

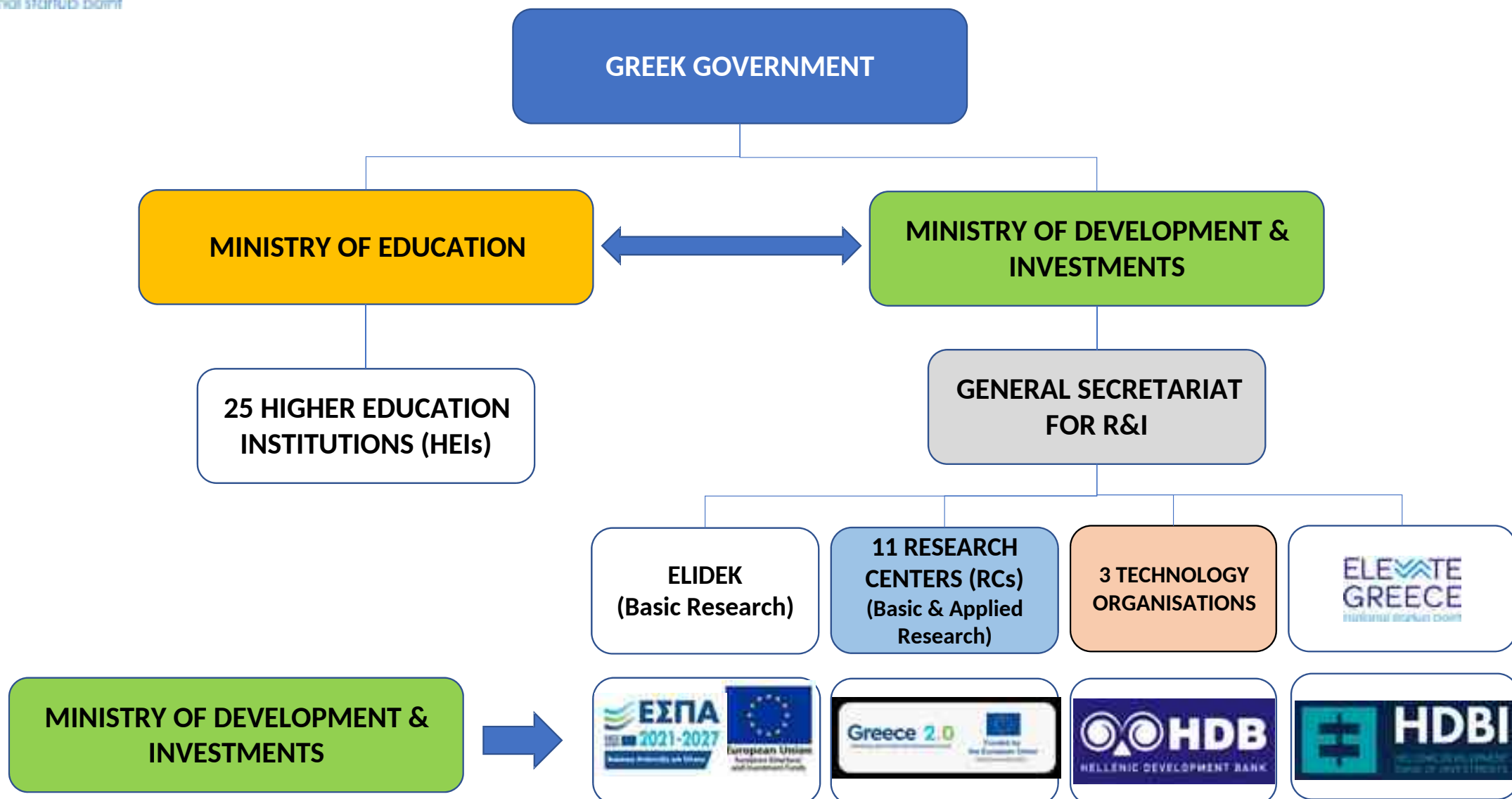
Synergies for the future – AI in Public Services



Michael Dritsas
CEO Elevate Greece SA

May 2023

R&I Competent Ministries



Research Centers supervised by GSRI

STRICTLY HEALTH / BIO

1. [Hellenic Pasteur Institute](#)
2. [Biomedical Research Foundation of the Academy of Athens \(BRFAA\)](#)
3. [Biomedical Sciences Research Center "Alexander Fleming" – BSRC Fleming](#)

MULTIDISCIPLINARY INCLUDING HEALTH / BIO

- ICT {
4. [Foundation for Research and Technology - Hellas \(FORTH\)](#)
 5. [Athena Research & Innovation Center in Information, Communication and Science Technologies](#)
 6. [National Centre for Scientific Research "Demokritos"](#)
 7. [Centre for Research and Technology Hellas / CERTH](#)
 8. [National Hellenic Research Foundation / NHRF](#)

OTHER RCs

9. [Hellenic Centre for Marine Research \(HCMR\)](#)
10. [National Observatory of Athens \(NOA\)](#) (Astronomy, Climate change, Earthquake monitoring etc)
11. [National Centre for Social Research \(NCSR-EKKE\)](#)

Research Centers supervised by GSRI

National Centre for Scientific Research "Demokritos"



Athena Research & Innovation Center in Information, Communication and Science Technologies (3 Spots)



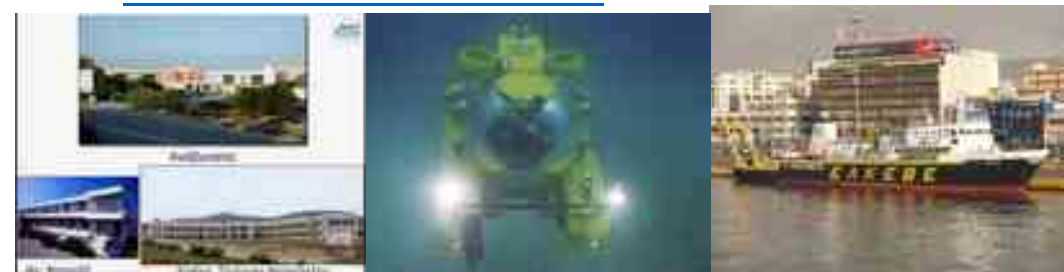
Centre for Research and Technology Hellas / CERTH



Centre for Research and Technology Hellas / CERTH



Hellenic Centre for Marine Research (3 Spots)



Biomedical Sciences Research Center "Alexander Fleming" – BSRC Fleming



National Observatory of Athens (NOA)



Biomedical Research Foundation of the Academy of Athens (BRFAA)



National Hellenic Research Foundation / NHRF



Hellenic Pasteur Institute

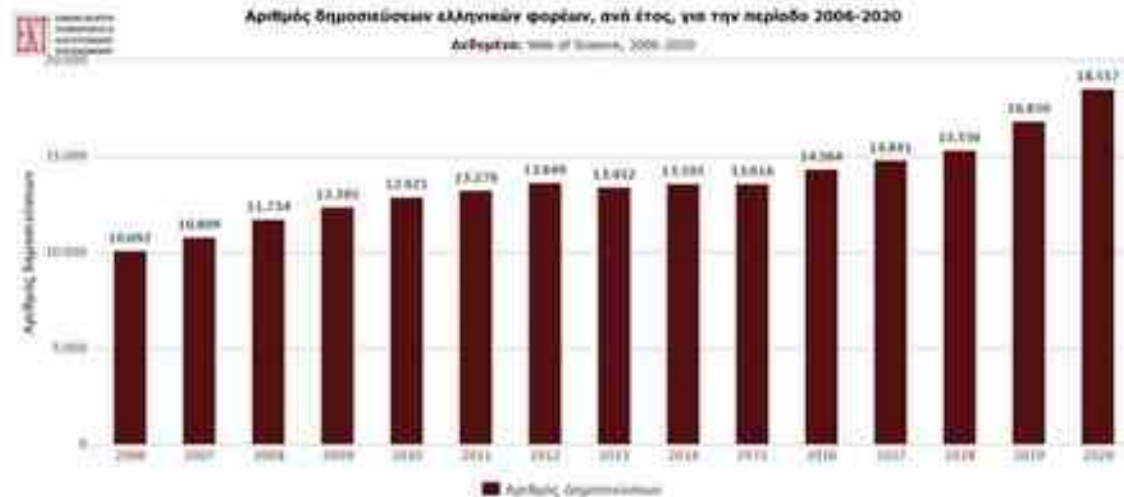


Greek Universities

- | | |
|---|--|
| 1. National and Kapodistrian University of Athens | 15. University of the Peloponnese |
| 2. National Technical University of Athens | 16. Aristotle University of Thessaloniki |
| 3. Hellenic Open University | 17. University of Ioannina |
| 4. Panteion University | 18. Ionian University |
| 5. Agricultural University of Athens | 19. University of the Aegean |
| 6. Athens University of Economics and Business | 20. University of Patras |
| 7. University of Piraeus | 21. University of Crete |
| 8. Harokopio University of Athens | 22. University of Macedonia |
| 9. Athens School of Fine Arts | 23. University of Thessaly |
| 10. Technical University of Crete | 24. University of Western Macedonia |
| 11. University of West Attica (formerly TEI of Athens and TEI of Piraeus) | 25. Democritus University of Thrace |
| 12. Hellenic Mediterranean University | |
| 13. International Hellenic University | |
| 14. School of Pedagogical and Technological Education (ASPETE) | |

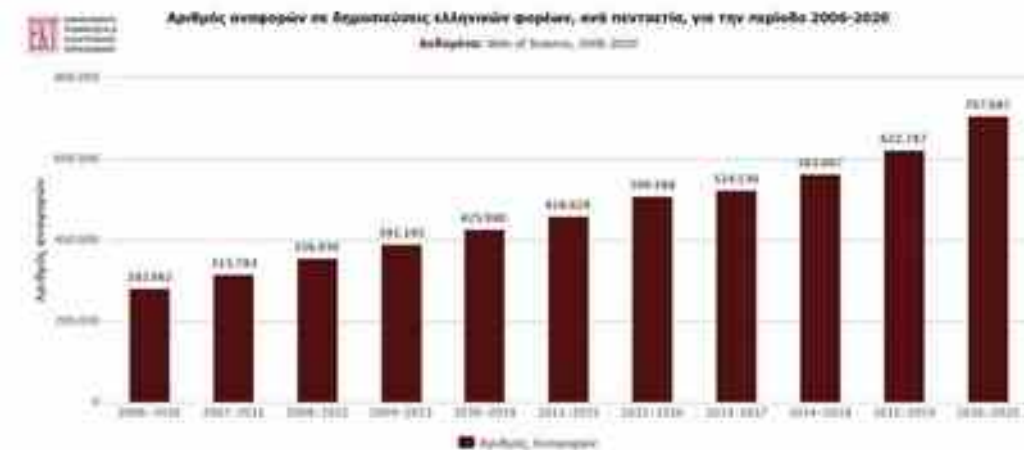
Web of Science: Citation Index 2004 - 2020

Scientific Publications



Πηγή: ΕΚΤ, Έκτακτοι Μετρητές Δημοσιεύσεων Ελληνικών Φορέων 2006-2020: Εξάμηνη ηνάλυση δημοσιεύσεων σε διεθνή επιστημονικά περιοδικά - Web of Science, <http://report03.metrics.ekt.gr>

Scientific Citations



Πηγή: ΕΚΤ, Έκτακτοι Μετρητές Δημοσιεύσεων Ελληνικών Φορέων 2006-2020: Εξάμηνη ηνάλυση δημοσιεύσεων σε διεθνή επιστημονικά περιοδικά - Web of Science, <http://report03.metrics.ekt.gr>

<https://metrics.ekt.gr/publications/572>

Web of Science: Greek Scientific Publications 2004 - 2020



Δείκτης απήχησης των δημοσιεύσεων της Ελλάδας, των χωρών μελών της ΕΕ και των χωρών του ΟΟΣΑ, ανά πενταετία, για την περίοδο 2006-2020

Δεδομένα: Web of Science, 2006-2020



OECD

ΠΗΓΗ: ΕΚΤ, Επιστημονικές Δημοσιεύσεις Ελληνικών Φορέων 2006-2020; Βιβλιομετρική ανάλυση δημοσιεύσεων σε διεθνή επιστημονικά περιοδικά - Web of Science, <http://report09.metrics.ekt.gr>

<https://metrics.ekt.gr/publications/572>

COUNTRY PERFORMANCE IN HORIZON 2020

Even better performance in H2020 Vs FP7



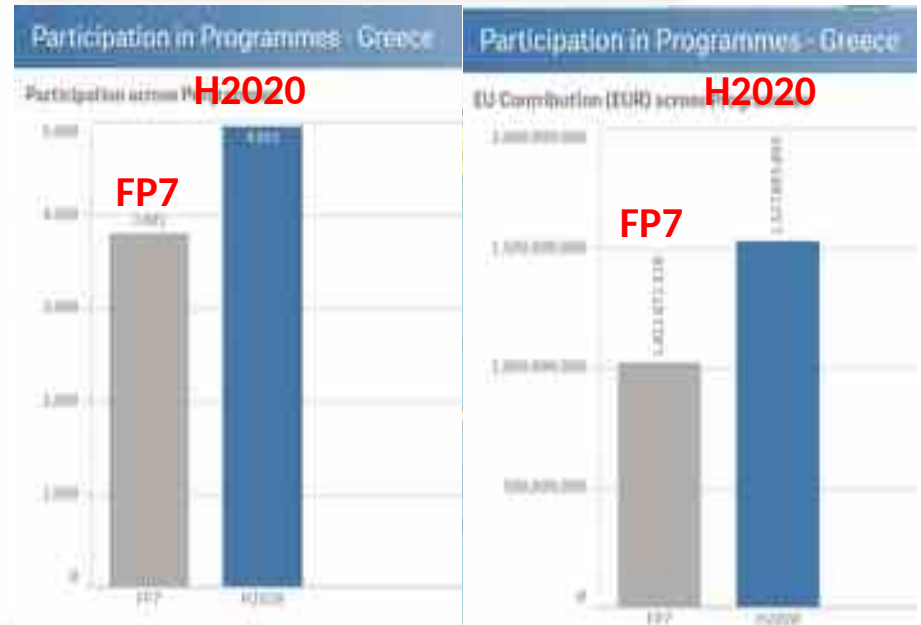
Horizon 2020 Key Figures



Participation in Horizon 2020



#8 out of 28 in participations –
#11 out of 28 in budget allocation
Participation in Horizon 2020



