

ERA Country Report 2024 Georgia



ERA Country Report 2024: Georgia

European Commission
Directorate-General for Research and Innovation
Directorate A — ERA & Innovation
Unit A2 — ERA, Spreading Excellence and Research Careers
Contact Magda De Carli, Head of Unit A.2
Heiko Prange-Gstoehl
Email <u>RTD-ERA-FORUM@ec.europa.eu</u>
European Commission
B-1049 Brussels

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ERA Country Report 2024 Georgia

This report was prepared by

Jonas Antanavičius and Ignas Bernotas, Visionary Analytics

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Key takeaways

- Georgia is committed to all ERA Actions, addressing all four ERA Priority Areas and demonstrating its engagement with the ERA Policy Agenda.
- Key national strategies such as the Unified National Strategy of Education and Science (2022-2030), the Long-Term Low-Emission Development Strategy, and the GovTech strategy play a central role in aligning national R&I priorities with ERA objectives.
- Notable advancements in Georgia include strengthening open science, promoting gender equality, and enhancing knowledge valorisation, driven by national initiatives and international collaborations.
- Nevertheless, some challenges remain, such as limited human and financial resources, prompting Georgia to refine its initiatives and commitments in the future for more targeted and sustainable implementation of the ERA Policy Agenda.

1. National context

Georgia is among the smallest Horizon Europe Associated countries with a population of around 3.7 million. It has been associated with Horizon 2020 since 2016 and became an associated member of Horizon Europe on 7 December 2021.¹ The country has a developing research and innovation (R&I) system, with Gross Domestic Expenditure on R&D (GERD) standing at 0.24 percent of GDP in 2023, significantly below the EU27 average of 2.27 percent . Similarly, Georgia had 1,823 researchers per million inhabitants, compared to the EU27 average of 4,681 (see Table 1 below). According to the Global Innovation Index 2024, Georgia ranks 57th among 133 economies globally, indicating the need for enhanced investment and strategic initiatives to bolster national R&I system.²

Table 1 Structural Key Indicators

	EU27	Georgia		
Indicator	2023	2023	Average 2018-2020	Average 2021-2023
GDP in euro per capita, current prices	35 790.00	/	/	/
Gross Domestic Expenditure on R&D (GERD) as a share of GDP	2.27	0.24	0.29	0.24
Size of the population (million)	448.80	3.74	3.72	3.72
Researchers (in FTE) per million inhabitants	4 681.34	1 823.03	1 721.86	1 787.81
Source: Annex 1				

The country's main strategy for R&I is the **Unified National Strategy of Education and Science of Georgia for 2022-2030**,³ which encompasses a range of policies regarding education, training, and R&I. The strategy is accompanied by the Action Plan for the biennium 2022-2024 along with its implementation monitoring reports for each year. Other key national documents include the **Long-Term Low-Emission Development Strategy (2023)**⁴, which aims to increase hydro and wind power contribution to its electricity consumption, and the **GovTech strategy**⁵ to the drive digital transformation in Georgia.

The key institutions responsible for developing and implementing R&I policies in Georgia are two ministries. The **Ministry of Education**, **Science and Youth** (MESY) coordinates education and academic research, while the **Ministry of Economy and Sustainable Development** is responsible for industry research. Other important institutions include the Shota Rustaveli National Science Foundation of Georgia (**SRNSFG**) and Georgia's Innovation and Technology Agency (**GITA**). Both institutions play a significant role in supporting the development of the Science, Technology and Innovation (STI) in Georgia.

