

## Research and Innovation System in Greece

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## Outline

### The GSRI

Performance of Greece in Research and Innovation

The National Smart Specialization Strategy 2021-27

International Cooperation in Research and Innovation

### **GENERAL SECRETARIAT FOR GREEK GOVERNMENT RESEARCH AND INNOVATION** Since July 2019 GSRI has been a part of the Ministry for Development and Investments **MINISTRY OF EDUCATION & MINISTRY OF DEVELOPMENT & RELIGIOUS AFFAIRS INVESTMENTS GENERAL SECRETARIAT FOR Research & 25 HIGHER EDUCATION Innovation INSTITUTIONS (HEIS) HELLENIC** 11 RESEARCH **FOUNDATION FOR TECHNOLOGICAL CENTERS** (Basic & **RESEARCH AND ORGANISATIONS Applied Research)**

**INNOVATION (HFRI)** 

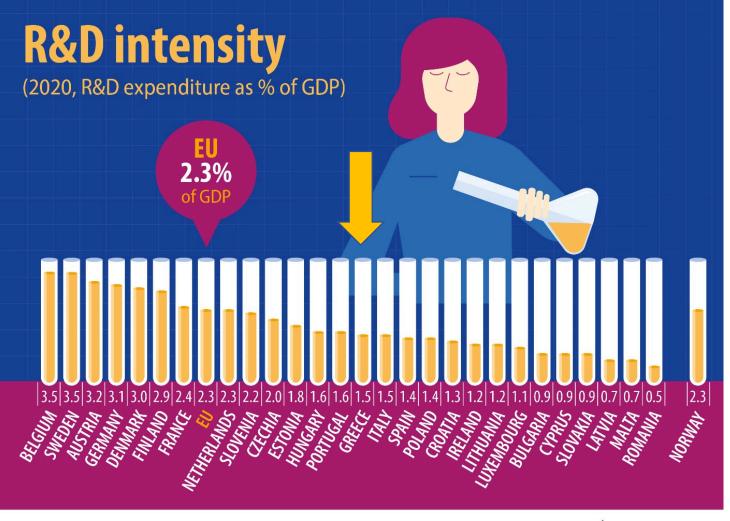
# Ministry of Development and Investments General Secretariat for Research & Innovation



### **Mission**

- Design, implementation, monitoring and evaluation of the National Strategy for Research and Innovation
- Launching and funding of research and innovation competitive programs
- Supervision and funding of 11 Research Centers and 3 Technological Organizations
- Representation to the European Union, OECD and International Research Organizations (CERN, EMBL etc.)
- <sup>-</sup> Promotion of public awareness on Science, Research and Technology

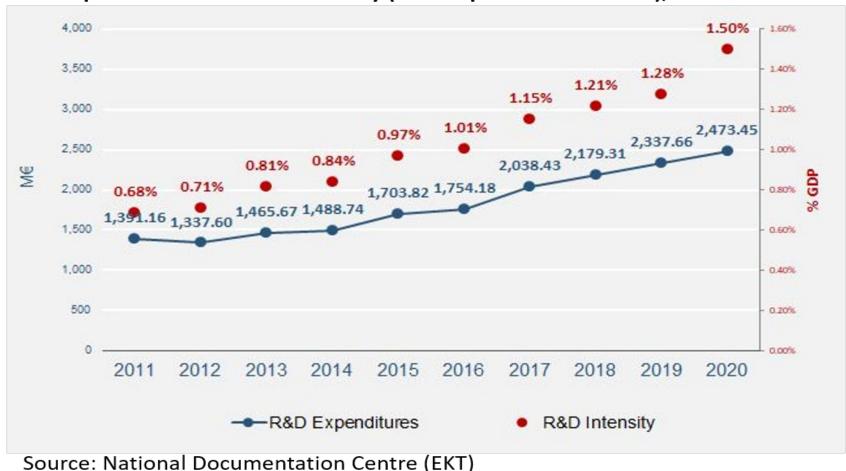
R&D Intensity in Greece remains below the EU average