R&D Intensity: R&D / GDP

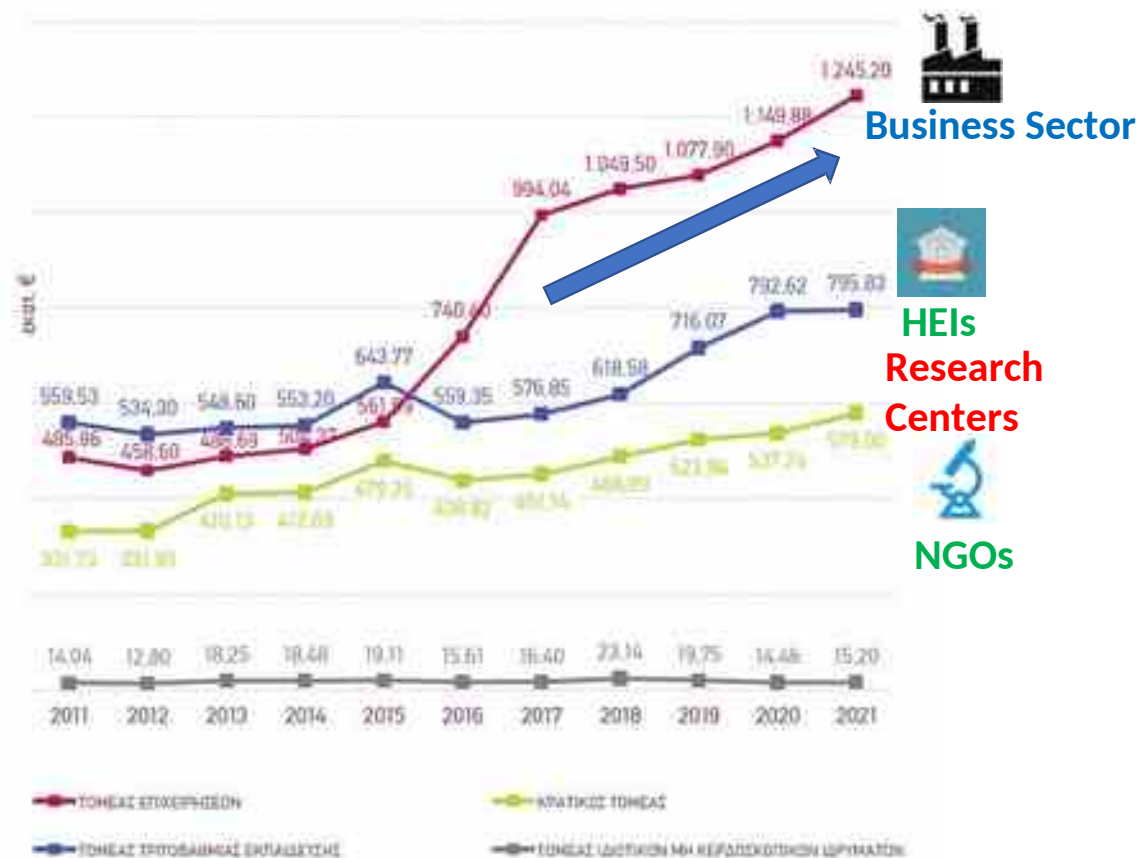
GR Target for 2020 : 1,20%

Achieved by 2020 : 1,51%



R&D exp. in million euros R&D % GDP

R&D expenditure by sector of performance



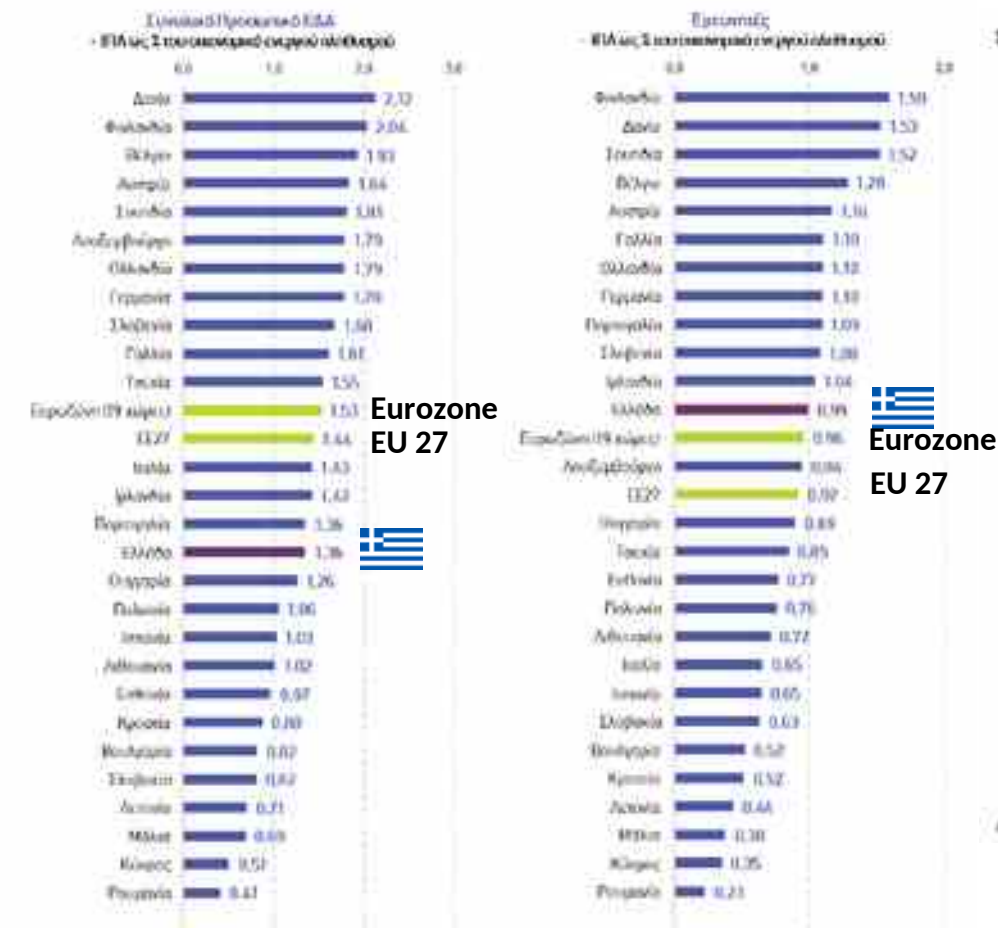
Πηγή: ΕΚΤ (<https://metrics.ekt.gr/research-development/indicators>, καβάρος αποκλεισμού: ΔΤ)

FTE Research personnel/Total

FTE Strictly Researchers

FTEs of Research personnel employed/Total per sector

Συνολικό Προσωπικό ΕΒΑ και Ερευνητές (ΠΑ ως % του οικονομικά ενεργού πληθυσμού) στην Ελλάδα (προκαταρκτικά στοιχεία 2021) και στις χώρες της ΕΕ27 (ετήσια στοιχεία 2020)



Συνολικό προσωπικό ΕΔΑ (σε ισοδύναμα Πλήρους Απασχόλησης) ανά τμήμα εκτέλεσης ΕΔΑ, 2011 – 2021



Free ECT <http://medrxiv.org/content/2019/04/24/20190424>



HEIs



Business Sector
Research Centers

NGOs

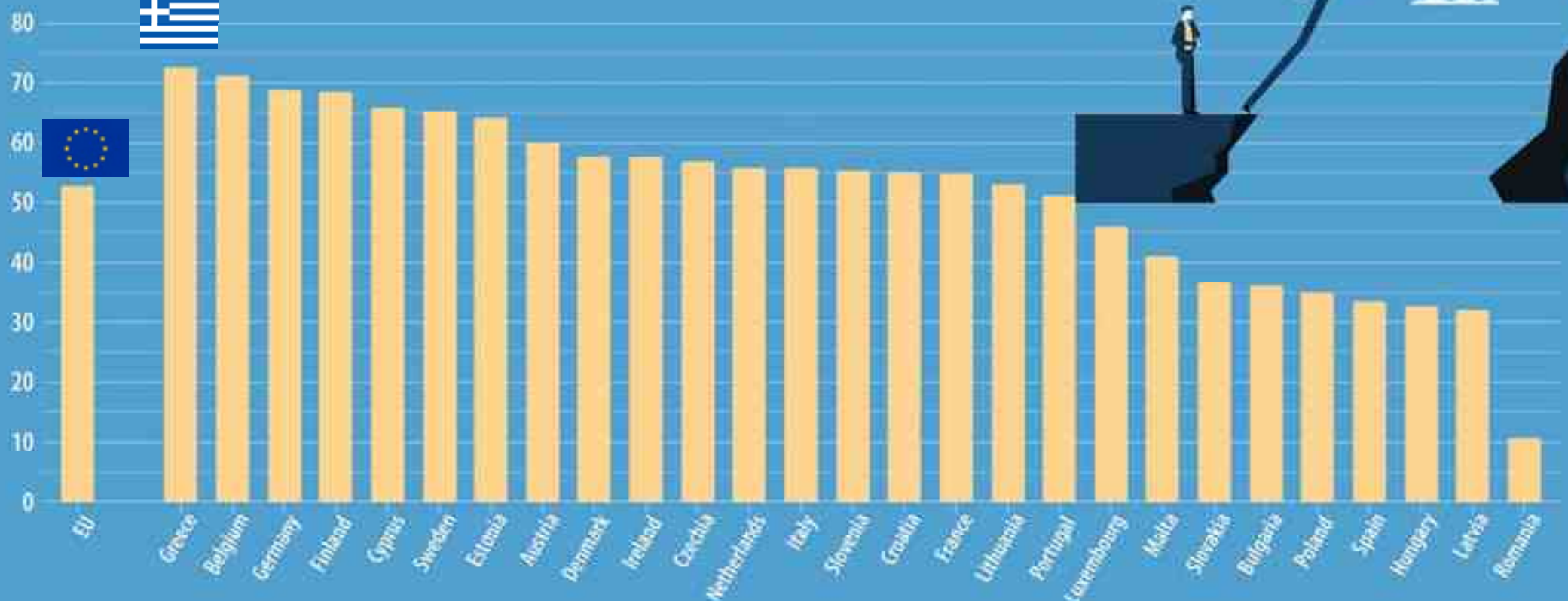
Greece ranks in 14th position from 16th



#1 Country in EU in introduction/adoption of innova

Share of innovative enterprises, 2018-2020

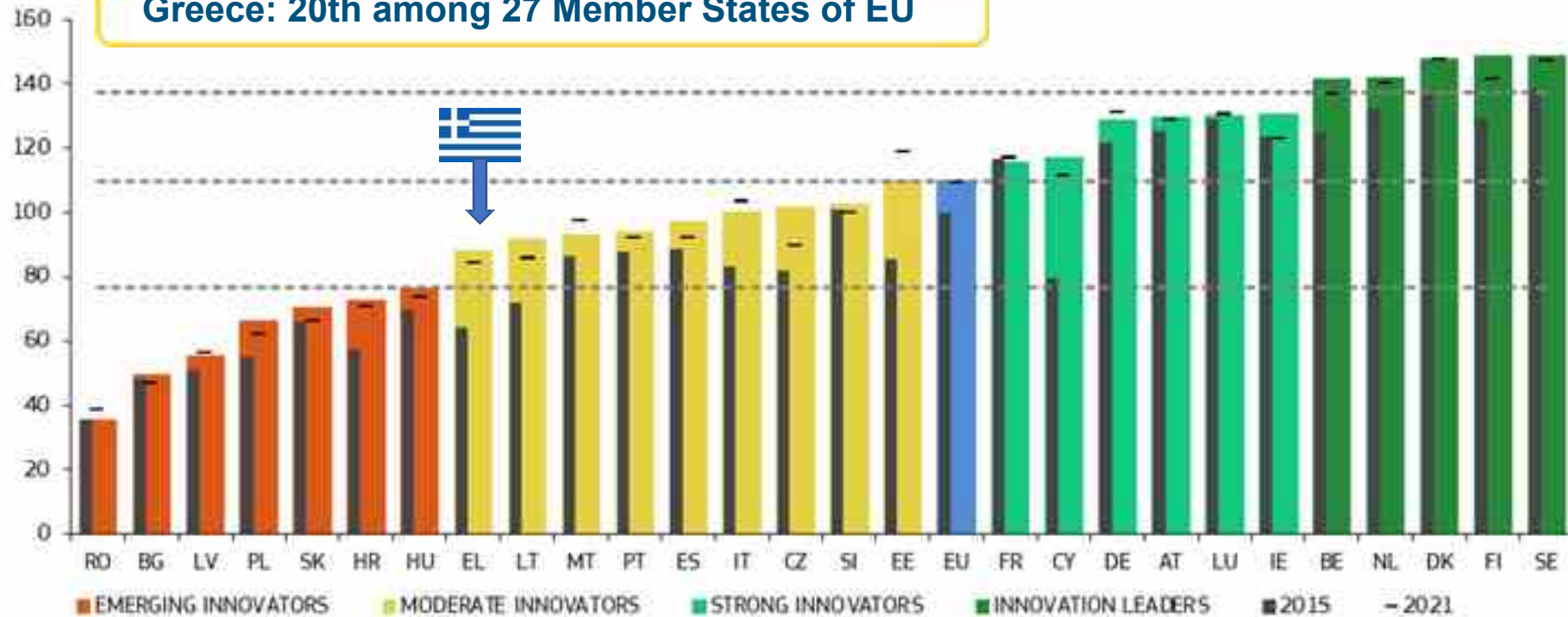
(%)



European Innovation Scoreboard 2022

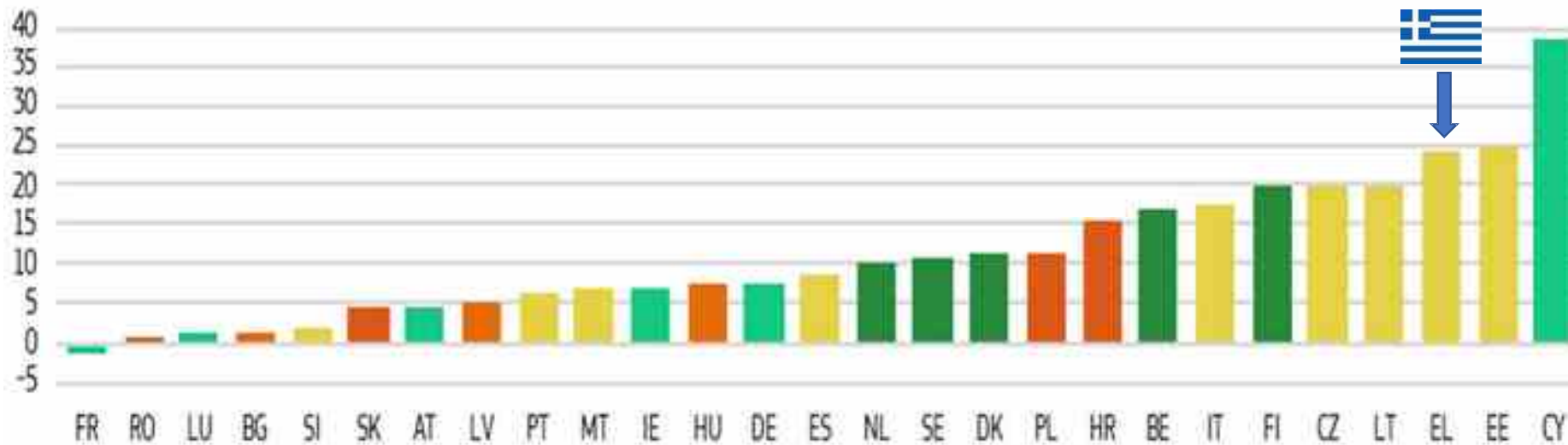


Greece: 20th among 27 Member States of EU



European Innovation Scoreboard 2022

Overall improvement between 2015 - 2022



Performance change between 2015 and 2022

Greece ranks 3rd among the countries
with highest improvement

European Innovation Scoreboard 2022

Greece			
	Relative to EU in 2021	Change 2021-2022	Change 2019-2022
SUMMARY INNOVATION INDEX	80.1	34.1	3.2
Human resources	71.4	1.8	-8.8
Doctorate graduates	70.7	1.4	-12.4
Population with tertiary education	127.2	1.0	1.0
Lifelong learning	38.7	1.0	1.0
Structural research systems	88.8	1.8	-1.2
International scientific publications	80.1	1.1	1.1
Most cited publications	28.6	1.1	1.1
Foreign doctorate students	1.4	1.1	-1.0
Digitalisation	81.8	0.0	0.0
Researcher population	88.8	1.8	1.8
Open access publications	11.1	1.1	1.1
Finance and support	88.7	1.7	1.7
R&D expenditures in the public sector	111.7	1.7	1.7
Research capital expenditures	88.8	1.8	1.8
Government support for business R&D	21.1	1.1	1.1
Private investments	71.4	1.4	1.4
R&D expenditures in the business sector	41.1	1.1	1.1
Non-R&D innovation expenditures	11.1	1.1	1.1
Government expenditures for innovation	11.1	1.1	1.1
Use of information technologies	51.1	1.1	-1.1
Enterprises providing ICT training	51.1	1.1	-1.1
Employed ICT specialists	11.1	1.1	1.1
Innovators	111.1	11.1	11.1
People with above basic overall digital skills	111.1	11.1	11.1
International scientific co-publications	11.1	1.1	1.1
Entrepreneurship	11.1	1.1	1.1
Entrepreneurial attitudes	11.1	1.1	1.1
Public-private co-publications	11.1	1.1	1.1
Business process innovation (BPI)	11.1	1.1	1.1
Product innovation	11.1	1.1	1.1
Product innovation in the public sector	11.1	1.1	1.1
Non-R&D innovation expenditures	11.1	1.1	1.1
Employment impacts	11.1	1.1	1.1
Population with tertiary education	11.1	1.1	1.1
Public-private co-publications	11.1	1.1	1.1
Business process innovation (BPI)	11.1	1.1	1.1
Environmental sustainability	11.1	1.1	1.1
Product innovation in the public sector	11.1	1.1	1.1
Non-R&D innovation expenditures	11.1	1.1	1.1
Employment impacts	11.1	1.1	1.1
Population with tertiary education	11.1	1.1	1.1
Public-private co-publications	11.1	1.1	1.1
Business process innovation (BPI)	11.1	1.1	1.1

