

The Cyprus R&I Ecosystem: a Strategy Deep Dive & Program Rollout

Audience: Cyprus Universities Rector
Conference

July 18th 2024, Nicosia

Mr. Demetris Skourides

CHIEF SCIENTIST / CTO FOR RESEARCH, INNOVATION AND TECHNOLOGY



CYPRUS VISION 2035

To be one of the world's best countries to live, work and do business in



**A powerhouse of innovation,
supported by digitalization**

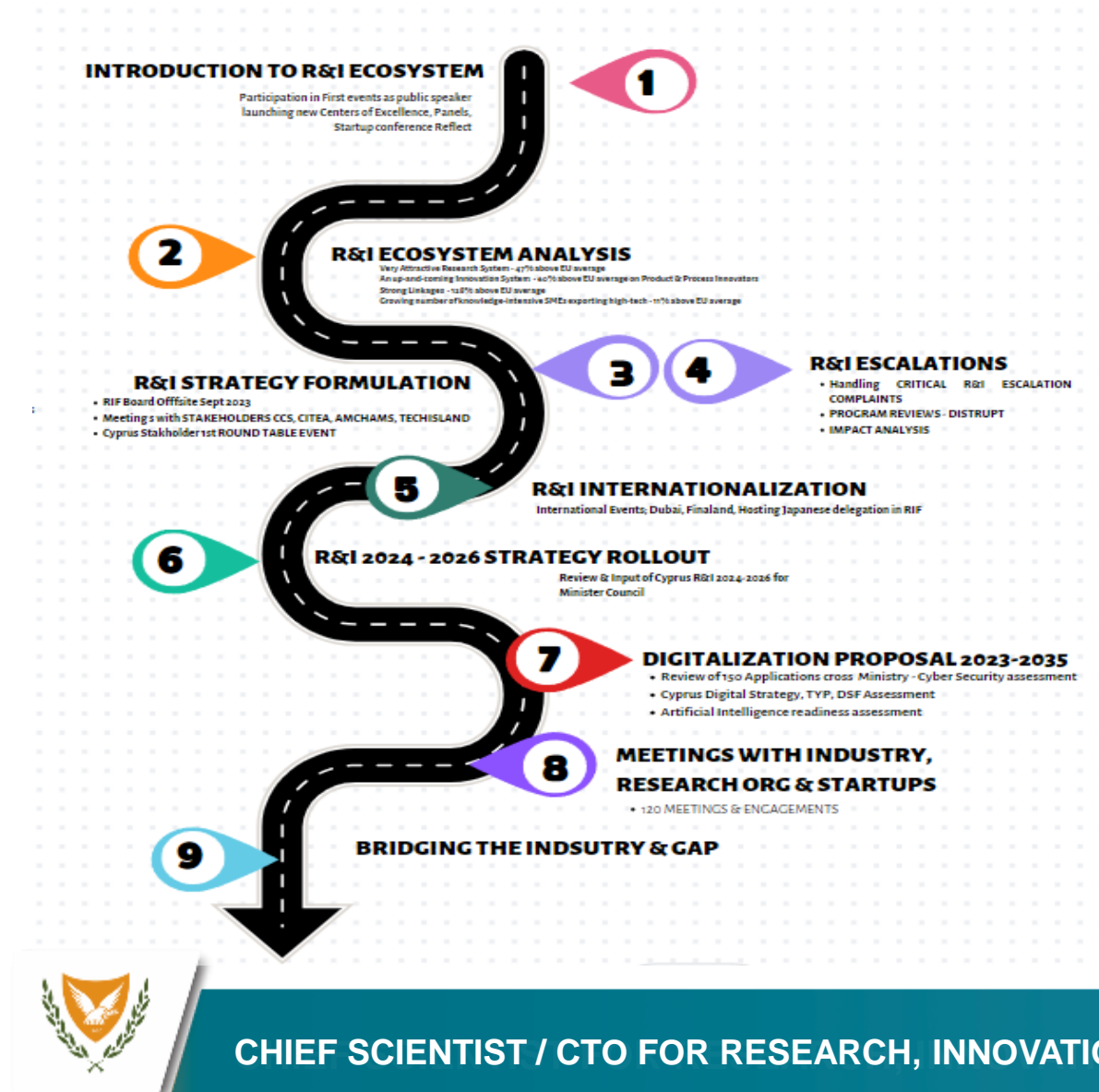
Continuous reforms, support and incentives



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Introduction To R&I Ecosystem

September to December 2023



8

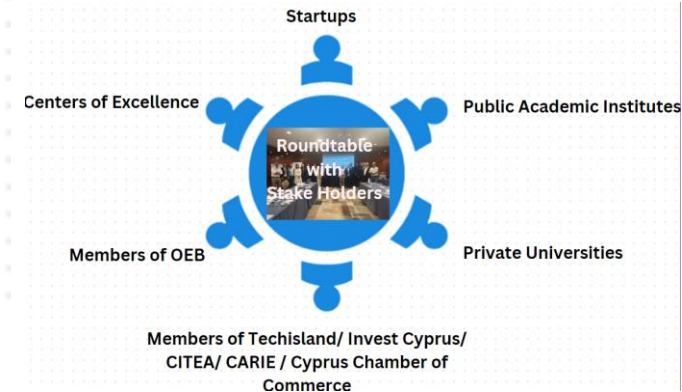
MEETINGS WITH INDUSTRY, RESEARCH ORG & STARTUPS