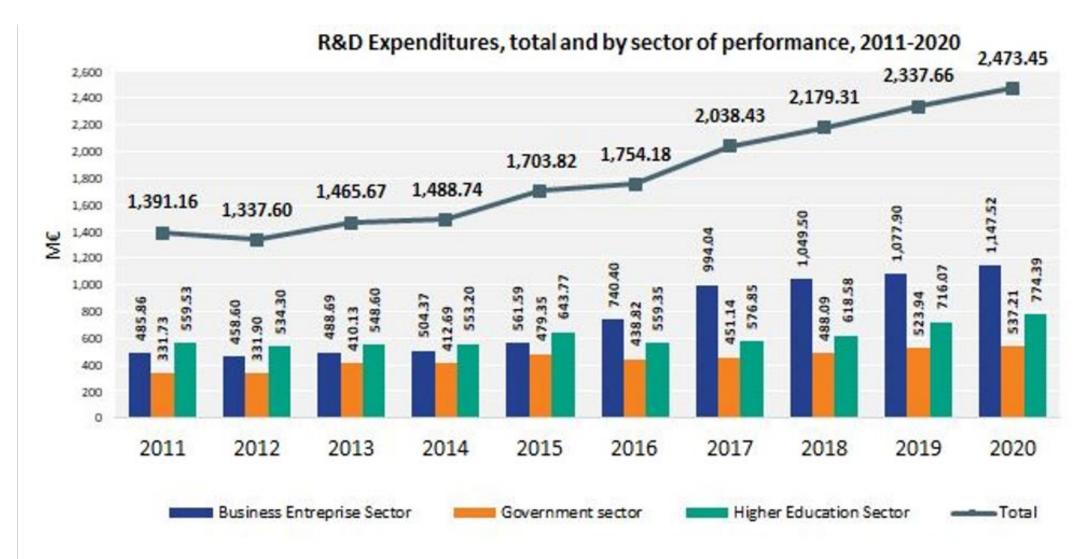


ec.europa.eu/eurostat

# R&D expenditures in Greece at 1.50% of GDP in 2020 (provisional data)

R&D Expenditures and R&D Intensity (R&D expenditures of GDP), 2011-2020

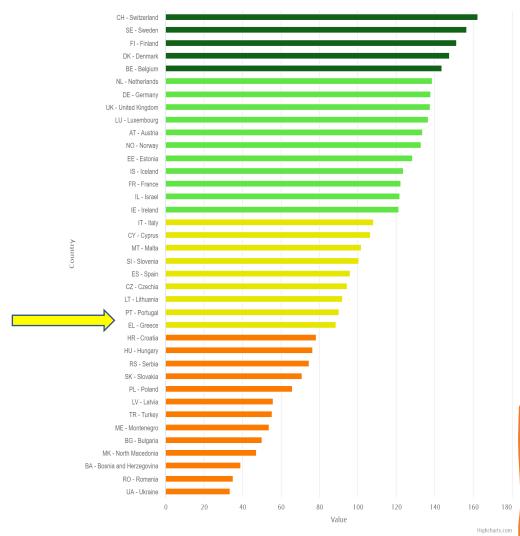


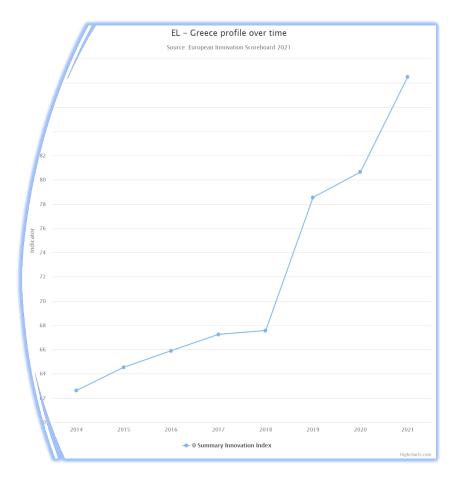


Source: National Documentation Centre (EKT)

#### 0 Summary Innovation Index

Source: European Innovation Scoreboard 2021





### **Greece is a Moderate Innovator**

Over time, performance relative to the EU has increased strongly, in the last three years in particular

## National Smart Specialization Strategy 2021-27

### Vision

A new growth model socially, financially and environmentally sustainable, based on knowledge and its commercialization for the production of high added value products and services, capable to integrate into global value chains.