Greece		Relative to EU in 2021	Relative to EU 2022 in 2022
1.1.1 Foreign doctorate students	Προσλήψεις διδακτορικών σπουδών	3.3	3.4
1.1.2 Lifelong learning	Δια-βίου μάθηση	30.3	18.9
2.1.1 Employed ICT specialists	Απασχολούμενοι ειδικοί ειδικοί σε ΤΠΕ	35.7	22.7
2.1.2 Government support for business R&D	Κίνητρα πολιτικής με δαπάνες Ε&Α από επιχειρήσεις	28.8	28.7
4.2.1 Medium and high tech goods exports	Εξαγωγές Προϊόντων Μέσης & Υψηλής Τεχνολογίας	10.1	27.1
5.1.1 Design applications	Αιτήσεις καταχώρισης βιομηχανικών σχεδίων	12.8	27.4
1.3.1 Broadband penetration	Διαείσδυση ευρυbandικότητας	59.0	58.5
3.3.1 PCT patent applications	Αιτήσεις καταχώρισης διπλώματων ευρεσιτεχνίας PCT (παιτέτες)	19.0	24.5
2.1.2 Venture capital expenditures	Επενδύσεις από Εταιρείες Επενδυσητικού Κεφαλαίου (VCS)	28.1	48.1
2.3.1 Enterprises providing ICT training	Εταιρείες που παρέχουν βελτίωση δεξιοτήτων σε ΤΠΕ	46.7	50.0
4.3.1 Environment-related technologies	Επενδύσεις σε τεχνολογίες περιβάλλοντος	81.4	55.2
3.2.1 Job-to-job mobility of H&ST	Κινητικότητα εργαζομένων σε επαγγέλματα Ε&Α	58.9	59.3
2.2.1 Innovation expenditures per employee	Δαπάνες Ε&Α ανά εργαζόμενο	66.1	66.8
1.1.1 Doctorate graduates	Διδακτορικοί με Αιδοεταρμικό	48.1	70.1
4.3.2 Air emissions by fine particulate matter	Εκπομπές αέρα με μικροσωματίδια	82.1	71.5
SUMMARY INNOVATION INDEX	ΕΥΝΟΗΤΙΚΟΙ ΔΕΙΚΤΕΣ ΚΑΙΝΟΤΟΜΙΑΣ	78.6	80.2
1.1.1 People with above basic overall digital skills	Πληθυσμός με ψηφιακές δεξιότητες άνω του μέσου όρου	81.4	81.8
1.2.1 International scientific co-publications	Διεθνείς Επιστημονικές Συνδημοσιεύσεις	84.6	84.2
4.3.1 Resource productivity	Παραγωγικότητα πόρων ως προς την Περιβαλλοντική βιωσιμότητα	69.1	88.3
1.2.2 Most cited publications	Διημερίσεις από top-10% σε επεξεργασία φάσις	88.8	89.6
3.3.2 Trademark applications	Αιτήσεις καταχώρισης Εμπορικών Σημάτων	87.8	81.0
4.2.2 Knowledge-intensive services exports	Εξαγωγές υπηρεσιών έντασης γνώσης	87.8	88.3
2.1.1 R&D expenditures in the public sector	Δαπάνες Ε&Α στον Δημόσιο τομέα	90.9	101.3
2.2.2 Non-R&D innovation expenditures	Επενδύσεις σε μη τεχνολογική καινοτομία (π.χ. Business Model, UX/UI)	106.6	106.2
1.1.2 Population with tertiary education	Διάρθρωση προσφοράς της εκπαίδευσης	117.2	118.2
3.2.2 Public-private co-publications	Επιστημονικές συνδημοσιεύσεις δημόσιου & ιδιωτικού τομέα	112.9	114.4
3.1.1 Business process innovation (BPI)	ΚΑΙΝΕ με καινοτομία σε επιχειρηματικές διεργασίες	121.7	121.0
4.2.1 Sales of innovative products	Πωλήσεις «καινοτόμων προϊόντων»	226.1	128.0
4.1.1 Employment in innovative enterprises	Απασχόληση σε καινοτόμες επιχειρήσεις	120.5	128.0
3.2.1 Innovative SMEs collaborating with others	Καινοτόμες ΜΜΕ που συνεργάζονται με άλλους	174.8	174.1
3.1.1 Product innovators (SMEs)	ΑΙΝΕ με πρωτογενή καινοτομία	180.5	179.5

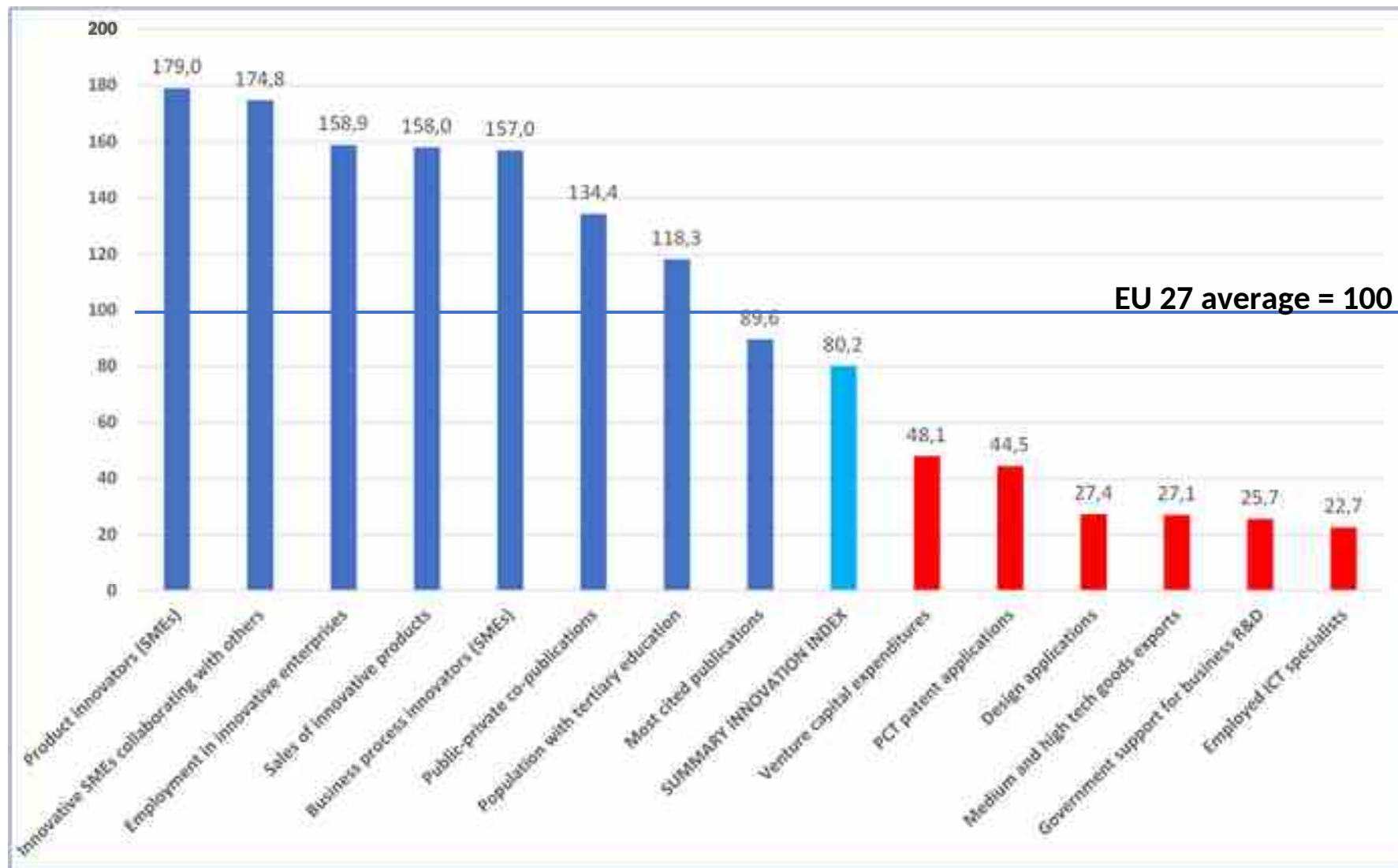
weaknesses



strengths



European Innovation Scoreboard 2022



Global Innovation Index – GII 2022


Rankings for Greece (2020–2022)

GIYR	GII	Innovation inputs	Innovation outputs
2020	43	40	52
2021	47	39	60
2022	44	44	49

38th Greece ranks 38th among the 48 high-income group economies.

28th Greece ranks 28th among the 39 economies in Europe.

- + 3 spots in 2022
- Improvement in “Innovation outputs” but still along way to go



Global Innovation Index 2022

CYPRUS

27th Cyprus ranks 27th among the 132 economies featured in the GII 2022.

The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

The following table shows the rankings of Cyprus over the past three years, noting that data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Cyprus in the GII 2022 is between ranks 25 and 28.

Rankings for Cyprus (2020–2022)

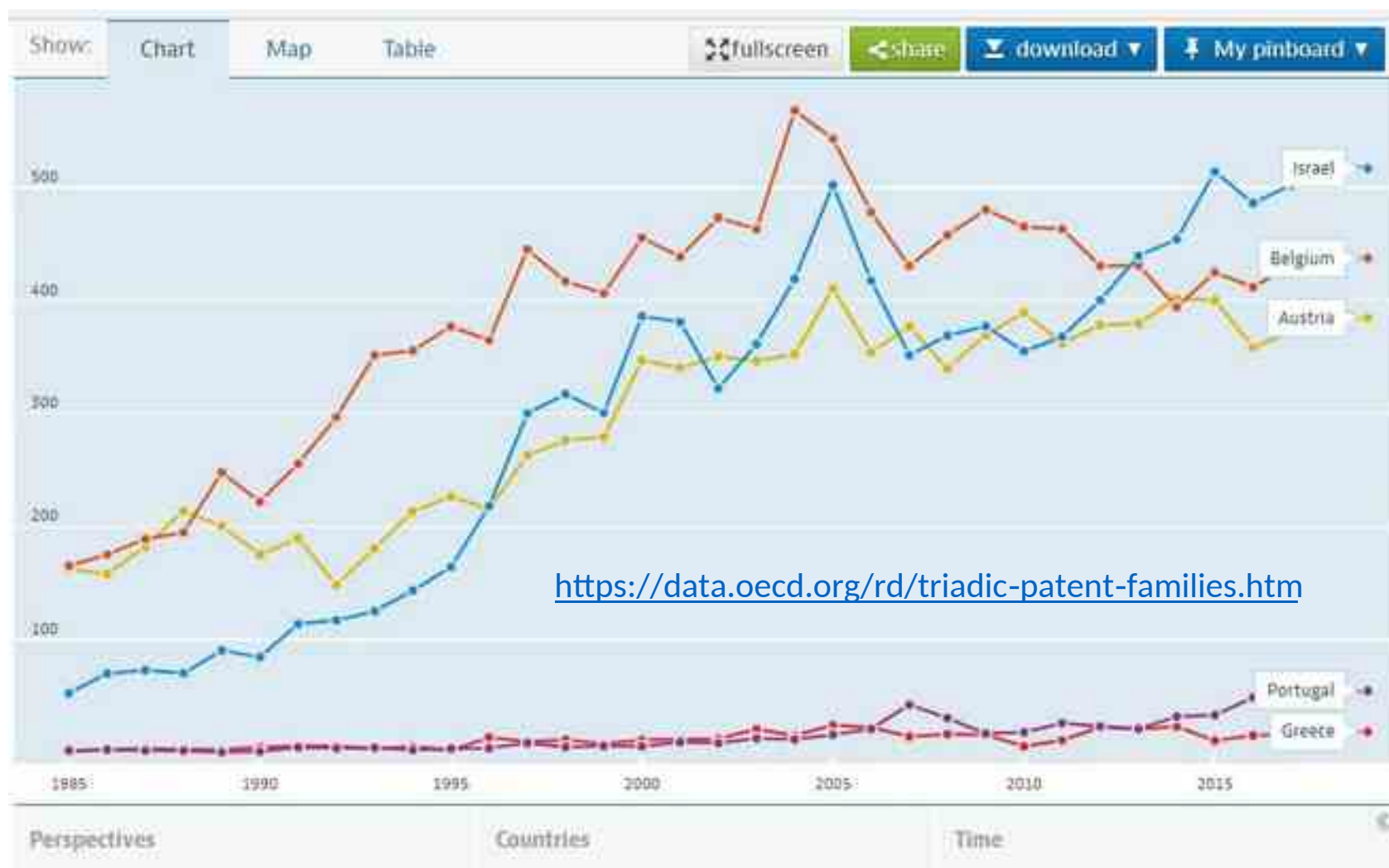
GIYR	GII	Innovation inputs	Innovation outputs
2020	29	38	26
2021	28	31	31
2022	27	28	29

- Cyprus performs better in innovation outputs than innovation inputs in 2022.
- This year Cyprus ranks 29th in innovation inputs, higher than both 2021 and 2020.
- As for innovation outputs, Cyprus ranks 29th. This position is higher than both 2021 and 2020.

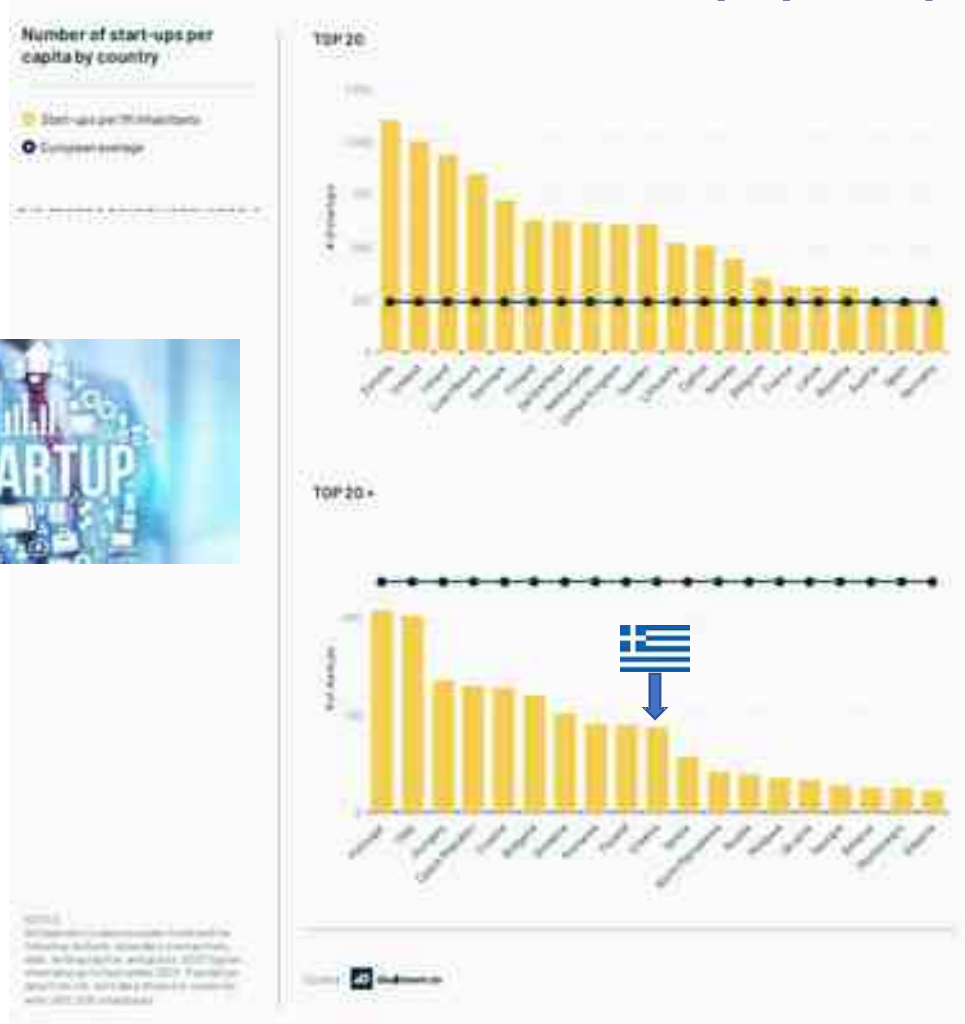
26th Cyprus ranks 26th among the 48 high-income group economies.

2nd Cyprus ranks 2nd among the 19 economies in Northern Africa and Western Asia.

