Share of patents registered by a Widening country together with partners from other EU countries*	OECD
52	*Share of innovative enterprises that cooperated with RPOs located in other countries*	Eurostat CIS
53	*Share of public R&D expenditures financed by the private sector*	Eurostat

Figure 3.4 Indicators for ERA Priority 4

Indicator number	Indicator	Source
54	*GBARD allocated to Europe-wide transnational, as well as bilateral or multilateral, public R&D programmes per FTE researcher*	Eurostat

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