¹ European Commission. <u>https://research-and-innovation.ec.europa.eu/strategy/strategy2020-2024/europe-world/international-cooperation/association-horizon-europe/georgia_en_2 "Georgia ranking in the Global Innovation Index 2024", WIPO, <u>https://www.wipo.int/gii-ranking/en/georgia</u></u>

² "Georgia ranking in the Global Innovation Index 2024", WIPO, <u>https://www.wipo.int/gii-ranking/en/georgia</u> ³ Ministry of Education, Science and Youth of Georgia (2022) Unified National Strategy of Education and Science of Georgia, <u>https://mes.gov.ge/uploads/files/2022-2030%20Unified%20National%20Strat-</u>egy%20of%20Education%20and%20Science.docx

⁴ United Nation Development Programme (2023) Georgia's Long-Term Low-Emission Development Strategy, available at <u>https://www.undp.org/sites/g/files/zskgke326/files/2023-07/undp-georgia-eu4climateledssummary-eng.pdf</u>

⁵ World Bank (2022) Georgia: Promoting Digital Transformation through GovTech : A Whole-of-Government Approach, available at <u>https://thedocs.worldbank.org/en/doc/bd555a478d4a4a63acc0739084838b20-</u>0350062022/original/GovTech-Case-Studies-Georgia-Promoting-Digital-Transformation-throughGovTech.pdf

2. Status of the Implementation of the ERA Policy Agenda

This section summarises new developments in Georgia, since the publication of the ERA Country Report 2023, given the commitments to the ERA Actions (Table 2). The findings are based on qualitative desk research and an interview with the Georgian delegate to the ERA Forum, Georgia has committed to all ERA Actions, covering all four Priority Areas (see Table 2). The aforementioned **Unified National Strategy** focuses on the first two ERA priorities, covering a range of policies for education, training, science and research.

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

Table 2 Commitment to ERA Actions

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

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

ERA Action 1) Open science initiatives continue to be primarily driven by the National Enable the open Science Library⁶ with the collaboration of the Ministry of Education, of Science and Youth. For example, under the Unified National Strategy, knowledge and the higher education institutions have created individual platforms to adre-use of research vance open science initiatives following the framework of the "Open outputs, including Science" programme.⁷ The action plan of the above-mentioned strategy through the devel- also supports open science through initiatives such as enhancing biopment of the Eu- bliometric data, creating a database of Georgian scientists, developing ropean Open Sci- innovation hubs, integrating digital platforms with European networks, Cloud and establishing a legal framework for technology transfer.⁸

legislative and

sharing

ence

(EOSC)

ERA Action 2) The National Intellectual Property Centre (Sakpatenti) actively supports Propose an EU this action. For example, its ongoing trainings and workshops aim to copyright and data improve researchers' understanding of intellectual property rights.⁹

⁶ "National Science Library of Georgia", European Open Science Cloud. https://eosc.eu/practice/nationalscience-library-of-georgia/

⁷ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 59, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

⁸ "Georgia: Overview", European Open Science Cloud, https://eosc.eu/tripartite-collaboration/georgia ⁹ "The Second Stage of the Training of Trainers (ToT) Program Organized by the WIPO Academy Was Completed Successfully at Sakpatenti", Sakpatenti, https://www.sakpatenti.gov.ge/en/news_and_events/615/

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regulatory frame-
work fit for re-
search
researchers
prove their quality,
performance and
impact
and
balanced
ternational. trans-
disciplinary and in-
ter-sectoral mobil-
ity across the ERA
tion
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ERA Action 3) The action is primarily supported via the Rectors' Permanent Confe-Advance towards rence¹⁰, as well as via the European University Association¹¹, which rethe reform of the presents national rectors' conferences and drives alignment with Euro-Assessment Sys- pean research assessment standards. Moreover, in 2023, Georgia tem for research, completed its assessment system reform by introducing cluster accreand ditation for higher education programmes in art, defence, and security, institutions to im- with no significant updates reported in 2024.¹²

ERA Action 4) The SRNSFG continues to act as a central institution for funding career Promote attractive development and research opportunities in the country. In 2023, a 30 sustainable percent increase in salaries of persons employed in scientific research research careers, units participating in Horizon Europe was implemented, which enhantalent ced the attractiveness of research careers.¹³ In addition, a significant circulation and in- increase in salaries has been recorded for teachers.¹⁴

ERA Action 5) As of 2024, all Georgian universities have adopted Gender Equality Promote gender Plans (GEPs), which was primarily driven thanks to the prerequisite for equality and foster participation in Horizon Europe.¹⁵ Moreover, following the Unified Nainclusiveness, tak- tional Strategy, a digital platform for career planning and promotion of ing note of the women in STEM was created, which resulted in an increase in the num-Liubliana declara- ber of women winners in the 2023 competitions of SRNSFG.¹⁶