• 120 MEETINGS & ENGAGEMENTS

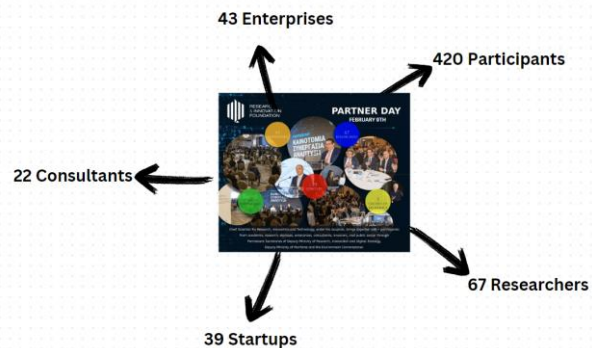
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BRIDGING THE INDUSTRY & GAP

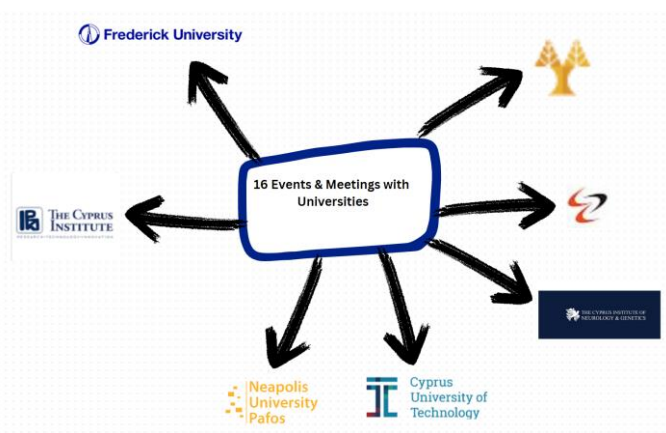
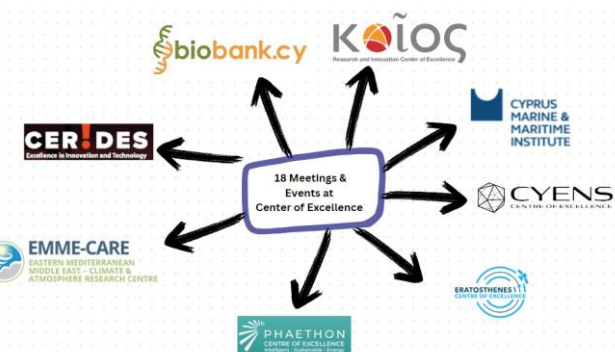
R&D & Innovation Stakeholder Round table



Partner Industry Innovation Day



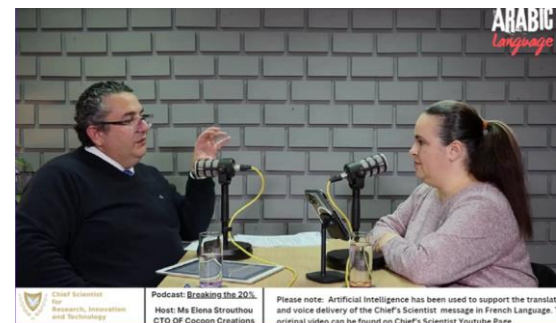
Artificial Intelligence Cyprus Ecosystem
Active Engagements with 35+ orgs, companies, units



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Chief's Meetings, Events & Seminars

- More than 620 Meetings, Events and Seminars
- 80+ Meetings with Governing/Semi Governing Bodies
- 100+ Meetings with Innovation Companies
- 16 Meetings AT Center Of Excellence
- 20+ Meetings with Ambassadors in Cyprus and Representatives
- 2 Virtual meetings presenting Cyprus R&D and Innovation to 30+ CY ambassadors worldwide
- 18 Meetings with Universities
- Global Presence Promoting Cyprus (Finland, Barcelona, Saudi Arabia, Japan, Dubai)
- 1st Roundtable with Stakeholders October 26th(Public Academic Institutes represented by Prof Michalis Sirivianos, Private Universities represented by Prof Michalis Kommodromos, Members of Techisland represented by Marios Giorgoudes and Christos Ounoufriou, Invest Cyprus represented by Marios Tannousis, CITEA represented by Dimitris Nissiotis, Members of OEB represented by Michalis Grigoriou, CARIE represented by Chairman Dr. Tasos Kounnoudes, and Dr. Alexandros Michaelides, Amchams represented by Giorgchos Georgiou and Antonis Skoullas, Cyprus chamber of commerce by Stalo demosthenous, CMMI represented by Zaharias Siokouros, Cyprus Institute represented by Prof Stavros Mallas, Startups represented by Michael Strouthos, other industry enterprises by Dr. Christakis Serghides from Medochemie and Panos Protopapas from Elyse, Deputy Ministry of Digital Policy and Innovation was represented by Christos Aspris