Investments in research and innovation are in line with the country's growth strategy, providing the necessary innovative background aiming at increasing the competitiveness of the Greek economy and solving important social problems.

Smart Specialization Strategy 2021-27:

The Greek Innovation Journey Green, Digital, Inclusive

- Strategic Objectives
- Production of New Knowledge
- Commercialization and diffusion of Knowledge
- Technological Transformation of the Greek Productive Sector – Innovation adoption
- Internationalization Penetration into Global Value Chains



## Intervention Areas

- Human Resources (business and academia)/ Skills
- Research Infrastructures
- Innovation support services and facilities/ Intermediaries
- Business and Academia Co-operation and Co-creation
- Digital Transformation
- Regulatory Framework Tax incentives
- Science and Society



# Thematic Priorities

Digital Technologies

Bio-Sciences, Health and Pharmaceuticals

**Environment and Circular Economy** 

Sustainable Energy

**Transport and Logistics** 

Agro-food Value Chain

Tourism, Culture and Creative Industries

## **Funding Sources**

Indicative Budget 2021-27: > 1,6 b €

OP "Competitiveness" Research, Innovation, Advanced Technologies:

633.228.490 €

OP "Competitiveness" Skills:

139.622.108 €

OP "Competitiveness" Financial Instruments for innovative entrepreneurship:

110.000.001 €

Recovery and Resilience Programme:

485.000.000 €

**Just Transition Fund:** 

250.000.000€

Regional Operational Programmes, Other Sectoral O.P.s, National Investments Programme, Tax Incentives

## **Human Resources**



Reverse Brain Drain, Skills



Flagship Initiatives & Networks (Personalized Medicine, Climate Change, Food value chains: wine, olive oil, honey etc.)



Incentives for trans-sectoral mobility of researchers



HFRI: Support to research excellence and basic research

## Research Infrastructures



Multiannual Budgeting Plan of National Research Infrastructures 2014-20 (28 RIs)



Internationalization of the Greek RIs – Networking to European (ESFRI) and to international facilities



PSF (supporting the Greek authorities in implementing an indepth study of the 28 Research Infrastructures included in the National Budgeting Plan)

## Innovation Support Services and Facilities



Support to Spin off/ innovative start ups, Elevate Greece, Financial Instruments



Intermediaries: Clusters, Competence Centres, Technology Transfer Offices



**Innovation Districts (Athens & Thessaloniki)** 



Support for Patenting, Pre-commercial Procurement

## **Business & Academia Collaboration and Co-creation**

Programming Period 2014-20: 1.137 projects/ 606,7 m€ public budget/ 114 m€ private contribution



Collaborative Projects, industrial research and experimental development in business firms



Long – term, Strategic
Partnerships and Co-creation
Mechanisms

Program "Research - Create - Innovate"



# Internationalization / International R&I Cooperation



Participation to Horizon Europe and ERA (Partnerships, Missions, Widening, ERA Policy Actions etc.)



Access to international Research Organizations and facilities (CERN, EMBL etc.)