ERA Action 6) Although no significant recent changes are observed, academic the freedom is laid out in the constitution.¹⁷

Deepening

ERA through protecting academic freedom in Europe

¹⁴ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, pp. 17 and 25, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

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<sup>15</sup> Source: Interview with Georgian delegate to the ERA Forum
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¹⁰ Available at https://rectorconference.ge/en

¹¹ Available at https://www.eua.eu

¹² Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 30, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

¹³ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 58, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

¹⁶ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 58,

https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx ¹⁷ Article 27 of the Constitutional Law of Georgia No 2071 of 23 March 2018 on Academic Freedom, available at https://matsne.gov.ge/en/document/view/30346?publication=36

ERA Action 7) GITA continues to actively engage universities, assessing scientists' Upgrade EU guid- needs and fostering industry cooperation.¹⁸ For example, with the partance for better nership of the Bank of Georgia and 500 Global, GITA aims to support knowledge valori- startups and thus advance the region's startup ecosystem.¹⁹ sation

the ERA

ERA Action 8) In its commitment to Action 8, Georgia has been continuing to develop Strengthen sus- and enhance the accessibility of research infrastructure. As of late tainability, acces- 2023, 40 projects were financed to modernise the material and technisibility and resili- cal base of scientific research units, with a total budget of 1.499.916 ence of research GEL.²⁰ For example, a modern and accessible educational centre in infrastructures in Khashuri was inaugurated in 2024.²¹

for on reciprocity

ERA Action 9) Georgia actively participates in Horizon Europe, as well as Erasmus+, Promote a positive which promotes international scientific partnerships. For example, as of environment and January 2025, Georgian researchers were participating in 58 Horizon level playing field Europe projects, receiving over €6.5 million in EU funding.²² Besides international European cooperation, Georgia has also partnered with the United Stacooperation based tes through initiatives like the University Capacity Building Programme, which strengthens research administration,²³ and the USAID Education for the Future Program, which enhances teacher training and educational science programmes.24

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) Similarly to Action 9, active participation in Horizon Europe programme Make EU R&I mis- is the main activity through which Action 10 is addressed in Georgia, sions (10.1) and supporting deeper integration into European research networks. partnerships (10.2) key contributors to the ERA

¹⁸ Source: Interview with Georgian delegate to the ERA Forum

¹⁹ "4-year partnership signed between Bank of Georgia, GITA and 500 Global", Bank of Georgia, available at https://bankofgeorgia.ge/en/about/news/details/62f109b612c31f18c08f4d84

²⁰ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 33, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

²¹ Ministry of Education, Science and Youth of Georgia (2024) "გიორგი ამილახვარმა ხაშურის მუნიციპალიტეტში ახალაშენებული კოლეჯი დაათვალიერა", https://mes.gov.ge/content.php?id=13863&lang=geo.

²² Source: Horizon Dashboard, https://dashboard.tech.ec.europa.eu/qs_digit_dashboard_mt/public/sense/app/1213b8cd-3ebe-4730-b0f5-fa4e326df2e2/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis

²³ Ministry of Education, Science and Youth of Georgia (2024) "აშშ-ის საელჩოს დაფინანსებით "უნივერსიტეტების შესაძლებლობების განვითარების პროგრამის" განხორციელება დაიწყო", https://mes.gov.ge/content.php?id=13698&lang=geo.

²⁴ Ministry of Education, Science and Youth of Georgia (2024) "აშშ-ის არიზონის სახელმწიფო უნივერსიტეტსა და საქართველოს 4 უმაღლეს საგანმანათლებლო დაწესებულებას შორის თანამშრომლობის მემორანდუმი გაფორმდა", https://mes.gov.ge/content.php?id=13677&lang=geo.

transformation

Accelerate systems

cation Area

ERA Action 11) In general, national energy transition efforts align with green transfor-An ERA for green mation goals under EU accession requirements. Georgia's action is led by its Long-Term Low-Emission Development Strategy (LT LEDS). adopted on 24 April 2023, which envisions achieving carbon neutrality by 2050.²⁵ The strategy prioritises energy efficiency and renewable energy development, such as hydropower and wind power generation.