2M+ Views, Share and Likes on Social Media



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Chief Scientist Focus

1. RIF BOARD STRATEGY

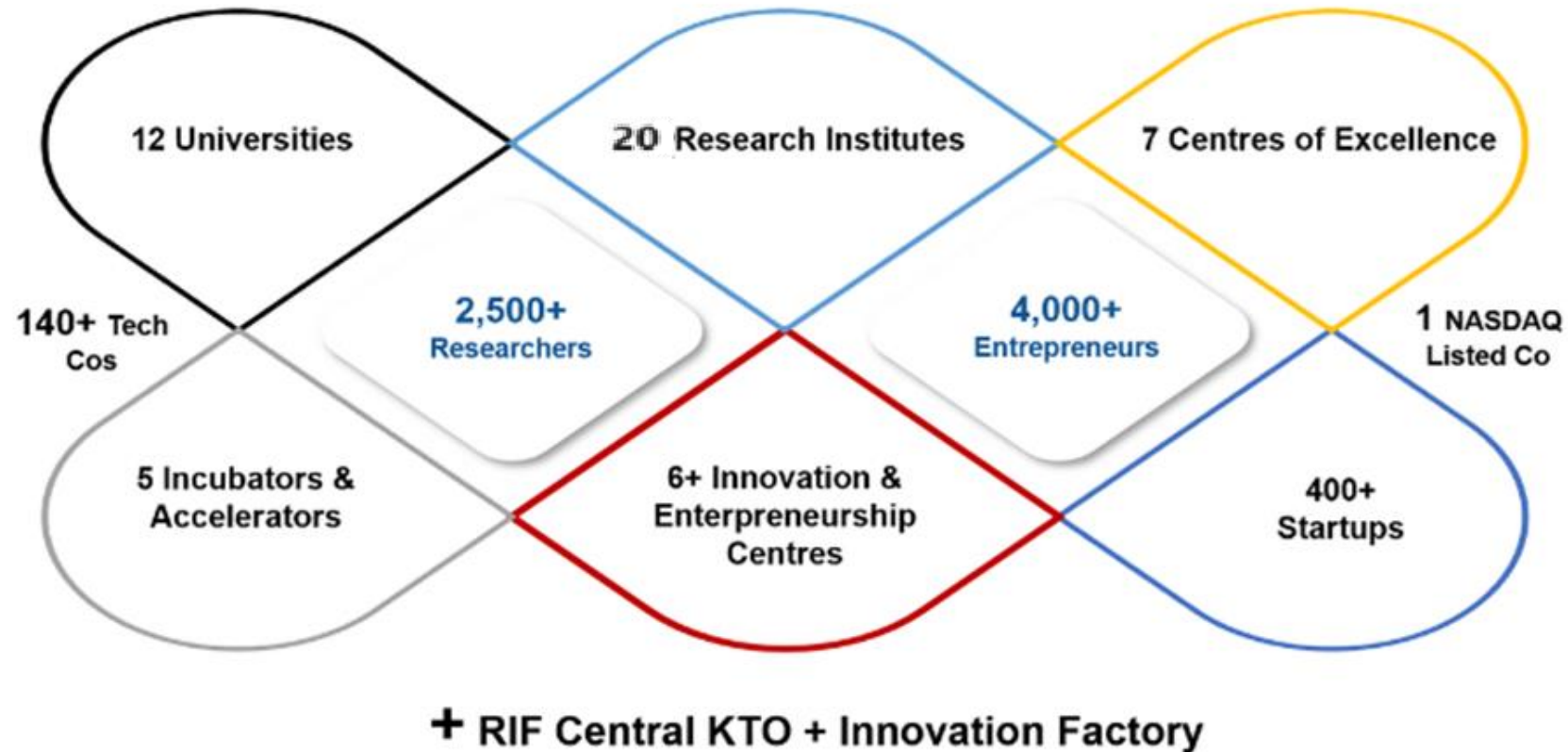
New Board Strategy aligned to President's Vision and Guidance



- Streamline & Simplify
- Improve Quality
- Enhance Customer Experience
- Evidence based programs
- Transparency
- Maximize Impact



Chief Scientist Focus



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Chief Scientist Focus

2. RESEARCH ECOSYSTEM

Strong Focus on Basic Research, Applied Research, Limited Commercialization!
To Scale Innovation more focus is required on IP, Patents, Private-Public & Industry partnerships



- Actively working to Map the R&I ecosystem



3. INNOVATION ECOSYSTEM

The Cypriot Innovation Ecosystem is ranked 10th in EU however requires structures to Magnify and Grow as there exists limited commercialization focus
Weakness: Medium to large orgs are not pursuing innovation as a means to increase competitiveness and country's posture will decrease



4. STARTUP ECOSYSTEM

- 400+ startups
- 2 Unicorn
- 2 Soonicorns
- Startup Meetups & Hackathons creating momentum
- Focus required on Commercialization & Attracting VCs



5. PERFORMANCE R&I

Cyprus is a strong Innovator standing at no.10 across Europe however requires strong monitoring metrics on money spend and re-enforcement and utilization of Co-innovation development, Sponsored research, Investment in R&D (PS+Private), ERC



Chief Scientist Focus

6. COE PERFORMANCE

Strong research and particularly Applied research. Requires Focus on Product innovation and Commercialization, Opening up Infrastructure to Tech innovators Actively Working on Connecting CoE internationally. Examples; Koios, Phaethon