Triadic Patent Families (OECD)



Number of startups per capita



Number of unicorns



	GREECE	PORTUGAL	ESTHONIA
# Startups	700	2.159	1.200
Population (million)	10,7	10,3	1,3
Startups / million	65,4	209,6	923,1
# Unicorns	2	10	10



National Strategy for a new Growth Paradigm



R & I GOVERNMENT TARGETS

#1: Increase R & D expenses (% GDP)

2: Enhance linkages of Research with real economy

#3: Provide stronger support to the startup/spin-off ecosystem

National Council for Research and Innovation (NCRI)

The supreme advisory body for the formulation and implementation of the national policy for Research, Technology and Innovation



Καθ. Σπύρος Αρταβάνης-Τσάκωνας

Chief Scientific Officer &
Executive Vice President, Biogen
Ομότιμος καθηγητής κυτταρικής
βιολογίας Harvard



Αρίστος Δοσιάδης
Big Pi Ventures



Βασίλης Αντωνιάδης
Managing Director
& Senior Partner
BCG



Δρ. Ευάγγελος Καρκαλέτισης
Διευθυντής Έρευνας
Ινστιτούτο Πληροφορικής &
Τηλεπικοινωνιών
ΕΚΕΦΕ “Δημόκριτος”



Νέλλη Κάτσου
Μέλος Δ.Σ
Pharmathen S.A



Καθ. Δώρος Θεοδώρου
Σχολή Χημικών Μηχανικών
Εθνικό Μετσόβιο Πολυτεχνείο



Καθ. Βάσω Κιντή
Καθηγήτρια Φιλοσοφίας
ΕΚΠΑ



Καθ. Ελίζα Κωνοφάγου
Biomedical Engineering
Columbia University



Ρούλα Μπαχταλιά
Programme Manager
Egg,Enter,Grow,Go



Δρ. Ευάγγελος Μπεκιάρης
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Βιώσιμης Κινητικότητας &
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Αιμίλιος Χαλαμανδάρης
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CEO της Innoetics



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Ecole Polytechnique Federale
de Lausanne (EPFL)



Καθ. Ελευθερία Ζεγγίνη
Technical University of Munich



Καθ. Χριστίνα Κουλούρη
Πρύτανης στο Πάντειο
Πανεπιστήμιο Κοινωνικών &
Πολιτικών Επιστημών

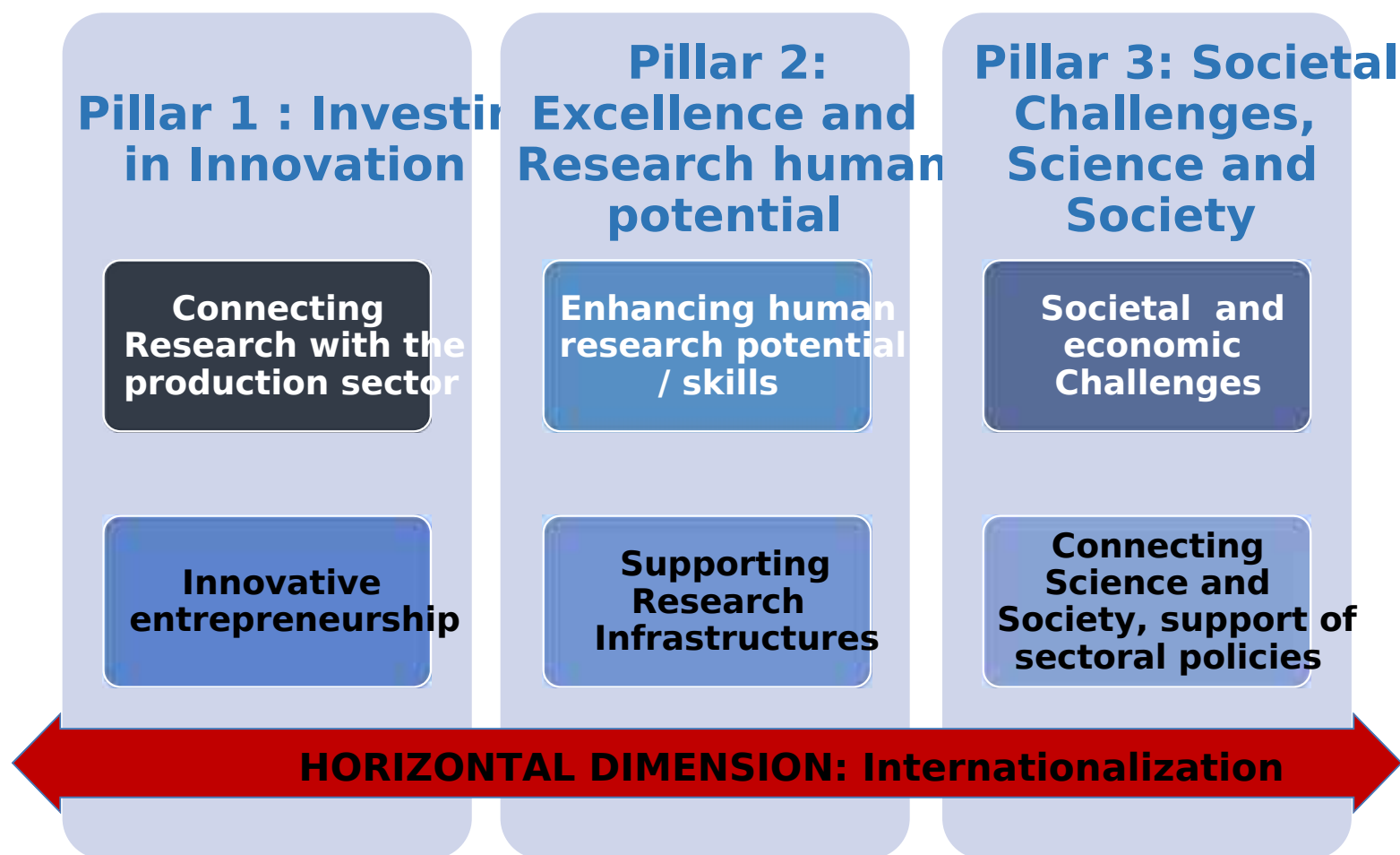


Δρ. Ιωάννης Ταλιανίδης
Διευθυντής Ερευνών, Ινστιτούτο
Μοριακής Βιολογίας & Βιοτεχνολογίας (ΙΤΕ)
AXA Chair in Epigenetics

Supported by 12 Sectoral Scientific Councils

Main Pillars of the National Strategy

National Strategy for Research and Innovation 2021 – 2027



Linking Research with Innovation & Entrepreneurship

✓ 'Research - Create - Innovate" : 1,137 projects which link Research with Innovation in 8 critical sectors (720.7 m. EUR)

✓ Establishment of 22 Innovation Clusters

✓ Establishment of 11 Competence Centres in Greece for the development of innovative entrepreneurship, mainly for small-to-medium businesses

✓ New legal framework for Spin-Off companies

✓ Financial support of 25 TTOs



OCTOBER 2020: Establishment of a
Startup Registry



Elevate Greece SA
<https://elevategreece.gov.gr/>



Elevate Greece “Mission”

- to identify promising startups and support their growth, by nurturing a robust innovation ecosystem



Applications' analytics

Total Statistics



3170

Total Drafts

1273

Total Finalized



Legal Entity



Registered Office



1134

Completed Evaluations



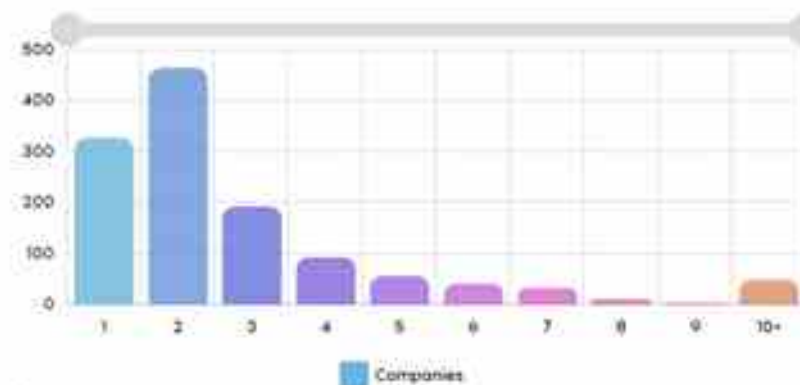
139

Pending Evaluations

Timeline



Partners/Team

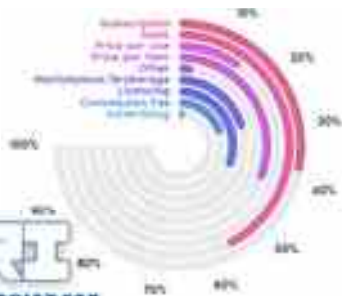


**ELEVATE
GREECE**

<input type="checkbox"/> Advertising & Marketing (AdTech)	<input type="checkbox"/> Enterprise Software
<input type="checkbox"/> AgriTech / FoodTech	<input type="checkbox"/> Entertainment/Media Games, Sports, Sci...
<input type="checkbox"/> Art, Cultural & Creative Industries	<input type="checkbox"/> Environment & Energy (CleanTech, Clea...
<input type="checkbox"/> Data Analytics - Big Data	<input type="checkbox"/> FinTech - Financial Services (WealthTech)
<input type="checkbox"/> Defence Systems	<input type="checkbox"/> Hardware
<input type="checkbox"/> Edutech - Education	<input type="checkbox"/> Human Resources
<input type="checkbox"/> InsurTech - Insurance	<input type="checkbox"/> Mobility
<input type="checkbox"/> LegalTech / RegTech	<input type="checkbox"/> Real Estate (Proptech, Construction)
<input type="checkbox"/> Life Sciences (MedTech, HealthTech, Bio...	<input type="checkbox"/> RetailTech - E-Commerce - Fintech
<input type="checkbox"/> Logistics & Transportation	<input type="checkbox"/> Security
<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Semiconductors
<input type="checkbox"/> Maritime	<input type="checkbox"/> Space
<input type="checkbox"/> Travel / Hospitality / Leisure	
<input type="checkbox"/> Web Being	
<input type="checkbox"/> Other	

<input type="checkbox"/> 3D Printing	<input type="checkbox"/> Data Analytics - Big D...
<input type="checkbox"/> AI	<input checked="" type="checkbox"/> Diagnostics/Imaging
<input type="checkbox"/> AR/VR	<input type="checkbox"/> Distributed Ledger
<input type="checkbox"/> Blockchain	<input type="checkbox"/> Drones
<input type="checkbox"/> Cloudcraft	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cloud Computing	<input type="checkbox"/> IoT
<input type="checkbox"/> Nanotech	
<input type="checkbox"/> Nanomater	
<input type="checkbox"/> Quantum Computing	
<input type="checkbox"/> Robotics	
<input type="checkbox"/> Sensors	
<input type="checkbox"/> Software	
<input type="checkbox"/> Web or Mobile Applica...	
<input type="checkbox"/> Other	

Funding Sources



- B2B
- B2B2C
- B2C
- B2G
- Άλλο













- Bootstrap
- Business Angel
- Grant
- VC
- Other

Registered Startups



~ 750+
startups as
of today!

Startup	Industry	Technology	Region	Employee count	Total funding €	Website
 Bio-Based Energy Technologies PC	Environment & Energy (GreenTech, Cleantech)	Cleantech, Hardware	Central Macedonia	4	-	Website
 BIOEMISSIION TECHNOLOGY SOLUTIONS IKE	Life Sciences (MedTech, HealthTech, BioTech)	Diagnostic/Imaging, Hardware, Nanotech, Sensors	Attica	11	-	Website
 Bionematic Surfaces	Manufacturing	Cleantech, Nanotech, Other	Crete	5	900K	Website
 BIOPIX DNA TECHNOLOGY (IE)	Life Sciences (MedTech, HealthTech, BioTech)	Diagnostic/Imaging	Crete	9	1.22M	Website
 Clio Muse PC	Travel / Hospitality / Leisure	AR/VR, Software, Web or Mobile Application	Attica	13	-	Website
 CollegeLink IKE	Human Resources	Data Analytics - Big Data, Software, Web or Mobile Application	Attica	14	150K	Website
 Convert Group	Data Analytics - Big Data	AI, Data Analytics - Big Data, Software	Attica	52	1.4M	Website
 Cube RM IKE	Life Sciences (MedTech, HealthTech, BioTech)	AI, Data Analytics - Big Data, Software	Attica	10	-	Website
 Ferryhopper	Travel / Hospitality / Leisure	Software, Web or Mobile Application	Attica	45	2.2M	Website
 FOODOXYS PC SPIN	Life Sciences (MedTech, HealthTech, BioTech)	Other	Thessaly	5	250K	Website



AUGMENTA

Augmenta Agriculture Technologies S.p.A. - Athens, Greece

Company Website: <https://www.augmenta.org/>

Company Email: info@augmenta.org

Employees: 45

Funding Stage: Series A

INDUSTRIES:

Agritech / FoodTech

TECHNOLOGY

About

Augmenta Agriculture Technologies (Augmenta) is a deep-tech Greek startup. It was established in 2016 when George Varnavelis and Dimitris Evangelopoulos, frustrated with the agriculture process being stuck with the same inefficient system since ages, decided to provide a solution for fast and easy uptake of the most modern farming techniques. Augmenta's vision is to be the enabler for sustainable and productive agriculture through the wide uptake of precision methods among all farmers. It adopted the mission of automating and precisely measuring the most financially effective farm operations, like the use of herbicides and chemicals, through real-time, multispectral computer vision. Augmenta's goal is to increase the efficiency of every hectare of land, ultimately augmenting the bottom-line of the average farmer. The Company's success was recognized by Forbes, which listed the founders among the 30 under 30 list for Greece in 2018.

Solution & Product

Augmenta's System is an all-in-one plug & play system that is mounted to the front of a tractor. As the tractor operates in the field, the software uses AI/ML models to analyse the captured images, determine the status of each inch of crop and regulate inputs. The scanning system also communicates with the sprayer/spreader using the ISOBUS protocol to maintain a constant flow of information for variable rate applications. The system maximises yield, quality and reduces crop inputs. The AI/ML software continuously improves itself using data collected before, during, and after crop treatments are deployed. This makes it a resilient and long-lasting investment for farmers. The system has been developed initially for 15 crops: Barley, Cotton, Corn, Rapeseed/Canola, Rice, Sorghum, Sugar cane, Soybean, Wheat, Grapes, Yams/bees, Potatoes, Onions, Leafy greens, and Sunflowers.

Innovation & Scalability

The Augmenta System has a great scale-up potential due to:

1) Technical features: Its hardware is built using off-the-shelf HIK and 4k range cameras (Sony and Hikvision). The company will have a small in-house assembly line that can be easily outsourced to contract manufacturers around the world, enabling quick and non-capital intensive industrialization. The built-in AI/ML-driven software and cloud analytics, are highly scalable and able to improve themselves using sophisticated AI algorithms, meaning that the more the innovation is adopted by farmers, in Europe and internationally, the better its performance improvement will be. The technology is scalable since it improves several tasks in crop input, crop types, and increased predictive capability for crop management, which will be expanded in the future for weed and plant disease control.

2) Regulatory requirements: Augmenta has already considered the regulations needed to achieve market authorization. The company is in the process of filing for the CE mark and will be able to timely comply with the regulatory requirements.

ONE LINER

Augmenta develops an innovative, AI-based, Precision Farming System.

TEAM



George Varnavelis, Co-founder



Dimitris Evangelopoulos, Co-founder

FUNDING



2021 - Series A, VC
EUR 6.5M, GHF Industrial, Pymwylac, HCVC, Marathon Venture Capital



2019 - Seed, VC
EUR 2.5M, HCVC, Marathon Venture Capital



2018 - Pre Seed, VC
EUR 600K, Marathon Venture Capital

PATENTS

Company Website: <https://www.augmentix.org/>

Company Email: info@augmentix.org

Employees: 40

Funding Stage: Series A

INDUSTRIES

AgriTech / FoodTech

TECHNOLOGY

AI CleanTech Data Analytics - Big Data
Diagnosis/Imaging Hardware IoT
Robotics Sensors

BUSINESS MODEL

B2B B2B2C B2C

REVENUE MODEL

Price per Item Price per Use Subscription

FUNDING SOURCES

VC

information for various crop applications. The system maximizes yield, quality and reduces crop inputs. The AI/ML software continuously improves itself using data collected before, during, and after crop treatments are deployed. This makes it a resilient and long-lasting investment for farmers. The system has been developed initially for 14 crops: Barley, Cotton, Corn, Rapeseed/Canola, Olive, Sorghum, Sugar cane, Soybeans, Wheat, Grapes, Tomatoes, Potatoes, Onions, Leafy greens, and Sunflowers.

Innovation & Scalability

The Augmenta System has a great scale-up potential due to:
1) Technical features: its hardware is built using 4G, the shell 3D and all range camera (Sunny and Rain). The company will have a small to house assembly line that can be easily reconfigured to attract manufacturers around the world, enabling quick and non-capital intensive industrialization. The built-in AI/ML driven software and cloud analytics are highly scalable and able to improve themselves using sophisticated AI algorithms, meaning that the more the innovation is deployed by farmers, in Europe and internationally, the better its performance improvement will be. The technology is scalable since it improves several levels in crop input, crop types, and increased predictive capability for crop management, which will be expanded in the future for weed and plant disease control.

2) Regulatory requirements: Augmenta has already considered the regulations needed to achieve market authorization. The company is in the process of filing for the CE mark and will be able to timely comply with the regulatory requirements.
3) Commercialization strategy and business model: Augmenta will target large farms and cooperatives as go-to-market customers, starting from 2023 in the EU and from 2024 worldwide. Augmenta will sell the system through big international distributors that already have a strong presence in the market and a solid network of customers supporting quick market expansion.

Traction & achievements

In pilot testing (evaluation customers), our system improved yield by 10% and crop quality by 20%, and decreased chemical usage by up to 40%, resulting in a net gain of an average of €200 per ha per season. Applied across the EU (15M ha of arable land), this would bring EU farmers an additional €24.8B revenue. Augmenta's system supports sustainable farming, making it economically effective for the farmers, reducing the need for institutional economic help. It also offers the possibility of directly measuring inputs to the fields, allowing for accurate monitoring of the agricultural practices. Currently, the Augmenta System has been deployed 75 times across 17 different countries and our customers have used the system in more than 35,000 acres.

Team & Why Us

Augmenta's team currently comprises 40 members, all with high-level academic backgrounds with specializations (M.Sc. or PhD in Engineering, Robotics, Agriculture, Maths, and Business). The team includes software and hardware engineers, agronomy, operation and communication experts. Altogether, the team brings tens of years of commercial experience and relevant technical expertise, spanning from agriculture, business, algorithms and software development, and the optimization of manufacturing processes. Augmenta plans to further expand its team by hiring a CRO, additional software developers, hardware engineers, and sales managers to finalize product development and sustain and coordinate the consequent business expansion.

Funding Needs

Developing an agri-tech solution is a quite complex endeavor. Our team includes Software and Hardware Engineers, Agronomists, ML/AI, and Computer Vision Scientists, as well as Sales, Marketing, HR, Admin, and Operations Managers. Our strongest asset nevertheless, is that many of us are also farmers, including the two co-founders. In order to achieve our goals, the product and business teams need to grow to 100 employees in the coming two years.