ERA Action 12) Georgia's commitment to accelerating the green and digital transition the of industrial ecosystems is primarily driven by its GovTech strategy²⁶. green/digital tran- which emphasises a comprehensive approach to digital transformation. sition of Europe's Specific initiatives include a continuous expansion of the My.gov.ge key industrial eco- platform with digital services for individuals and businesses, and the development of Government Gateway infrastructure for data sharing across organisations.

ERA Action 13) Georgia is empowering higher education institutions through initiatives Empower Higher such as obtaining the American Engineering and Technology Accredi-Education Institu- tation Council (ABET) accreditation for undergraduate STEM protions to develop in grammes at major universities. In 2023, Georgian Technical Universiline with the ERA, ty's Biomedical Engineering programme and Ilia State University's and in synergy with Computer Engineering programme were accredited, marking a signifithe European Edu- cant step in aligning with international academic standards.²⁷ This builds on earlier progress, with Ivane Javakhishvili Tbilisi State Universitv's programmes in Electrical and Electronic Engineering and Computer Science first accredited in 2019.²⁸ Moreover, with the amendment to the law on higher education, e-learning in Georgian universities has been approved, contributing to the strengthening of higher education institutions.²⁹ Furthermore, in 2024, Georgia officially became a member of the Eurydice Network, which unites member and Erasmus+ associated countries aiming to improve their national education systems.30

²⁷ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 28, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

²⁵ United Nation Development Programme (2023) Georgia's Long-Term Low-Emission Development Strateqy, available at https://www.undp.org/sites/g/files/zskgke326/files/2023-07/undp-georgia-eu4climateleds-

summary-eng.pdf ²⁶ World Bank (2022) Georgia: Promoting Digital Transformation through GovTech : A Whole-of-Government Approach, available at https://thedocs.worldbank.org/en/doc/bd555a478d4a4a63acc0739084838b20-0350062022/original/GovTech-Case-Studies-Georgia-Promoting-Digital-Transformation-throughGovTech.pdf

²⁸ Ivane Javakhishvili Tbilisi State University (2019) "ABET აკრედიტაციის ექსპერტები თსუ-ში", https://tsu.ge/en/news/ABET-%E1%83%90%E1%83%99%E1%83%A0%E1%83%94%E1%83%93%E1%83%98%E1%83%A2%E1%83%

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[%]E1%83%94%E1%83%A5%E1%83%A1%E1%83%9E%E1%83%94%E1%83%A0%E1%83%A2%E1%83 %94%E1%83%91%E1%83%98-%E1%83%97%E1%83%A1%E1%83%A3-%E1%83%A8%E1%83%98

²⁹ Ministry of Education, Science and Youth of Georgia (2024) "First E-Learning Regulations Approved in Georgia's Education System", https://mes.gov.ge/content.php?id=13854&lang=eng

³⁰ Ministry of Education, Science and Youth of Georgia (2024), "საქართველო ევროპული ქსელის Eurydice Network-ის წევრი გახდა", https://mes.gov.ge/content.php?id=13752&lang=geo

ERA Action 14) Annual science festivals³¹ and events (for example, on World Science Brina Science Day)³² organised by the MESY bring researchers and citizens together to discuss science and innovations. In addition, open science platforms, closer to citizens led by the National Science Library, engage the public in research dissemination.³³ Moreover, following the Unified National Strategy, a digital platform for girls/women in STEM was created, which helps to encourage their interest in science.34

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) The national Horizon Europe office continuously supports Georgian sci-Improve EU-wide entists in joining international networks, enhancing their competitiveaccess to excel- ness and excellence.³⁵ In addition, in July 2024, the second Internalence tional Excellence School in Georgia was inaugurated, which plans to provide training for the academic staff and early career researchers.³⁶