7. EDUCATION & CULTURE

Strong, vibrant tertiary education system growing requiring significant re-enforcement in STEM across High schools; Robotics, AI, Math, Biology, Science to Future Proof CY;



8. THOUGHT LEADERSHIP

Actively championing the role of Digital Leader, Evangelizing Digital leadership, Adoption, Transformation, and how the Future looks like. 400+ engagements via social media to position Cyprus as a leading Hub in Technology, Research, Innovation



9. EXECUTION

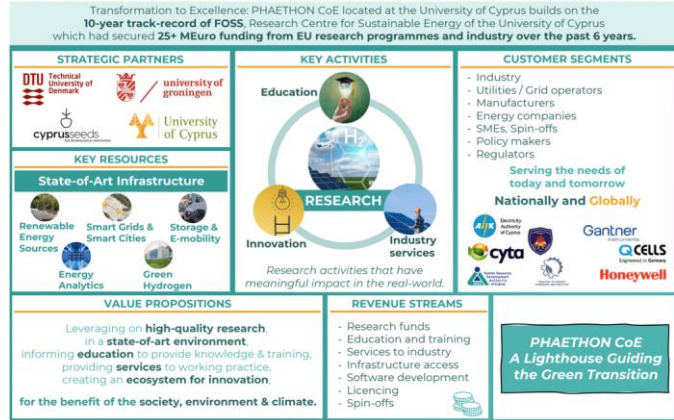
Support Investment in Basic Research, Creation of Syner Building a fast paced Innovation & Technology culture with focus on execution, GTM, focused on outcomes & Impact



KIOS Research Infrastructures



PHAETHON CoE for Intelligent, Efficient & Sustainable Energy Solutions



Paving the way for sustainability and always serving the society!

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DCO Secretary General visits KOIOS

Japan Amabassador & President of JST visit Phaethon



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Cyprus as an Attractive R&I Ecosystem

Attractiveness of Cyprus for Startups

10
27

European Innovation Scoreboard 2023
Strong Innovator 2nd year in a row

28
135

Global Innovation Index 2023
2nd in the Northern Africa and Western Asia (NAWA) region

11
95

Greenfield FDI Index 2023
One of top overachievers – 4th in Emerging Europe and 11th globally

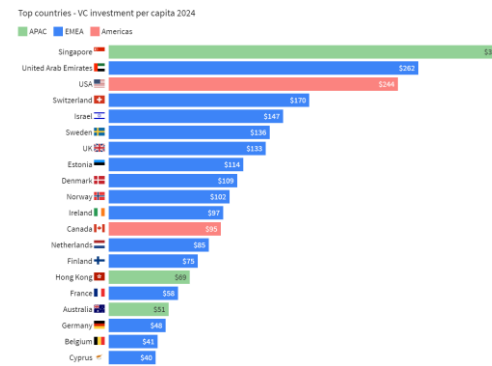
Cyprus Strengths in European Innovation Scoreboard

- Public-private co-publications
- International scientific co-publications
- Innovative SMEs collaborating with others
- Trademark applications
- Population with tertiary education

Attractiveness of Cyprus for Startups

- 2.5% IP Tax
- Startup Visa
- Digital Nomad Visa
- Ranked in The top 3 countries in the EU showing a majority of adult population being educated in third level studies with 58.3% of population
- Regular Tech Meetups & Events
 - Google, AWS groups
 - Tech Associations; CITEA, Techisland, CCS
 - Women in Tech

Top 10% in
VC per Capita



R&I Strategy Focus 2024-2026

Focus:

- Digital Technologies
- Advanced materials
- Dual Use Technologies
- Agrifood
- Maritime & Shipping
- Renewable Energy

Emerging:

- Space

Enablers:

- Health
- Environment

- Cyprus Ranks in Top 5 adoption of European Horizon funds for Research
- 38% of Researchers are Female
- Highest % of Teaming Centers of Excellence in Europe; 7 Centers



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erc Cyprus' ERC grantees – 18 in total

Source: [ERC Dashboard](#)

- Antonis Kirimizis, University of Cyprus - Starting Grant (2011)
- Artemis Georgiou, University of Cyprus – Starting Grant (2020)
- Christoforos Pissarides, University of Cyprus – Advanced Grant (2013)
- Chrysanthos Chrysanthou, University of Cyprus, Starting Grant (2023)
- Elena Andreou, University of Cyprus, Starting Grant (2008) & Proof of Concept (2014)
- Fotios Mpekris, University of Cyprus, Starting Grant (2023)
- Ioannis Krikidis, University of Cyprus, Consolidator Grant (2019) & Proof of Concept (2023)
- Iosif Kovras, University of Cyprus, Consolidator Grant (2023)
- Johannes Lelieveld, The Cyprus Institute, Advanced Grant (2009)
- Margarita Chli, University of Cyprus, Consolidator Grant (2023)
- Marios Avraamides, University of Cyprus, Starting Grant (2008) & Proof of Concept (2015)
- Marios Polycarpou, University of Cyprus, Advanced Grant (2012), Synergy Grant (2021), 2 Proof of Concept (2014 & 2017)
- Philippos Patsalis, NIPD Genetics Public Company Ltd, Advanced Grants (2013) & 2 Proof of Concept (2016 & 2020)
- Stelios Timotheou, University of Cyprus, Consolidator Grant (2023)
- Stylianos (Stelios) Choulis, Cyprus University of Technology, Consolidator Grant (2015)
- Themistoklis Charalambous, University of Cyprus, Consolidator Grant (2022)
- Tryantafyllos Stylianopoulos, University of Cyprus, Starting Grant (2014), Consolidator Grant (2020), Advanced Grant (2023), 3 Proof of Concept (2019 & 2022)
- Tuija Jokinen, The Cyprus Institute, Starting Grant (2023)