FUNDING

- 2021 - Series A, VC
EUR 5.5M, OMI Industrial, Pymovis, HVC, Marathon Venture Capital
- 2019 - Seed, VC
EUR 2.5M, HVC, Marathon Venture Capital
- 2018 - Pre Seed, VC
EUR 500K, Marathon Venture Capital

PATENTS

AWARDS

- 2021 - Investor
DAA - International's Technical Innovation Prize and Blue Award for 2021
- 2019 - Funding
AgriTechstars - Ag Tech Awards prize for 2019
- 2018 - Funding
HesseChallenge Texas 2018 Gold prize \$14,100

INCUBATIONS/ACCELERATIONS

- 2021 - Program
EUS

JOBS

- 2023 - Full time
[apply for multiple jobs](#)

PERKS

Official Partners

Business Partners



Institutional Partners



ELEVATE
GREECE³³
national startup point

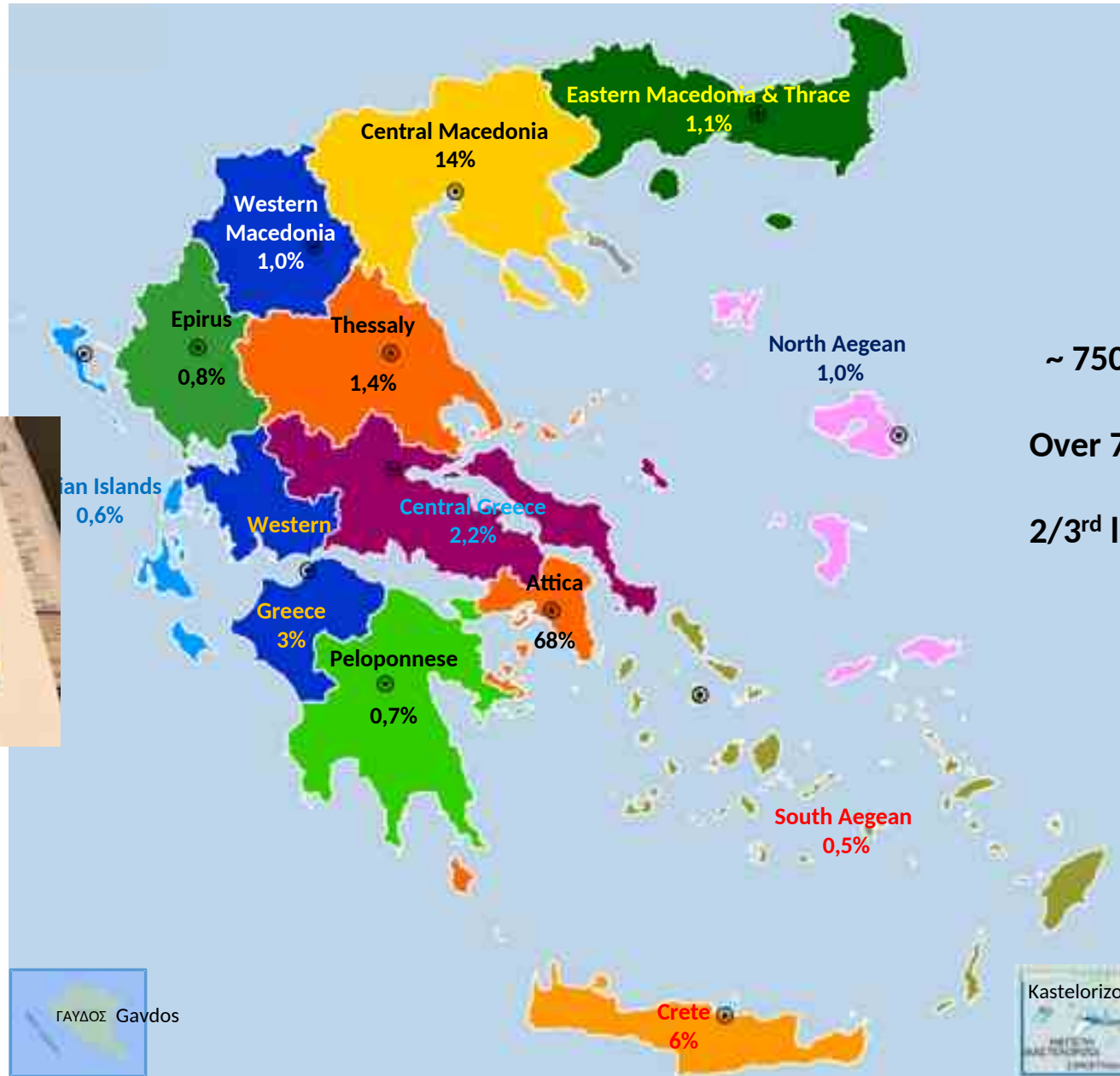
National Startup Awards



Favourable conditions for startup ecosystem growth

- Favourable tax incentives for stock options / L. 4646/2019, gazette A' 201, Art. 4
- Favourable tax incentives for Angel Investors / L. 4712/2020, gazette A' 146, art. 49
- Call for working capital cash injections up to 100.000 euros, addressing covid-19 negative impact
- Funding from Angel Co-investment fund and 10 VC funds
New funds ahead !!
- Global networking and pitching events