ERA Action 17) A national representative for this ERA action oversees the Centre for Enhance the stra- International Education³⁷, which promotes capacity-building initiatives tegic capacity of through collaboration with European and international counterparts.³⁸ Europe's public re- This, in turn, enhances the strategic planning and resource allocation search-performing capacities of research-performing organisations. organisations

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

ERA Action 19) Georgia contributes to ERA Forum discussions and the ERA monitor-Establish an effi- ing processes, including assistance with the ERA Country Report. The cient and effective country also monitors the implementation of its Unified National Stratmonitoring egy, which aligns with ERA objectives, through an annual reporting pro-ERA cess.39 mechanism

³¹ Ministry of Education, Science and Youth of Georgia (2024) "საქართველოს რეგიონებში მეცნიერების ფესტივალი მიმდინარეობს", <u>https://mes.gov.ge/content.php?id=13868&lang=geo</u>

³² Shota Rustaveli National Science Foundation of Georgia (2024) "Event Dedicated to the World Science Day", https://rustaveli.org.ge/eng/siakhleebi/metsnierebis-saertashoriso-dghisadmi-midzghvnili-sazeimoghonisdzieba

³³ Source: Interview with Georgian delegate to the ERA Forum

³⁴ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 58, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx ³⁵ Source: Interview with Georgian delegate to the ERA Forum

³⁶ Ministry of Education, Science and Youth of Georgia (2024) "Nodar Papukashvili Opens Three-Day Event at the International Excellence School", https://mes.gov.ge/content.php?id=13811&lang=eng

³⁷ Available at https://cie.ge/

³⁸ Source: Interview with Georgian delegate to the ERA Forum

³⁹ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx

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 Georgia's performance in achieving the ERA objectives as defined in the Pact for R&I during the period 2022-2024. However, the discussed Georgia's progress is simultaneously driven by its participation in Horizon Europe, the ERA, and broader EU accession efforts (each interconnected within the wider European vision), which means that specific ERA's impact cannot be viewed in isolation.

In general, since the last reporting period, Georgia has continued its initiatives towards reaching ERA objectives, especially in gender equality, open science, and knowledge valorisation. However, limited human and financial resources,⁴⁰ ministerial changes, and the challenge of communicating ERA's relevance to national stakeholders remain barriers.⁴¹ To address these, Georgia has focused on targeted engagement through information events and plans to refine its commitments to ERA Actions in the next ERA Policy Agenda for 2025-2027, ensuring more sustainable implementation in the future.⁴²

ERA Priority 1 is addressed through Georgia's commitment to Actions 1 to 9. Open science (Action 1) is continuously promoted by the National Science Library and the MESY through annual science festivals and collaboration with universities, while ERA Dashboard Indicators show an increasing number of open-access research datasets (ERA Dashboard Indicator 7) and a high share of open-access publications (ERA Dashboard ndicator 6). Moreover, gender equality (Action 5) advanced significantly as all universities have adopted GEPs (thanks to the prerequisite for participation in Horizon Europe), and a positive situation is also visible in related indicators (ERA Dashboard Indicators 13, 14). Further, academic freedom (Action 6) remains constitutionally adressed with Georgia securing a score of 0.801 on the Academic Freedom Index 2023 (ERA Dashboard Indicator 27). Despite this, recent political events, including the government's decision to pause EU accession efforts⁴³, may pose an obstacle to international funding and collaboration in the field of higher education and research in Georgia. However, the major funding schemes such as Erasmus+ and Horizon Europe remain available to Georgian scientists. Lastly, knowledge valorisation (Action 7) has been a focus of GITA's engagement with universities and industry, while the share of public-private co-publications in Georgia in 2023 stood at an EU-27 average of 0.12 percent (ERA Dashboard Indicator 19). However, the indicator data shows a slight drop in 2023 compared to 2022, whereas the patent-related indicators remain below the EU-27 average (ERA Dashboard Indicators 21, 25). This suggests that scepticism among researchers remains a challenge to valorising knowledge.44