Cyprus as an Attractive R&I Ecosystem



- VC & Angel Investors
- EU Horizon Funding
- Investors
- Government



- Ranked in The top 3 countries in the EU showing a majority of adult population being educated in third level studies with 58.3% of population
- 12 Universities
- 20 Research Organizations
- 400+ Tech Innovation companies including Market Innovators, Followers in various segments



- National Funding Innovation Foundation
 - Competitive funding
 - MoU
- Accelerators & Incubators
- Centers of Excellence
- Meetups (Google, AWS, CIO, CSO, PMO)
- Regional Events:
 - Slush - November
 - Reflect - May
 - Bash - July
 - ERN - Cyprus
 - Partner Innovation Day
 - Mobile World Congress – Barcelona
 - Gitex – Dubai, UAE



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Main Areas Supporting Cyprus Strategy 2022-2026



**Focus
Areas**

Digital Technologies

Advanced materials

Dual Use Technologies

Agrifood

Maritime & Shipping

Renewable Energy



**Emerging
Ecosystems**

Space



Enablers

Health

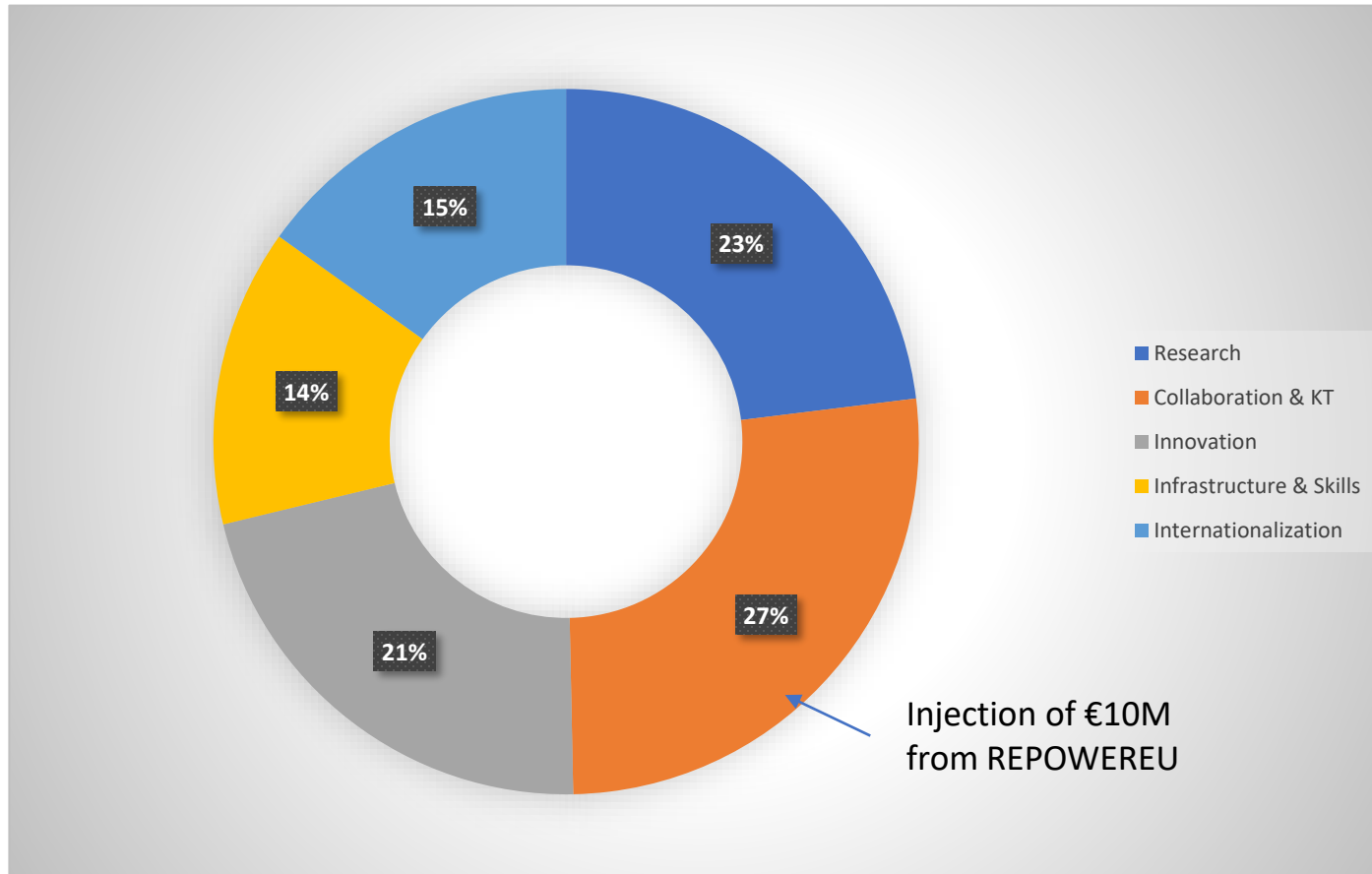
Environment



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Policy Mix – Funding Allocation: €177.25 Announced Budget