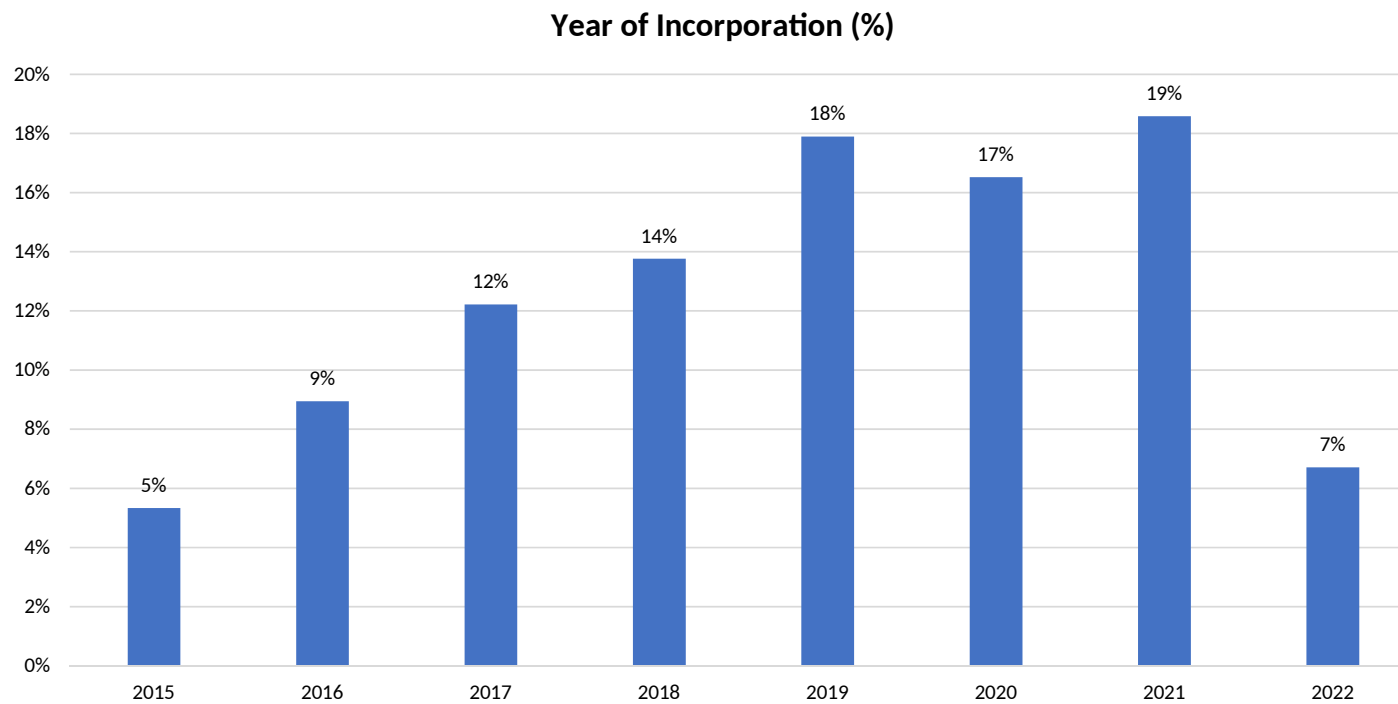
~ 750 registered startups

Over 7,000 talented employees

2/3rd located in Athens

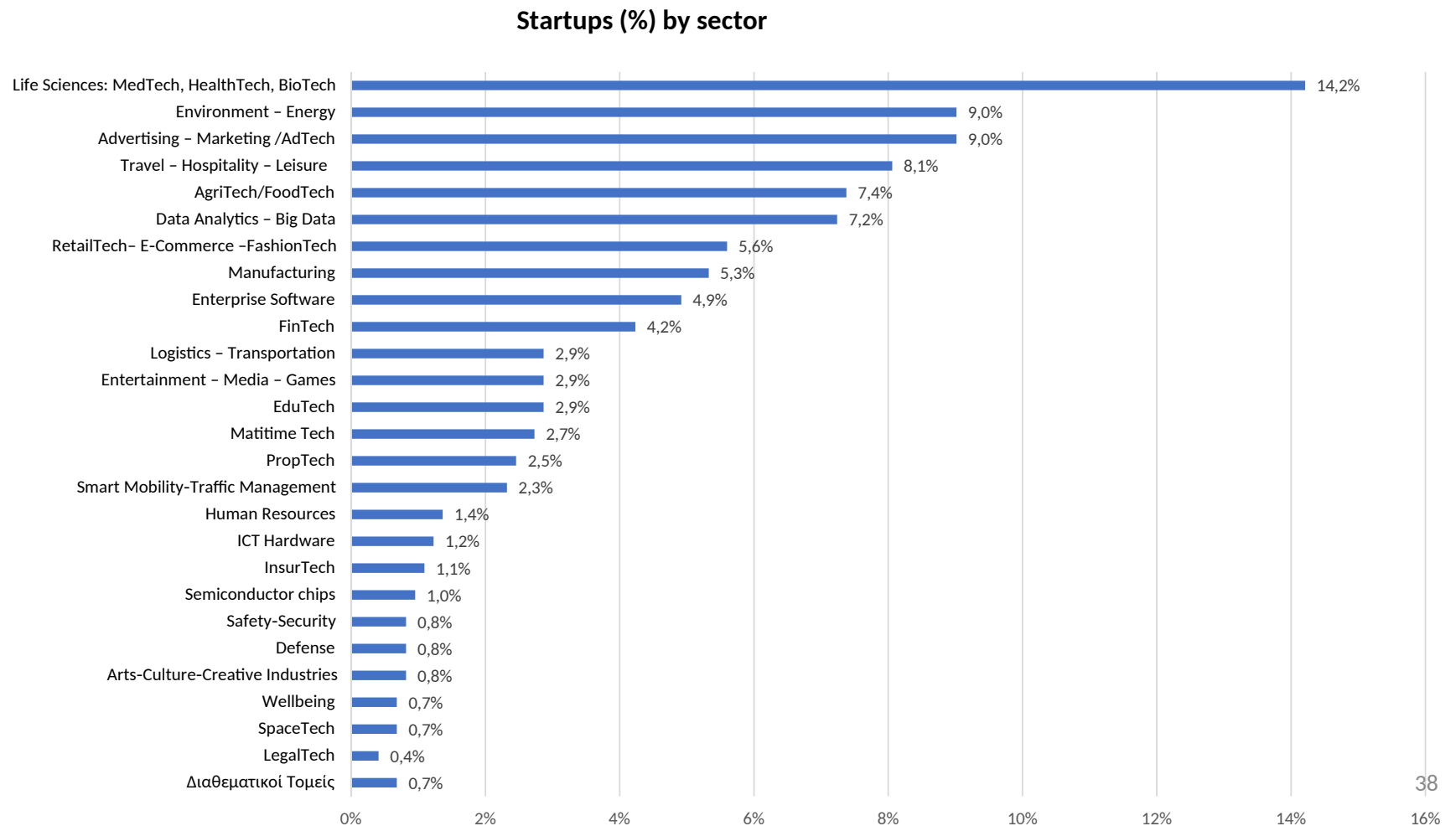


Elevate Greece Startup Ecosystem Statistics



Elevate Greece Startup Ecosystem Statistics

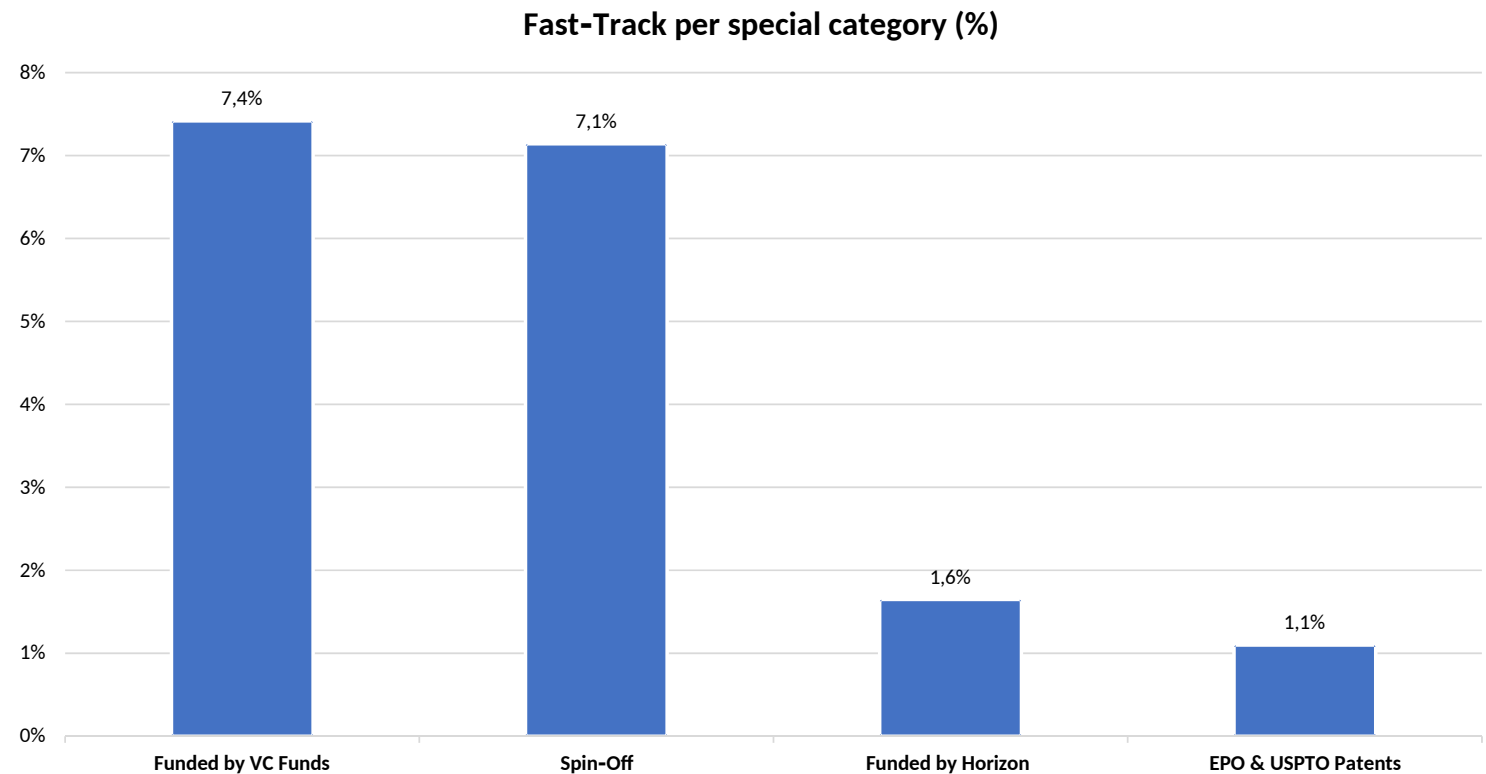
728 startups
up to 31.12.2022



Elevate Greece Startup Ecosystem Statistics

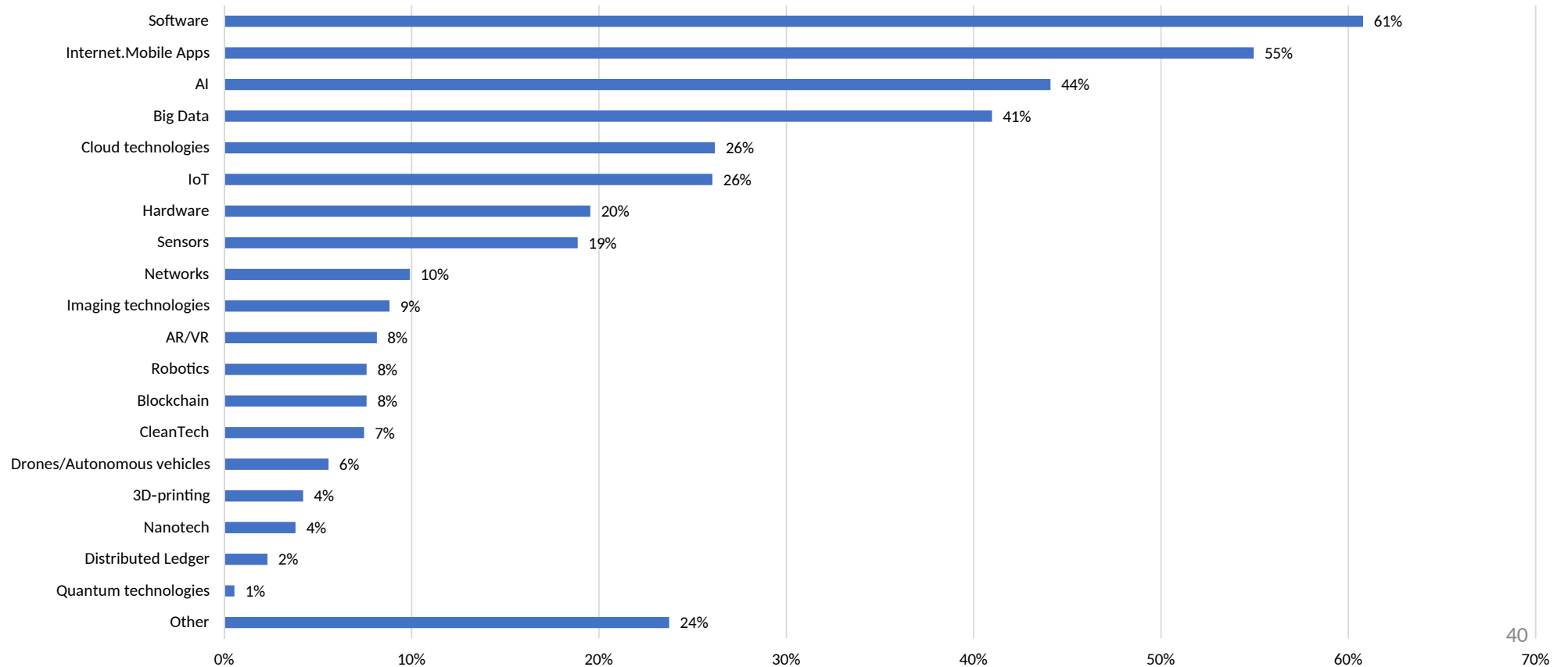
Up to 31.12.2022

Fast-Track way	Numbers
Funded by VC Funds	54
Spin-Off	52
Funded by Horizon	12
EPO & USPTO Patents	8
	126



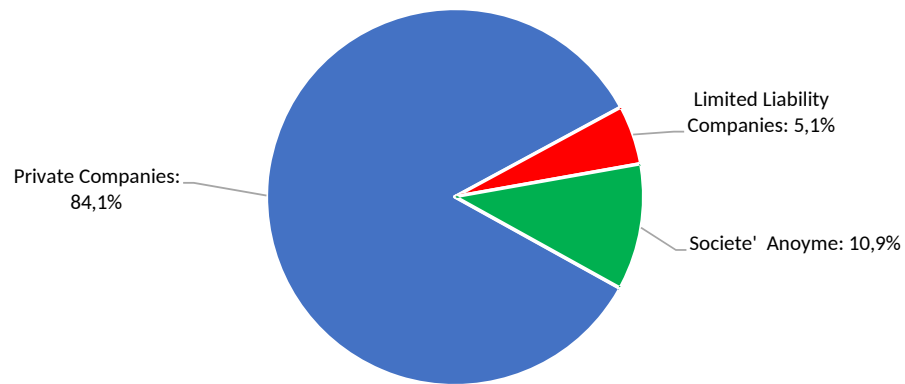
Elevate Greece Startup Ecosystem Statistics

Preferred technologies (%)
(multiple answer possibilities)

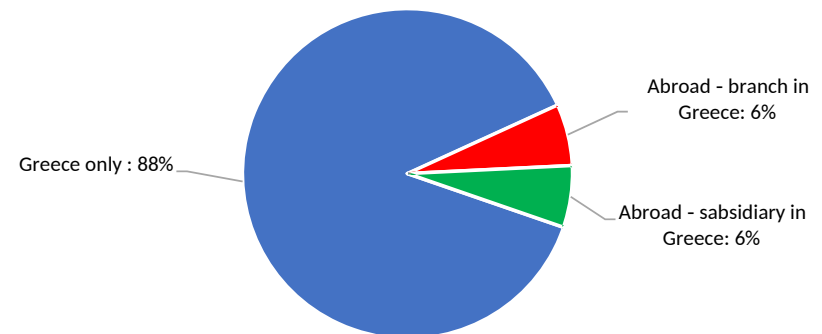


Elevate Greece Startup Ecosystem Statistics

Legal entity types (%)

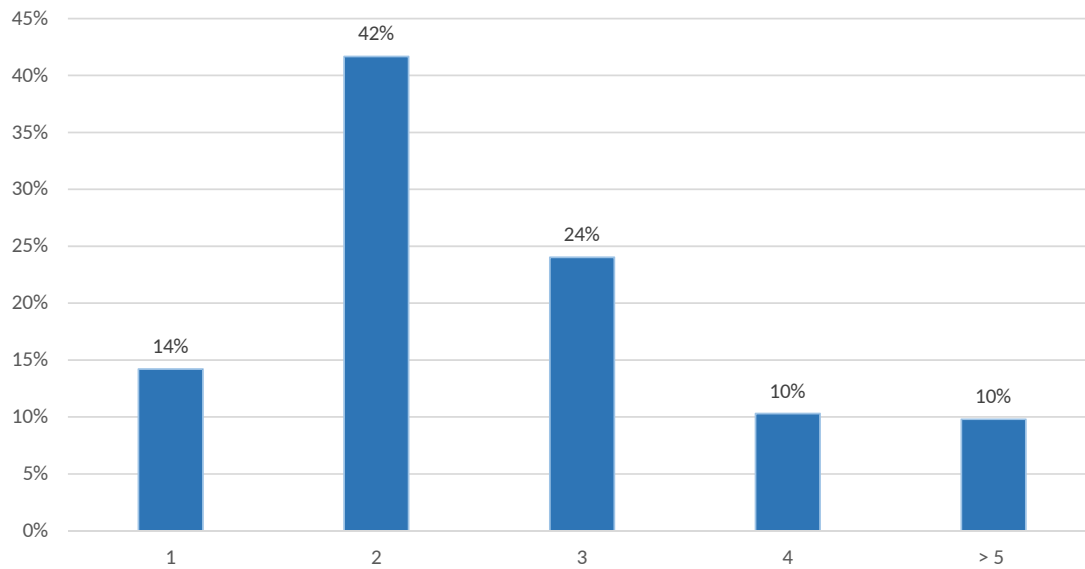


Country of Incorporation

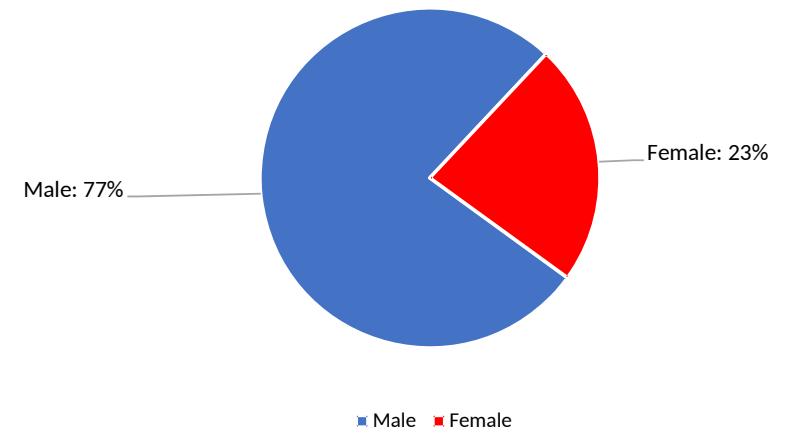


Elevate Greece Startup Ecosystem Statistics

Number of founders

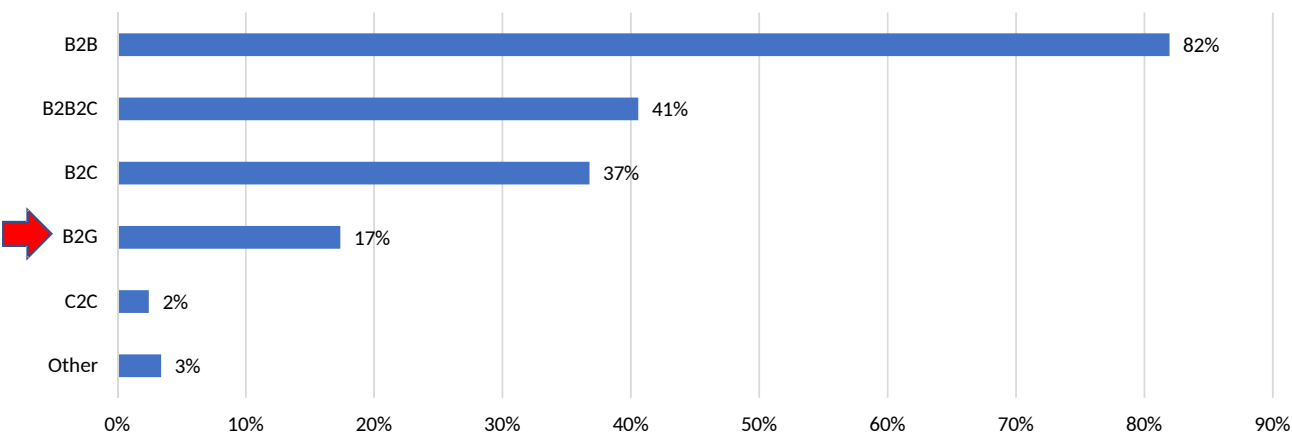


Gender (%)

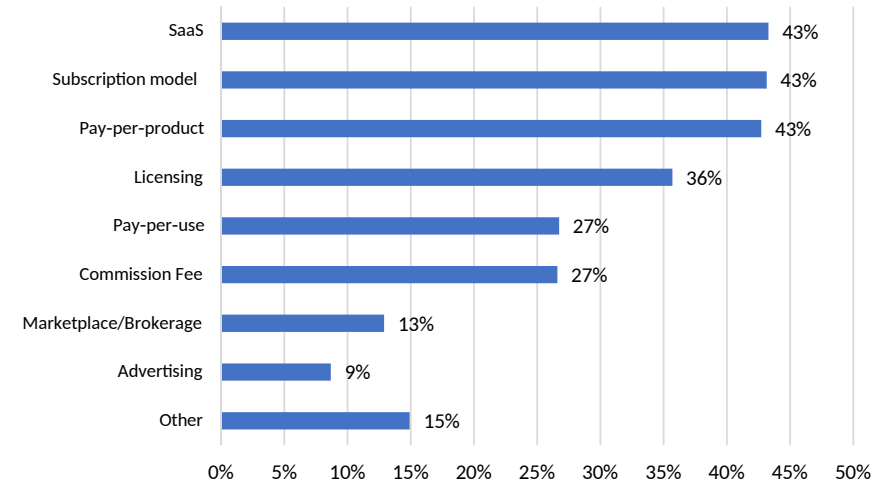


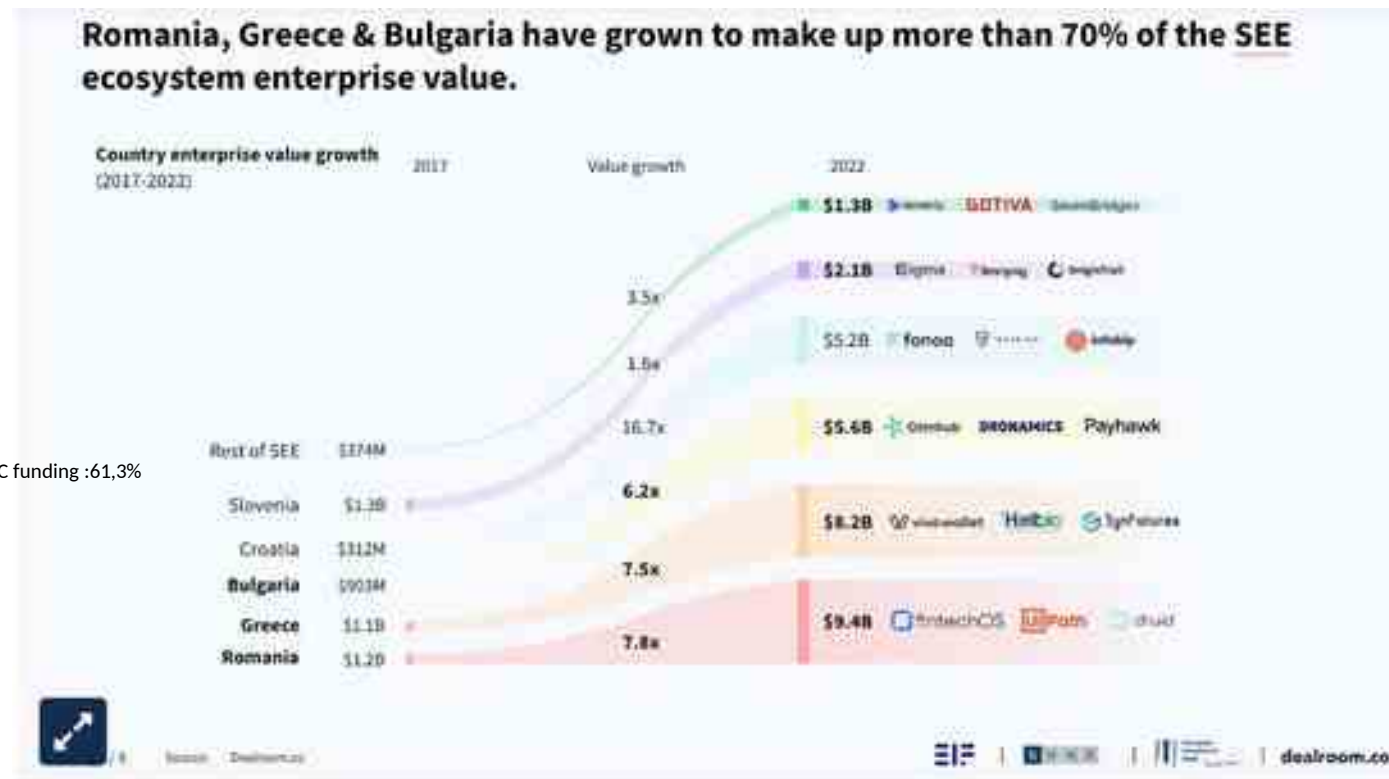
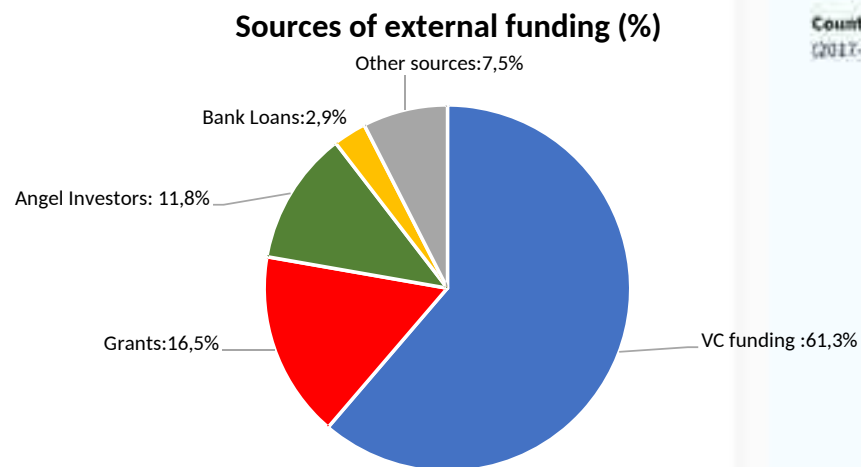
Elevate Greece Startup Ecosystem Statistics

Business Model
(multiple answer possibilities)



Reveniew Model
(multiple answer possibilities)





















Elevate Greece Startup Ecosystem Statistics: 350 use AI

350 Startups










Download as PDF

Startup	Industry	Technology	Region	Employee count	Total funding €	Website
 TileDB, Inc.	Data Analytics - Big Data	AI, Cloud Computing, Data Analytics - ...	Attica	30	16.3M	Link
 Inteligencia	Life Sciences (MedTech, HealthTech, Bio...	AI, Data Analytics - Big Data, Software	Attica	110	13M	Link
 Augmenta Agriculture Technol...	AgriTech / FoodTech	AI, Cleantech, Data Analytics - Big Dat...	Attica	46	9.7M	Link
 PD NEUROTECHNOLOGY LIM...	Life Sciences (MedTech, HealthTech, Bio...	AI, Cloud Computing, Data Analytics - ...	Attica	38	5.5M	Link
 Bryq - IDALTO HELLAS MIKE	Human Resources	AI, Data Analytics - Big Data, Software, ...	Attica	11	5.5M	Link
 Convert Group	Data Analytics - Big Data	AI, Data Analytics - Big Data, Software	Attica	63	4.1M	Link
 IIBE COFFEE LIMITED GREE...	Data Analytics - Big Data	AI, Data Analytics - Big Data, Hardware...	Attica	22	3.92M	Link
 Centour Technologies P.C.	AgriTech / FoodTech	Blockchain, Cleantech, Cloud Computin...	Thessaly	20	3.7M	Link