As for other actions under ERA Priority 1, there is limited data in ERA Dashboard Indicators to reflect the progress, yet various investments and initiatives are present in the country. For

⁴⁰ Ministry of Education, Science and Youth of Georgia (2024) 2023 Monitoring Report of the 2022-2024 Action Plan of the Unified National Strategy of Education and Science for 2022-2030, p. 60, <u>https://mes.gov.ge/uploads/MoESY%202023%20-%20Monitoring%20Report.docx;</u> European Commission (2024) ERA Country Report 2023: Georgia, <u>https://european-research-area.ec.europa.eu/sites/de-</u>

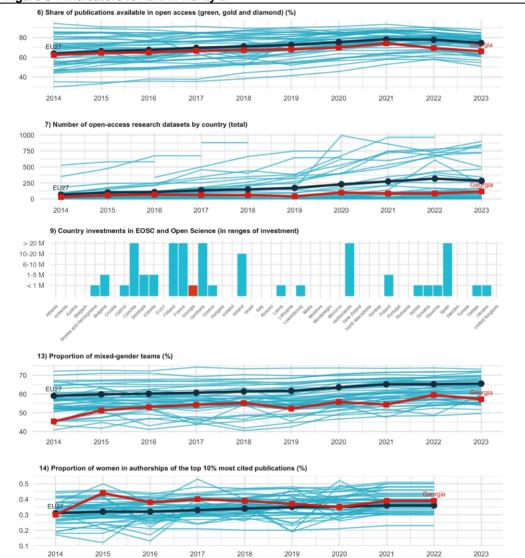
tault/files/documents/2024-05/ERA%20Country%20Report%202023%20Georgia.pdf ⁴¹ Source: Interview with Georgian delegate to the ERA Forum

⁴² Source: Interview with Georgian delegate to the ERA Forum

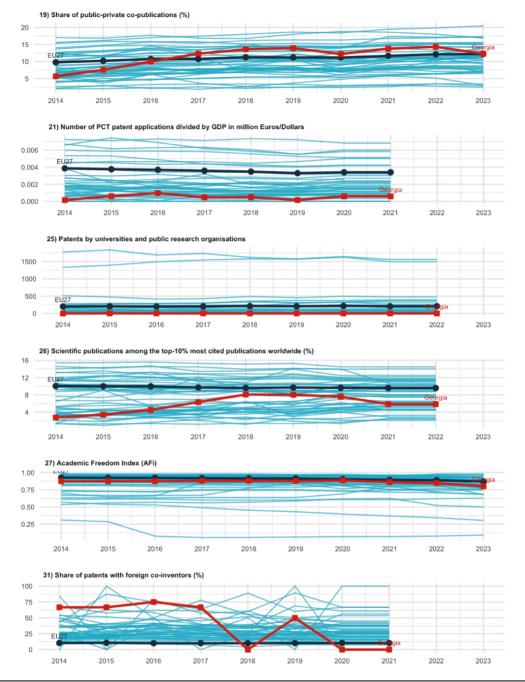
⁴³ "Joint statement on the Georgian government's decision to pause its accession to the European Union", European Parliament, <u>https://www.europarl.europa.eu/delegations/en/joint-statement-on-the-georgian-gov-ernme/product-details/20241129DPU39689</u>

⁴⁴ Source: Interview with Georgian delegate to the ERA Forum

example, the National Intellectual Property Centre supports the copyright and data frameworks (Action 2), while the Rectors' Permanent Conference contributes to the development of research assessment (Action 3). Moreover, in the past year, Georgia has particularly focused on making research careers more attractive (Action 4) by increasing salaries and providing SRNSFG's support to researchers. Lastly, the country has been also actively building and modernising its research infrastructure (Action 8), and prioritising international cooperation (Action 9) through Horizon Europe and other collaborative frameworks.