Programming Period: 2021-2027



Initial Budget 2021-2027: €150M
Target Operating Budget: €177.25M
→ 34% Increase from 2014-2020

RIF Enhanced Operational Efficiency

Time To Pay (Days)



Time To Contract (Months)



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Research

Programming Period: 2021-2027



Call	Announced Budget to Date	Planned Budget till 2027	Commentary
Excellence Hub	€ 22M	-	Includes funding opportunities for Basic/Fundamental Research 66% Increase compared to 2014-2020
Vision ERC/2 nd Opp/B2H	€ 7.6M	-	
Post Doc	€ 2.5M	€ 2.5M (2025)	
PHD in Industry	€ 2.75M	€ 1M (2025)	
Proof Of Concept	€ 1.9M	€ 0.6M (2025)	
TOTAL	€ 36.75 M	€ 4.1M	

2021 Excellence Hubs Call: 10M awarded

2024 Excellence Hubs Call: 12M / proposals under evaluation (58% publicly funded , 35% privately funded RO)

Excellence Hubs Linkages: 109 Public – Private Collabs (29% vs. 21% in 2021 Call)



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Research that leads to Internationalization

Programming Period: 2021-2027

Program	Budget	Description	Call Status
Vision ERC	€ 1M	National Funding to enhance research excellence that leads to submission of proposal to ERC	Open
Bridge 2 Horizon	€ 6M	National Funding that leads to enhance excellence and impact in Pillar II of Horizon Europe	New Calls tba
ERC 2 ND Opportunity	€ 0.6M	National Funding for excellent projects not funded by the ERC due to lack of EC budget. RIF funds them to improve proposal and resubmit	Open
ERC Fellowship	€ 0.2M	National Funding up to 50k to work with ERC Grantee (Mobility Scheme)	Open
TOTAL	€ 7.8M		

Announced in June
10 Proposal submitted already
RIF to increase budget

40 Project to be funded

Resubmission improved chances of securing funding (Source: ERC)

4-8 Researchers to work with ERC Grantees abroad depending on time period



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Collaboration & Knowledge Transfer

Programming Period: 2021-2027



Call	Announced Budget to Date	Planned Budget till 2027
Co-Develop	€ 23.4M	€ 6M (2024)
Research In Enterprise	€ 12M	€ 3M (2025)
Dual Use Tech	€ 2.7M	-
TOTAL	€ 38.2M	€ 9M

Thematic Area	Announced Budget to Date	Planned Budget till 2027
ICT	3 Million	1.2 Million
Green Transition	6 Million	
Energy	6 Million	
Shipping	2.4 Million	
Agrifood	2.4 Million	1.2 Million
Health	3.6 Million	1.2 Million
Advanced Materials	-	1.2 Million
Environment	-	1.2 Million
Total	23.4 Million	6 Million



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Innovation

Programming Period: 2021-2027



Call	Announced Budget to Date	Planned Budget till 2027
Pre-Seed	€ 2.2M	€ 2.2M (2024 & 2025)
Seed	€ 6M	€ 4M (2025)
Innovate	€ 6M	€ 6.2M (2024)
Disrupt	€ 10M	-
Commercial Proof of Concept	€ 1.6M	-
TOTAL	€ 25.8M	€ 12.4M



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Infrastructures & Skills

Programming Period: 2021-2027



Call	Announced Budget to Date	Planned Budget till 2027
Infrastructure	€ 17.5M	-
New Product Development	€ 0.9M	-
Innovation Vouchers	€ 0.6M	-
Classify labs	€ 0.4M	-
Support Structure	€ 0.3M	€ 0.3M
TOTAL	€ 23.9M	€ 0.3M



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Internationalization

Programming Period: 2021-2027

EU Partnerships – € 18.6M

EU Partnerships	R&I Action Type
Key Digital Technologies	Research & Innovation
Clean Energy Transition	Research & Innovation
Driving Urban Transition	Research & Innovation
Sustainable Blue Development	Research & Innovation
Agroecology	Research & Innovation
Rare Diseases	Research & Innovation
Eurostars/ Innovative SMEs	Innovation
Prima	Research & Innovation

Bilateral Agreements – € 4.2M

Countries	Budget	R&I Action Type
Israel MOST	€ 0.9M	Fundamental & Applied
Israel IIA	€ 0.9M	Innovation
Greece	€ 2M	Innovation
Japan/EU	€ 0.4M	Research & Innovation