Bilateral and Multilateral R&D Cooperation



Support International Networking of Business and Research Organizations





#### COUNTRY PERFORMANCE IN HORIZON 2020 Even better performance in H2020 Vs FP7

#### **Horizon 2020 Key Figures**

Participation

Number of organisations involved in H2020 projects. One organisation participating in N Net EU Contribution 1,69B<sup>2,76%</sup> of EU total

Funding received by the project's participants after deduction of their linked third parties' funding

34.4873,91% of EU total

Number of organisations applying for Horizon 2020 grants. One organisation applying in N proposals

Success rate 13,43%<sub>EU average</sub>

Ratio of the retained proposals to the total number of eligible proposals received

SME Participation 29923,96% of country total

Number of SMEs involved in H2020 projects. One SME participating in N projects is counted N times SME Net EU Contribution 359,9M<sub>of country total</sub>

Total funding received by SME participants after deduction of their linked third parties' funding

**ERC Principal Investigators** 

360,45% of EU total

MSCA Participation

5802,17% of EU total

#### **Participation in Horizon 2020**

Participation rank 8 out of 28EU

Ranking position based on the participations in H2020, for a country in its country group

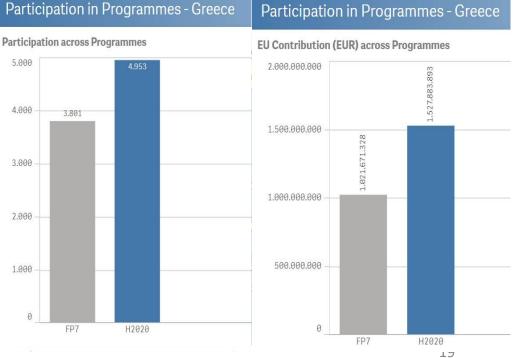
Budget share rank 11 out of 28<sup>EU</sup>

Ranking position based on funding received from H2020, for a country in its country group



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





### Participation to European Partnerships



Art. 187 TFEU

**High Performance Computing-HPC JU** 

**Key Digital Technologies – KDT-JU** 



Art. 185 TFEU

PRIMA – Partnership for Research and Innovation in the Mediterranean Area



<u>Co-funded Partnerships</u>/1° wave (Driving Urban Transition, Clean Energy Transition, Biodiversa+, Blue Bio, Water4All, Innovative SMEs, ERA4Health, THCS)

<u>Co-programmed Partnerships (</u>European Open Science Cloud – EOSC, Chemical Risk Assessment – PARC)

### Current Bilateral and Multilateral R&D Cooperation Programs



### **Greece - Germany**

24 active projects co-funded by the GSRI and BMBF

2+2 scheme (1 research organization +1 private enterprise from each country)



### <u>Greece – Israel</u>

8 active projects co funded by GSRI and ISERD

1 private enterprise from each country +/- research organisation



### **Greece – China**

23 active projects co-funded by GSRI and MOST



USA, Latin America, 3+1 (Greece, Cyprus, Israel +USA)



### Bilateral and Multilateral R&D Cooperation Programs

Who can participate ?

Higher Education Institutions, Research & Technological Organisations, Private Enterprises, NGOs

**Budget** 

Program budget: jointly agreed upon – typically 2-10 m € (3 years)

Project Funding : jointly agreed upon – typically 100-250 K € / project

**Timeline** 

Launching of Joint Call (open for 2 months) (to be mutually agreed)

National Evaluation – peer review - Joint Committee

**Duration of projects: 2-3 years** 

# Participation to European Partnerships, Bilateral and Multilateral Programs

Key features

- Joint priority setting
- Common time frame of funding and implementation

## Challenges

- Combination of different funding rules and procedures
- Different audit requirements
- Need for revision of national legal framework
- Human resource requirements

# Positive developments

- GBER revision (2021), art. 25©, art. 25 d
- Similar timeframe of Horizon Europe and Structural Funds
- Central Management of Financial Contributions
- New! Commission notice Synergies between H-E and ERDF

### **ERA Policy Actions**



**ERA Policy Action 1** 

Enable the open sharing of Knowledge and the re-use of research outputs, including through the development of the European Science Cloud (EOSC)



**ERA Policy Action 4** 

Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and inter-sectoral mobility across the ERA



**ERA Policy Action 10** 

Make EU Missions and Partnerships key contributors to ERA



**ERA Policy Action 11** 

ERA for Green Transformation: Green Hydrogen



**ERA Policy Action 14** 

Bring Science Closer to the Citizens: Plastic Pirates



## Thank you!

For more information https://gsri.gov.gr/en