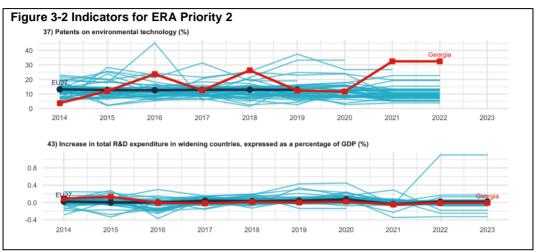




Source: Annex 1

ERA Priority 2 is addressed through a range of initiatives related to **Actions 10-14**, such as Long-Term Low-Emission Development Strategy (**Action 11**), GovTech strategy (**Action 12**), and Unified National Strategy(**Action 13**). Moreover, **Action 10** is addressed through active Georgian participation in Horizon Europe, while citizen engagement (**Action 14**) has been promoted through initiatives like annual science festivals. While these efforts are advancing, a lack of ERA Dashboard indicators with available data for Georgia limits progress tracking

for this ERA Priority. Nevertheless, ERA Dashboard Indicator 37 shows significant progress in the share of patents on environmental technology, with percentages of around 30 percent in 2021-2022, which positively stands out compared to other EU Member States or Associated Countries. However, as revealed by ERA Dashboard Indicator 43, a 0.01 percent decrease in total R&D expenditure as a percentage of GDP was recorded in 2023, which indicates a presence of some financial constraints for R&D.



Source: see Annex 1

ERA Priority 3 is addressed through Georgia's commitment to **Actions 16 and 17**. The national Horizon Europe office actively supports Georgian scientists in joining international networks, enhancing their competitiveness and excellence (**Action 16**). Whereas the Centre for International Education promotes capacity-building initiatives and international collaboration to aid public research-performing organisations (**Action 17**). While action is undertaken, the lack of ERA Dashboard indicators with available data for Georgia limits the ability to measure the progress quantitatively.

ERA Priority 4 is addressed through Georgia's commitment to **Action 19**. Georgia actively monitors the implementation of its national strategies and contributes to the ERA monitoring process (**Action 19**). However, the lack of ERA Dashboard indicators with available data for Georgia limits the ability to measure the ERA progress quantitatively.

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

This chapter presents a qualitative assessment of the ERA Action commitments of Georgia and their effects on identified national R&I priorities, including the quantitative performance in the ERA Dashboard.

Overall, the national R&I system in Georgia is **well aligned with ERA priorities**. Agencies dedicated to the implementation of ERA Actions are committed to ERA, and the general policy direction is in line with the European vision.⁴⁵ One of the key Georgia's focuses now is to ensure that various national stakeholders are well-informed about ERA and its connection to

⁴⁵ Source: Interview with Georgian delegate to the ERA Forum

Horizon Europe and Georgian priorities. For this, Georgia has already held several information events to highlight how ERA actions fit within the national context, reflecting ongoing efforts to strengthen alignment.⁴⁶ However, recent political developments, specifically the government's decision to pause its EU accession efforts⁴⁷, highlight the need to closely monitor whether the ERA Actions will have lasting effects on Georgia's R&I system.

ERA Priority 1: Georgia's implementation of **ERA Actions 1-9** demonstrates a strong alignment with national R&I priorities, with ERA Policy Agenda particularly influencing the importance of open science (**Action 1**), research assessment (**Action 3**), and the promotion of research careers (**Action 4**) on the national agenda.⁴⁸ These areas might not have been as prioritised without commitment to ERA. At the same time, academic freedom (**Action 6**) was already adressed by Georgia's constitution⁴⁹ prior to the ERA Policy Agenda. Nevertheless, as stated above, recent political developments introduce risks and uncertainties that may impact international collaboration in higher education and research beyond available Erasmus+ and Horizon Europe programmes.

ERA Priority 2: Georgia's commitment to **ERA Actions 10-14** reflects the country's focus on green and digital transformation and public engagement. These actions are underpinned by key national strategies, such as Long-Term Low-Emission Development Strategy (**Action 11**), GovTech strategy (**Action 12**), and Unified National Strategy(**Action 13**). Many aspects of ERA Priority 2, such as green and digital transformation (**Actions 11 and 12**), were already being implemented in Georgia through EU accession commitments, while initiatives like bringing science closer to citizens in Georgia (**Action 14**) predate the current ERA Policy Agenda.⁵⁰ However, ERA has amplified the visibility of green and digital transformation within academia and, for example, influenced the way public engagement and science festivals are organised in the country.⁵¹ This shows how ERA serves to complement and enhance Georgia's existing strategies in these areas.