Strengthening Participation in Horizon Europe – € 4M

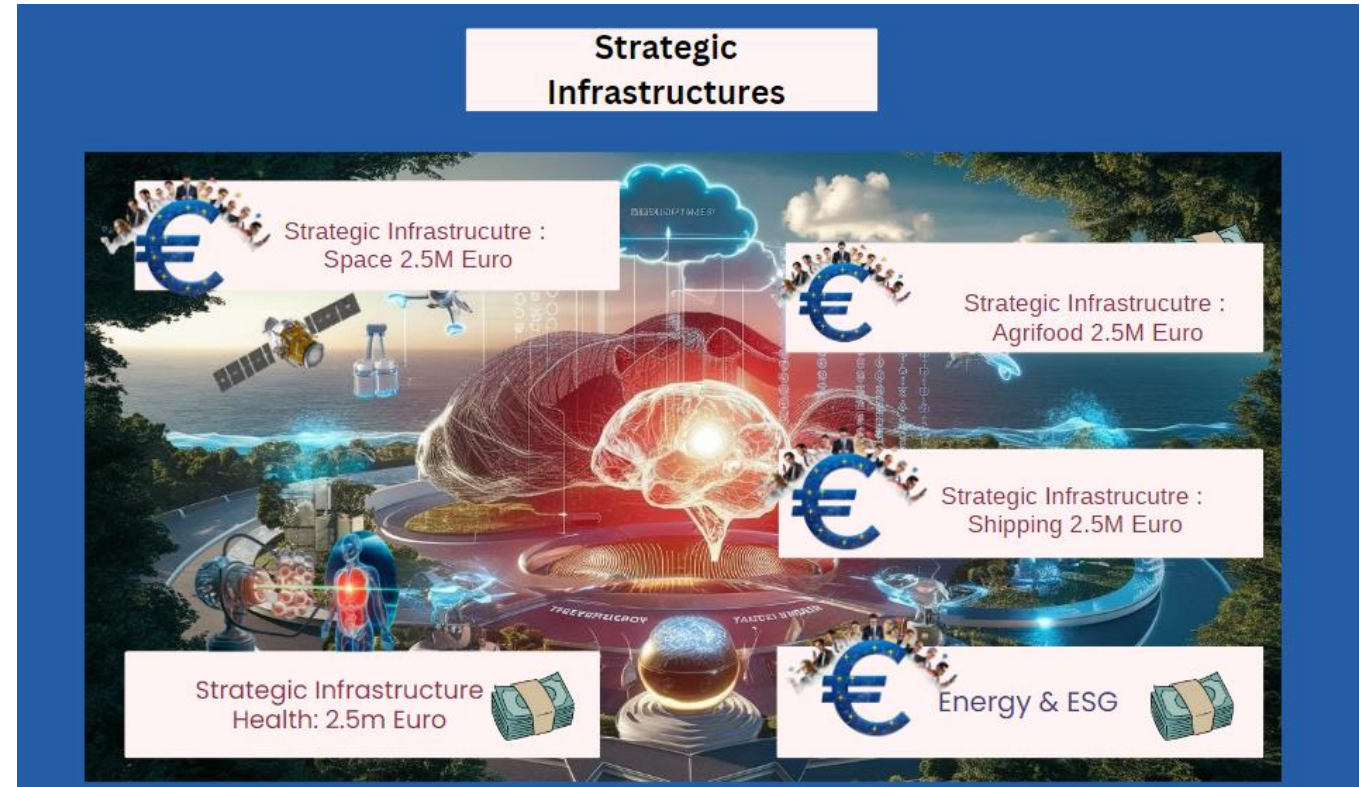
Call	Budget	R&I Action Type
MSCA 2 nd Opp	€ 2.5M	Fundamental & Applied
EIC 2 nd Opp	€ 1.5M	Innovation



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Participation in 2022 Infrastructure Projects

- **Total: 14 Projects**
- Cyprus University of Technology: 9
- University of Cyprus: 7
- Frederick University: 4
- University of Nicosia: 1



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Going Forward – Key Simplifications

- ✓ New Rules of Participation from 2025 with further simplifications
- ✓ New Grants Managements System to replace IRIS (tender procedure ongoing)

Main Simplifications Planned (under revision with competent authorities):

Simplification	Description
Wages + 40%	Extend the use of this method in more programmes. The RIF audits only the salaries of staff and awards 40% of audited salary cost for all other expenses, no questions asked by the RIF.
Unit Rates	Use of specific salary rates depending on qualifications and experience of R&I staff, based on market rates and adjusted biannually.
Lumpsum	Grants awarded on a lumpsum basis subject to successful completion of deliverables described in approved proposal. Shift audits from financial to technical/scientific. All or nothing principle for deliverables.
Budget Amendments	Simplifications of budget amendment procedures for projects audited on full-audit basis.



Thank you!

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Large Scale Infrastructures contracted