Elevate Greece Startup Ecosystem Statistics: 350 use AI

 Centaur Technologies P.C.	AgriTech / FoodTech	Blockchain, Cleantech, Cloud Computin...	Thessaly	20	3.7M	link
 OCELL I.K.E.	Life Sciences (MedTech, HealthTech, Bio...	AI, Diagnostic/Imaging, Hardware, Sens...	Creta	10	3.52M	link
 GUARDIAN TELEMATICS SA	Life Sciences (MedTech, HealthTech, Bio...	AI, Data Analytics - Big Data, Sensors, S...	Attica	30	2.9M	link
 Perceptual Robotics Limited	Manufacturing	AI, Cloud Computing, Data Analytics - ...	Attica	12	2.62M	link
 ADVANTIS MEDICAL IMAGING	Life Sciences (MedTech, HealthTech, Bio...	AI, Cloud Computing, Diagnostic/Imagi...	Attica	13	2.33M	link
 JADBio - Gnosis DA A.E.	Life Sciences (MedTech, HealthTech, Bio...	AI, Cloud Computing, Data Analytics - ...	Creta	10	2.22M	link
 Finclude	FinTech - Financial Services (WealthTech)	AI, Cloud Computing, Data Analytics - ...	Attica	12	2M	link
 NETFOX ANONYMH ETAIPEI...	Enterprise Software	AI, IoT, Networks, Sensors	Attica	9	2M	link

Elevate Greece Startup Ecosystem Statistics: 350 use AI

Startup	Industry	Technology	Region	Employee count	Total funding €	Website
 DELIX OILX SINGLE MEMBER PRIYA...	Data Analytics - Big Data	AI, Data Analytics - Big Data	Attica	29	1.9M	Website
 ORFIUM - Hexacorp Greece Sk...	Entertainment/Media (Games, Sports, S...	AI, Cloud Computing, Data Analytics - ...	Attica	120	1.8M	Website
 Triparound	Travel / Hospitality / Leisure	AI, Cloud Computing, Data Analytics - ...	Attica	23	1.77M	Website
 Agriknow IKE	AgriTech / FoodTech	AI, Data Analytics - Big Data, Software	Attica	13	1.67M	Website
 ROADCUBE	FinTech - Financial Services (WealthTech)	AI, Cloud Computing, Hardware, IoT, So...	Attica	30	1.5M	Website
 DeepMed IO Ltd	Life Sciences (MedTech, HealthTech, Bio...	AI, Cloud Computing, Data Analytics - ...	Attica	6	1.41M	Website
 POCKEE IKE	Advertising & Marketing (AdTech)	AI, Data Analytics - Big Data, Software, ...	Attica	17	1.25M	Website
 dci Digital Commerce Intelligence...	Data Analytics - Big Data	AI, Cloud Computing, Data Analytics - ...	North Aegean	8	1.2M	Website
 HELLENIC INSTRUMENTS	Defence Systems	3D Printing, AI, AR/VR, Data Analytics - ...	Attica	12	1.14M	Website

Increase in Global Ranking

✓ Greece increased by **6 spots** in the Global Startup Ecosystem

2021

54th



2022

48th

This growth was achieved after a decline of 10 spots from 2020 to 2021

STARTUP
Blink



✓ Athens increased by **21 spots** in the Global Startup Ecosystem

2021

153th



2022

113th

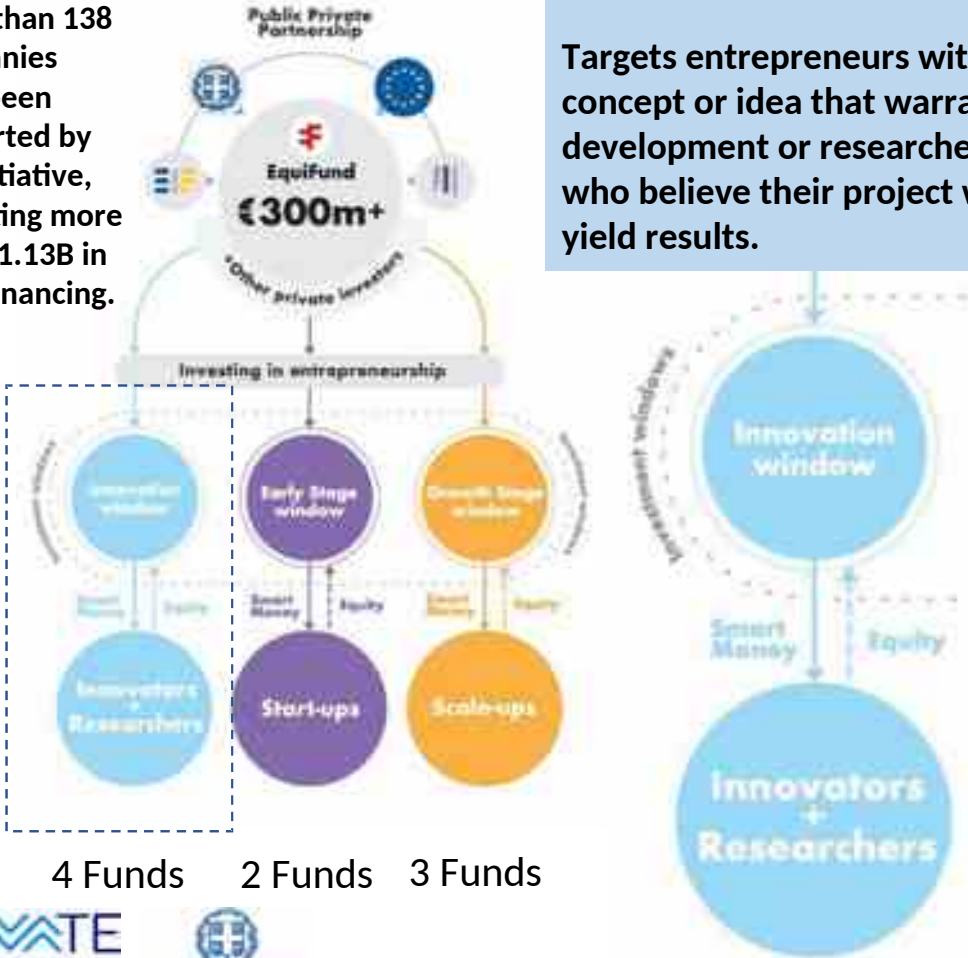


2018

More than 138 companies have been supported by the initiative, attracting more than €1.13B in total financing.

The innovation window

Targets entrepreneurs with a concept or idea that warrants development or researchers who believe their project will yield results.



4 Funds 2 Funds 3 Funds



Software, data analytics, machine learning, SaaS, robotics, optics, sensors, materials science, energy-tech and clean-tech.



B2B solutions and products in technology, ICT, high tech in verticals such as robotics, microelectronics, AI,, Data and machine learning, Cyber-security, energy, transportation and fintech.



ICT, e-business, robotics, maritime, supply chain, IoT, energy informatics, FinTech and InsurTech.



Tourism/travel, fintech, logistics, retail, shipping, maritime and e-health and wellness.

BIG PI

(€50M to manage)

23 investments

98 investments

METAVALLON

(€32M to manage)

30 investments

uni fund

(€30M to manage)

23 investments

VELOCITY PARTNERS

(€24M to manage)

22 investments

- 2bull MeDiTherapy
- Accusonus
- Altered
- Anodyne Nanotech
- Athroa Innovations
- Balena
- Biomimetic
- Bryq

- Dataviva
- Fieldscale
- Intelligencia
- Kinems
- Navenio
- Orfium
- Orthoson
- PCNano Materials

- PD Neurotechnology
- Phenometry
- Prosperity
- Saphetor
- Space Talos
- TileDB
- Vivante Health

- Advantix
- Better Origin
- Bioemtech
- BIOPIX-T
- Citizen
- Covve
- Cogitat
- CreatorUp
- Better Origin (formerly Entomics)
- Ferryhopper

- GuestFlip
- [I2.d] technologies
- Intelstyle
- Krolos
- LangAware
- Lerna AI
- Loctio
- MielJo
- Perceptual Robotics
- Prosperity
- Purposeful

- Alicencode
- B2B Wave
- Bespot
- BlueCoffee
- Clio Muse
- CollegeLink
- Convert Group
- Cyns

- DTwise
- e-satisfaction
- EnzyQuest
- Exit Bee
- FlexCar
- Foodexys
- Intale
- K-invent

- M-hospitality
- Nanoplasmex
- Nimble
- Novoville
- PLIN Nanotechnology
- QCell
- Tekmon



ELEVATE GREECE national startup point

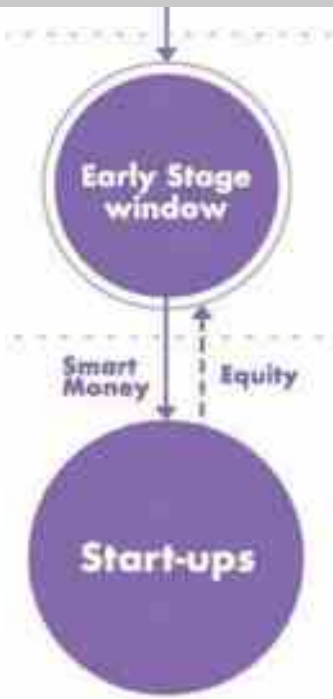
ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Υπουργείο Ανάπτυξης
και Περιφέρειας

2018



The early stage window

Targets start-up founders who foresee a high growth potential for their business.



Marathon VC

Marathon VC brings together a team that combines investment, entrepreneurial, technical and operational skills in order to help the new generation of ambitious founders build world-class technology companies. The fund targets SMEs at the seed and Series A stages.

Targeted sectors include: Generalist ICT with a preference for B2B.

VentureFriends 400W

VentureFriends 400W brings together a strong and cohesive team able to provide substantial value to ICT SMEs in the seed and Series A stages.

Targeted sectors include: Marketplaces and SaaS.



MARATHON
VENTURE CAPITAL

(€32M to manage)

15 investments

- Augmenta
- Ariadne Maps
- Avrio
- Causaly
- Centaur Analytics
- Code BGP
- Connectly
- Cube RM
- Hack The Box
- InAccel
- Lambda Automata
- LearnWorlds
- Lenses
- Netdata
- Norbloc

37 investments

VentureFriends

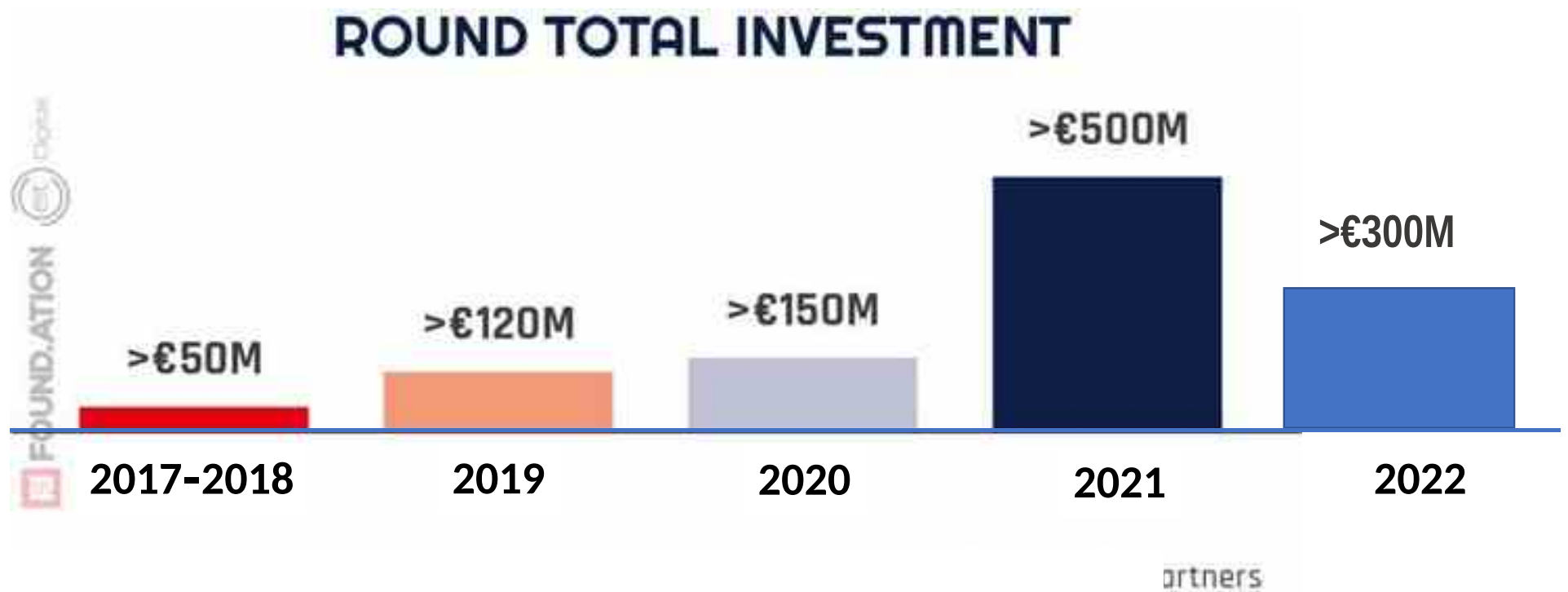
(€50M to manage)

22 investments

- Accusonus
- Belvo
- BibeCoffee
- Blueground
- Byrd
- FlexCar
- Gaspardesk
- Home Made
- Homie
- Influo2
- Instashop
- Lyvly
- MyJobNow
- Norbloc
- Novoville
- Plum
- RTsafe
- Spotawheel
- Stasher
- Tymit
- Weengs
- Welcome Pickups



Startup Ecosystem Highlights



Source:

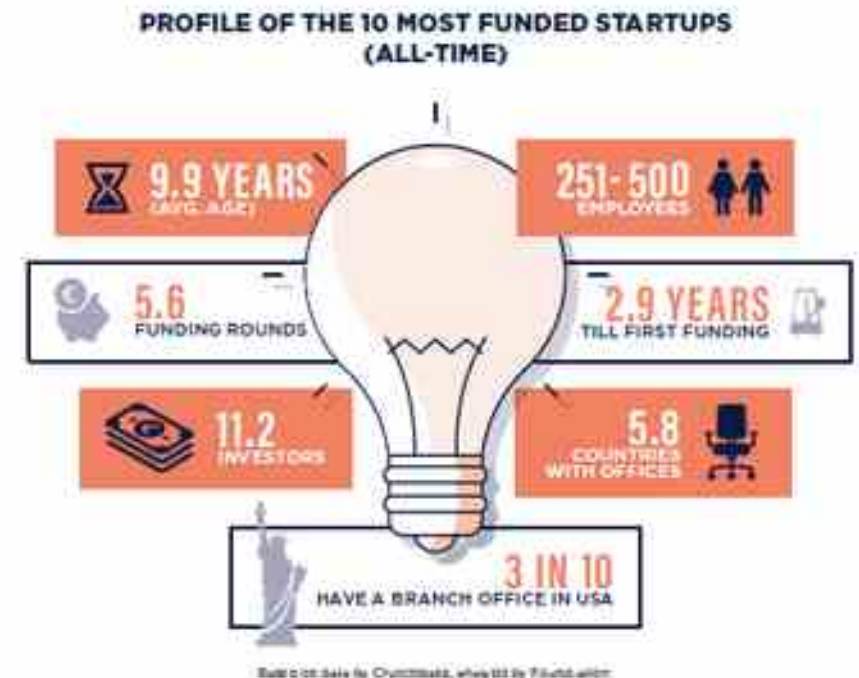


Startup Ecosystem – Key Facts

TOP 10 MOST FUNDED GREEK STARTUPS (ALL-TIME)		
	Company	Total Funding (€ in millions)
1	Viva Wallet	322.75
2	FlexCar	296.6*
3	Blueground	221.07
4	Skroutz	*
5**	Spotawheel	119.4*
6	Persado	83.6
7	Workable	73.83
8	Hellas Direct	58.23
9**	TileDB	48.1
10	Plum	40.1

*Undisclosed or estimate amount, market estimations were taken into consideration for the ranking. Amounts also include debt funding that companies have secured.

**New entries in 2022



Source:



Greek Startup Community Exits

5 out of 19 exits from the Greek startup community during 2021 – 2022

 POWERFACTORS

acquired →


Meta

acquired →

 mobileum

acquired →


celonis


acquired →

 sitecore

acquired →


inaccess


accusonus


IDOMETRICS


Q LENSES


moosend



Greek Unicorns

That emerged in 2022



- ➔ Neonbank based in Athens
- ➔ 49% of its stake was acquired by JP Morgan



PeopleCert
All talents, certified.