ERA Priority 3: Georgia's implementation of **ERA Actions 16 and 17** strengthens its commitment to inclusiveness and institutional excellence. Access to excellence (**Action 16**) is promoted through active Georgian participation in Horizon Europe, while research-performing organisations (**Action 17**) benefit from capacity-building initiatives, such as those led by the Centre for International Education. These efforts ensure that Georgian institutions can collaborate effectively with European counterparts and achieve higher levels of research excellence, fostering deeper integration into the ERA.

ERA Priority 4: Georgia's alignment with **ERA Action 19** highlights its commitment to monitoring and evaluating R&I policies. ERA monitoring (**Action 19**) is supported through contributions to ERA reports and participation in the ERA Forum.⁵² Overall, although recent political developments introduce some uncertainties, the national R&I system remains aligned with ERA objectives and the broader European framework, and Georgia intends to submit commitments under the new ERA Policy Agenda.

⁴⁶ Source: Interview with Georgian delegate to the ERA Forum

⁴⁷ "Joint statement on the Georgian government's decision to pause its accession to the European Union", European Parliament, <u>https://www.europarl.europa.eu/delegations/en/joint-statement-on-the-georgian-gov-ernme/product-details/20241129DPU39689</u>

⁴⁸ Source: Interview with Georgian delegate to the ERA Forum

⁴⁹ Article 27 of the Constitutional Law of Georgia No 2071 of 23 March 2018 on Academic Freedom, available at <u>https://matsne.gov.ge/en/document/view/30346?publication=36</u>

⁵⁰ Source: Interview with Georgian delegate to the ERA Forum

⁵¹ Source: Interview with Georgian delegate to the ERA Forum

⁵² Source: Interview with Georgian delegate to the ERA Forum

5. Conclusions

Georgia demonstrates strong engagement with the ERA, committing to all ERA Actions across all Priority Areas. As highlighted in Chapter 1, this commitment is guided by key national strategies such as the Unified National Strategy of Education and Science (2022-2030), the Long-Term Low-Emission Development Strategy, and the GovTech strategy, which align national R&I system with ERA objectives and the broader European vision.

As discussed in Chapter 2, progress has been notable in areas such as open science, gender equality, and knowledge valorisation, where ERA has played an important role in raising these priorities on the national agenda. However, some challenges persist, such as limited human and financial resources, while the lack of ERA Dashboard Indicators with available data for Georgia limits the ability to measure progress quantitatively (see Chapter 3). Despite this, as outlined in Chapter 4, current Georgia's actions and ambition to cover all ERA Priorities show its commitment to aligning with ERA while addressing national constraints. Recent political developments, including the pause in EU accession efforts, introduce uncertainties regarding Georgia's future engagement, which requires continued attention. Nevertheless, Georgia has expressed its intention to submit commitments under the new ERA Policy Agenda.

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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).

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 per- centage of GDP	EC/European Innovation Procure- ment 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 per- formance (%)	Eurostat, https://doi.org/10.2908/TSC00005

Table 1 Structural Key Indicators:

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 Sci- ence (in ranges of investment)	EOSC Observatory
10	Share of national public R&D expenditure com- mitted 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 aca- demic 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 per- centage 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 or- ganisations	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 part- ners per 1,000 researchers in the public sector	EC_ScienceMetrix and Euros- tat/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 sug- gested 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 re- search institutions	Eurostat CIS	
39	Enterprises that purchased or licensed-in pa- tents or other IPRs from public research organi- sations, universities or higher education institu- tions	Eurostat CIS	

40	Direct government support and indirect govern- ment 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 per- sonnel (in FTEs)	Cordis - Eurostat
46	Summary Innovation Index (Widening coun- tries)	EC_EIS
47	Share of enterprises using public funds from dif- ferent governance levels (local or regional, na- tional, 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 coun- try 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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