COLLABORATING PARTNERS	SHORT DESCRIPTION	PROJECT BUDGET
Cyprus Space Exploration Organisation Space Systems Solutions (S3) Ltd The Cyprus Institute of Neurology and Genetics University of Cyprus CYENS ARETAEIO IATRIKO KENTRO LTD.	The project proposes the establishment of the Cyprus Space Research and Innovation Centre (C-SpaRC), a state-of-the-art infrastructure for rapid prototyping, production, integration, space testing, and space qualifications	2,499,807.25
CMMI CYPRUS MARINE AND MARITIME INSTITUTE Cyprus University of Technology Columbia Shipmanagement Ltd M.M. MAKRONISOS MARINA LTD Electi Consulting Ltd A.T. Delevant Business Solutions Ltd Marinefields Holdings Limited CYPRUS SHIPPING ASSOCIATION Cyprus Ports Authority	To create a new research infrastructure that will stimulate synergies and provide the means for the development and uptake of maritime digitalization technologies that will improve safety, security, and efficiency for the economic and environmental sustainability of Shipping - Marine Transport activities	2,499,320.00
LINAC-PET SCAN OPCO LTD University of Cyprus The Cyprus Institute European University - Cyprus Ltd Dcentric Health Ltd ClinBAY Ltd The Cyprus University of Technology	Agora 3.0 will create a one-stop-shop infrastructure to foster innovation in the field of applied technological solutions for the healthcare sector. It connects researchers and engineers with a healthcare provider.	1,811,077.00
Frederick Research Center CLOUDWATER LTD Ministry of Agriculture, Rural Development and Environment Nicosia Development Agency	The primary goal is to establish a Cyprus Meteorological cluster (CyMETEO) to promote scientific excellence in the field of operational weather prediction and meteorology in Cyprus.	1,508,440.00
University of Cyprus Ministry of Agriculture, Rural Development and Environment Frederick Research Centre Cyprus University of Technology ATLANTIS Perivallon kai Kainotomia LIMITED Alion Vegetables & Fruits Co Ltd CY.R.I.C CYPRUS RESEARCH AND INNOVATION CENTER LTD	A phenotyping facility in Cyprus would enable the evaluation of plant cultivars that are best suited for local environmental conditions, provide a tool for plant breeders to select improved crop varieties, enable the testing of specific agricultural chemicals, accelerate research and development in plant and environmental research, and serve as a platform for building additional smart agricultural technologies	2,217,658.00

Note: Chief Scientist & Chairman of RIF will be reviewing the progress status of projects in adhoc basis quarterly in an effort to maximize impact



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Small Scale Infrastructures contracted

COLLABORATING PARTNERS	SHORT DESCRIPTION	PROJECT BUDGET
CYPRUS UNIVERSITY OF TECHNOLOGY UNIVERSITY OF CYPRUS Ministry of Transport Communication & Works InfraLabs Ltd	The creation of a knowledge centre equipped with state-of-the-art sensors and platforms, like vertical takeoff and landing (VTOL) drones, RGB, multi- and hyperspectral cameras, LiDAR systems, terrestrial laser scanner, soil moisture, ultrasonic, inclinometers and wireless strain sensors as well as multibeam echosounder, that can promote research excellence about the detection, monitoring, documentation and analysis of cultural heritage sites and monuments, both in land and underwater.	699,960.01
CYPRUS UNIVERSITY OF TECHNOLOGY CYPRUS INSTITUTE Lumoscribe Ltd	Time-gated luminescence spectroscopy (TGLS) monitors electronic processes and excited state dynamics. As a highly sensitive tool, it empowers the study of a diverse materials portfolio and it serves industry in quality control	699,935.15
CYPRUS UNIVERSITY OF TECHNOLOGY ERATOSTHENES CENTRE OF EXCELLENCE I.O GEO-GRAFICA Ltd	Upgrading the CyCLOPS strategic research infrastructure unit, established to study solid earth processes and geohazards in Cyprus.	676,135.09
FREDERICK RESEARCH CENTER UNIVERSITY OF CYPRUS RF and Microwave Solutions Ltd	Upgrade of the research facilities of the research groups at Frederick and UCY with a high-end Electronics 3D printer. Aims in the creation of clusters for the development of new centers of excellence and innovation capacity in ICT to address challenges of high loss and radiation blockage associated with mm-wave communications (B5G/6G)	699,920.00
CYPRUS UNIVERSITY OF TECHNOLOGY UNIVERSITY OF CYPRUS CYENS SK EMBIO DIAGNOSTICS	The creation a New Unit in Cyprus, for serving the area of Rheology and Complex-Fluids Research, with an emphasis on Fluidics and Microfluidics Technology.	699,600.00
UNIVERSITY OF CYPRUS SK EMBIO DIAGNOSTICS Embryorigin Fertility Centre Ltd	Pharmacological enhancement or suppression of ciliary motility can be used to treat airway mucociliary dysfunction that occurs either by genetic or environmental factors and to generate male contraceptives and improve our contraceptive portfolio	697,225.20
FREDERICK RESEARCH CENTER Cyprus Space Exploration Organisation (CSEO) CLOUDWATER LTD	Advance scientific excellence in the field of ionospheric monitoring based on the installation of the first European mid-latitude Super Dual Auroral Radar (SuperDARN) in Cyprus.	699,960.00
CYPRUS UNIVERSITY OF TECHNOLOGY MTV Water Services Ltd Lumoscribe LTD	Advancement and wider adoption of SGE (Shallow Geothermal Energy) in the market of Cyprus, through the expansion of the current infrastructure in the premises of the Cyprus University of Technology	697,500.00
CYPRUS INSTITUTE OF NEUROLOGY & GENETICS CYPRUS UNIVERSITY OF TECHNOLOGY E.I. UNIVERSITY OF NICOSIA	State-of-the-art equipment will facilitate the use of innovative techniques to study basic mechanisms of nervous system function and the full range of functional evaluation in pre-clinical studies of new therapeutic approaches to treat neurological disorders	698,587.50

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