- ➔ Founded in Athens
- ➔ Leader in the assessment and certification of professional skills

Greek Soonicorns



Blueground

[PERSADO]

Persado



Workable



LearnWorlds

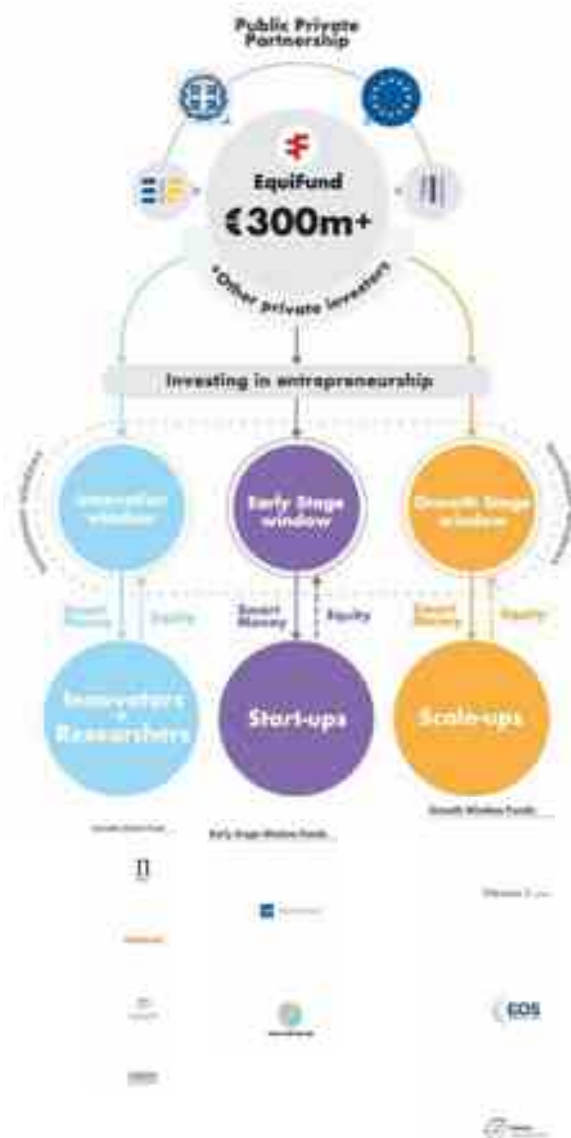
**HELLAS
DIRECT**
RETHINK INSURANCE

Hellas Direct

F. FlexCar

Flex Car

2017



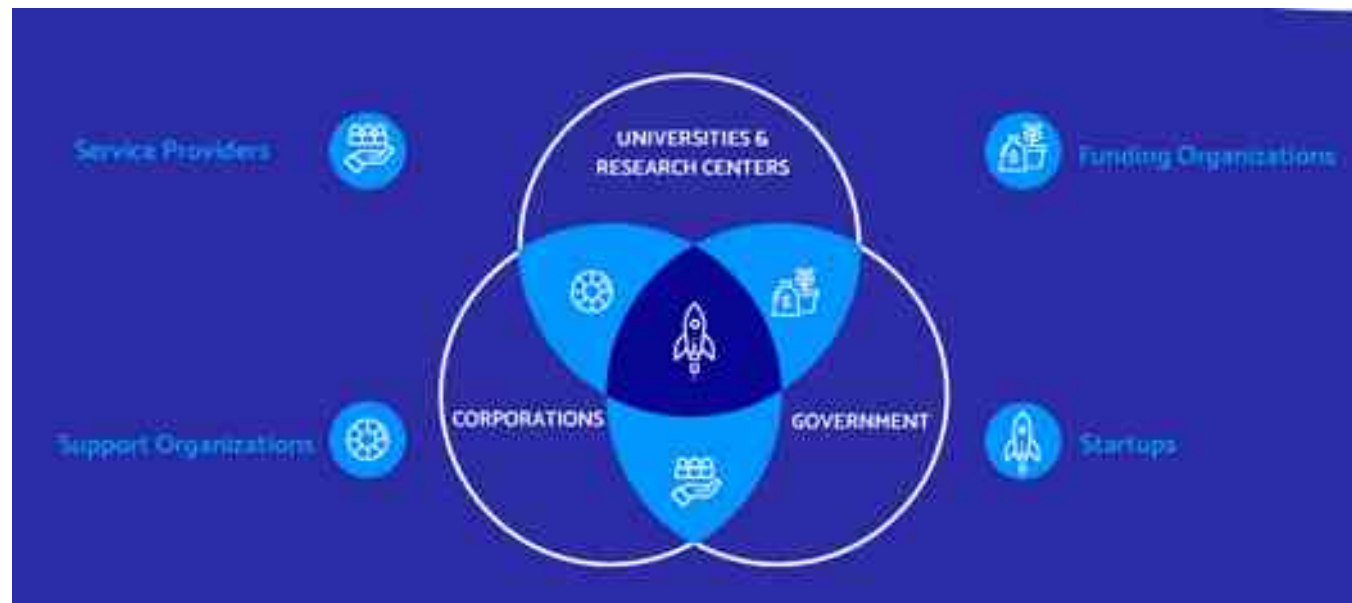
2023

ACTIVE VENTURE CAPITAL FUNDS

Active Venture Capital Funds in 2022-2023			
Name	Size (€ million)	Total Investments	Investments in Greek startups in 2022
Active until the end of 2022:			
BigPi Ventures	€50	23	Athraa Innovations, Bryn, Orthoson, PD Neurotechnology, Dyania Health
Elkonos 2 S.C.A SICAR	€85	10	Select Fish, S.A
EOS Capital Partners	€100	6	Archeiothiki S.A
Matavation VC	€32	30	Better Origin, Ferryhopper, Krotos, Trucksters, Wikifarmer
Synergia Hellenic Fund IV	€50	Undisclosed	-
Uni.Fund	€30	23	-
Velocity Partners	€24	22	SERG Technologies, Spotawheel
Active in 2022 and beyond			
Genesis Ventures	€20	10	ClickToTherapy, Feel Therapeutics, Finloop, Lerna AI, Prometheus, Protio, Swaplanet, Wealthyhood, Zenus, Dyania Health
Forth Tech	€25	-	-
Lstone Capital I	€15.62	-	-
Marathon VC II	€70*	15**	Lambda Automata
Northern Greece Investment Fund (NGIF)	€30	-	-
Phaistos SG	€101	1	Mattarnet
TECS Capital	€3	3	ComeTogether, Oliveox
VentureFriends III	€100*	52**	Simpler, Spotawheel, Gaspardesk

*Referring only to the size of the current funds, not those made under the Equifund period.

**including investments from previous funds under the same managers.



Ecosystem Actors

Science Parks & Technology Transfer

Science Parks and Technology Transfer

Technology Parks are open spaces that aim to facilitate innovation for science-related start-ups. The focus is on the commercialization of research results, the creation of a business and the promotion of innovation in the region.



Innovation Clusters

Innovation clusters are geographical concentrations of companies, research institutions and other organizations, which are focused on a specific sector and aim to promote innovation and economic growth through collaboration and knowledge sharing.



Venture Capital Funds

Venture capital funds provide the investment capital for start-ups with high growth potential. The focus is on funding in the early stages of the company's development, typically before the company has established a revenue stream. The funds are managed by professional investors and aim to provide the start-up with the capital needed to grow the business.



Innovation Clusters

VCs

Incubators

Accelerators

Coworking Spaces

Federations

Incubators

Incubators provide support and resources to start-ups in the early stages of their development. They offer office space, mentorship, and other services to help the start-up grow. Incubators are often funded by the government or private organizations.



Coworking Spaces

Coworking spaces are shared workspaces where individuals and companies can rent desks or private offices. They provide a flexible and affordable way for start-ups to get their feet on the ground. Coworking spaces often offer additional services like meeting rooms and event space.



Accelerators

Accelerators provide intensive support and resources to start-ups over a short period of time. They offer mentorship, funding, and other services to help the start-up grow. Accelerators are often funded by the government or private organizations.



Federations

Federations are organizations that bring together different actors in the innovation ecosystem. They aim to promote collaboration and knowledge sharing between the different actors. Federations are often funded by the government or private organizations.

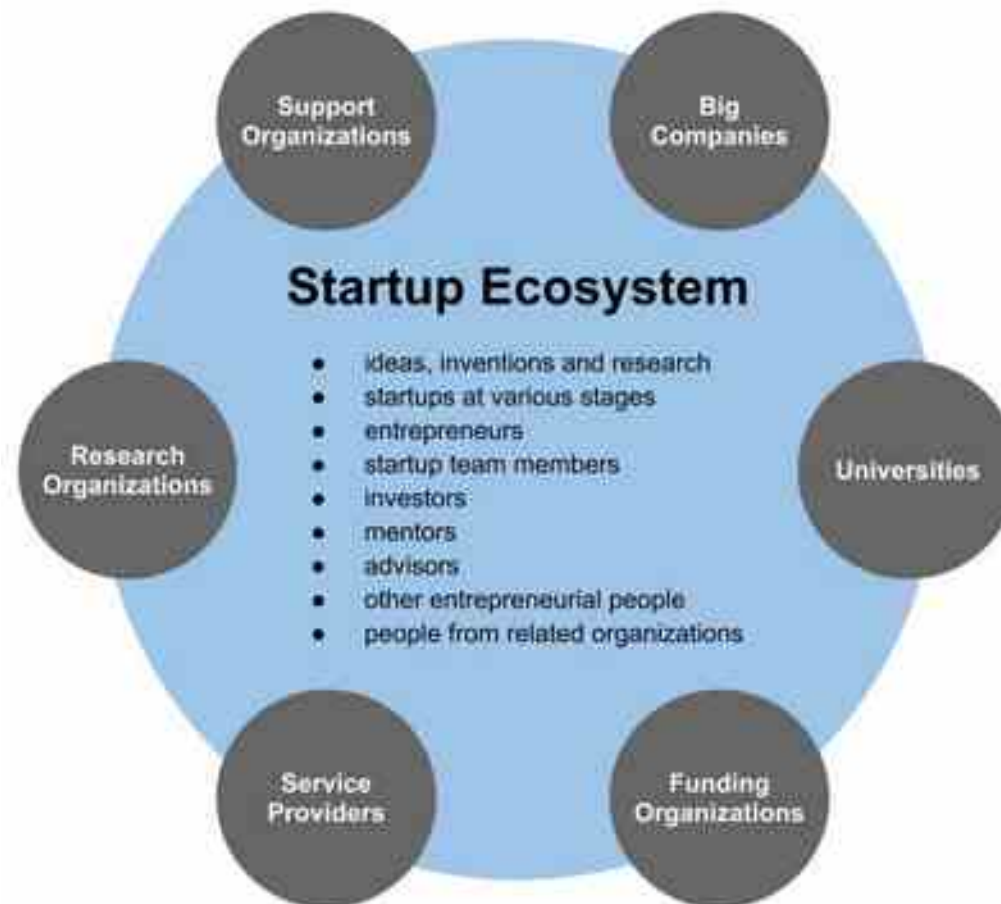


Responding to the challenges of fostering regional growth and employment in a competitive global economy, many governmental structures raise new focus on the Innovation Ecosystem.

Ministry of
Education and
Religious Affairs

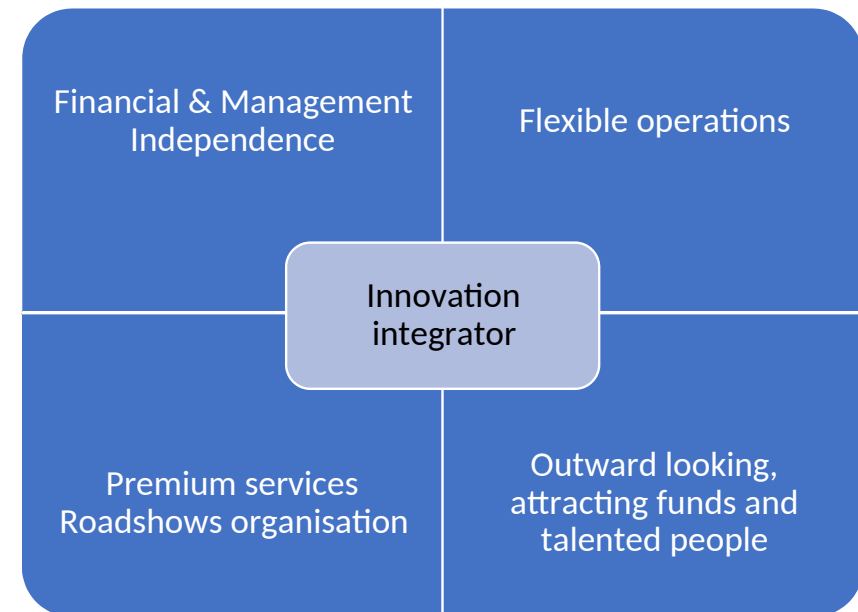
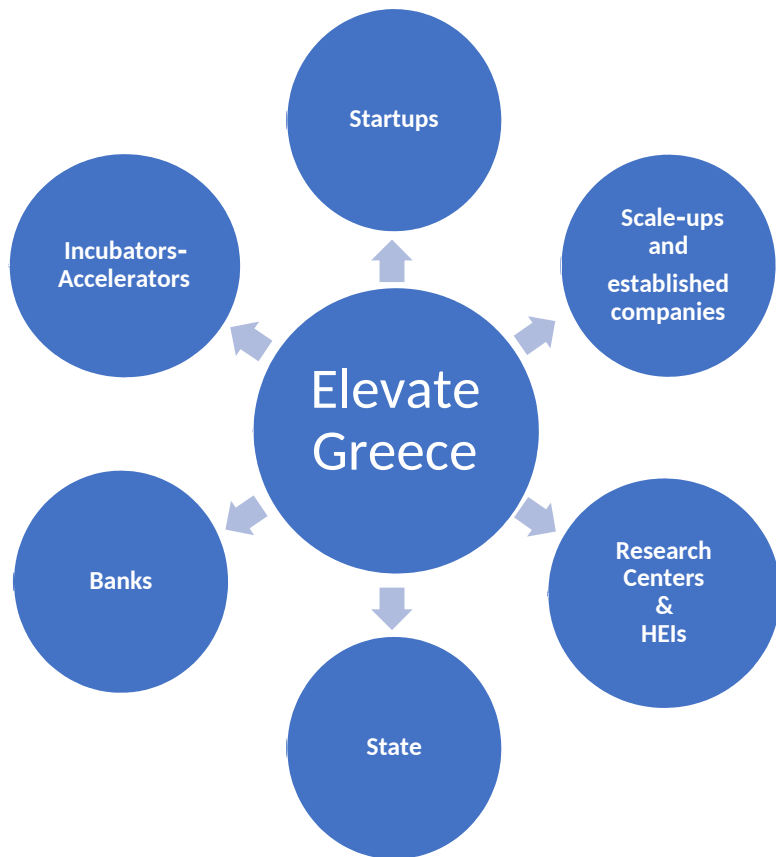


A driving force for a more inclusive and networked innovation ecosystem





A driving force for a more inclusive and networked innovation ecosystem



Grants – Loans – Equity

- Grants through:

- Strategic Investments (Law 4864/2021)
- Investment Incentives Law (Law 4887/2022)
- Structural and Investment Funds (26 billion + private investments)



- Grants or Loans (32 billion) through Recovery and Resilience Funds

- Green Transition: 38%
- Social cohesion: 25%
- Impactful Private Investments: 24%
- Digital Transition: 13%



- Equity/Quasi Equity through **H**ellenic **D**evelopment **B**ank of **I**nvestments (2+ billion €)

High Impact Investments

1. **Strategic Investments (Law 4864/2021):** investments of strategic importance for the national and/or the local economy – **3 sub-categories**

3rd category: High Impact Investments e.g.

- Production and Research Facilities
- Green economy investments (e.g. Hydrogen production)



Greek pharmaceuticals manufacturer ELPEN will have completed investments of 155 m. € by the end of 2025 in **production and research facilities** with a total area of 55,000 sq.m.



€ 83 million biotechnology investment plan from the joint venture of **Orgenesis & Theracell**



ΕΠΟΜΕΝΑ ΒΗΜΑΤΑ

- Οργανόγραμμα - Προσλήψεις (ΑΣΕΠ)
- Νέα πλατφόρμα σε 2 έτη
- Μελέτες για το οικοσύστημα
- Δράσεις εξωστρέφειας
- Ενδυνάμωση διασυνδέσεων με όλο το ελληνικό οικοσύστημα
- Διασύνδεση με άλλα οικοσυστήματα εκτός Ελλάδος



- Υψηλός οικονομικός αντίκτυπος (High impact startups)
- Προσέλκυση περισσότερων επενδυτών από εξωτερικό
- Σημαντικές επενδύσεις (deal flow)
- Υψηλότερη αποτίμηση (startup valuation)
- Περισσότερες απο-επενδύσεις (exits)
- Περισσότεροι μονόκεροι (unicorns)



Thank you for your attention!

