



## WP6

# Urban entrepreneurial policy for sustainable development in GREECE

*This publication has been produced with the financial assistance of the European Union under the ENI CBC Mediterranean Sea Basin Programme. The contents of this document are the sole responsibility of IED and can under no circumstances be regarded as reflecting the position of the European Union or the Programme management structures.*





# Innovation Country Profile: GREECE

## 1. Background

Greece during the last decade has made much progress in the sector of innovation. However, despite the improvement Greece is lagging behind the EU average in various categories, which constitutes the profile of an innovating country. Such areas are the attractive research system, digitalization, finance support of businesses, firm investments, use of information technologies, exports of high and medium technology products and use of IT technologies by businesses to improve workers skills.

According to the European Innovation Scoreboard 2022 of the European Commission, Greece belongs to the “moderate innovators” category, along with Czechia, Italy, Lithuania, Malta, Portugal, Slovenia, and Spain. Greece’s overall innovation performance in 2022 was 80.2% of the EU average and the country ranked 20th among the 27 member states. However, the Commission notes that the country’s performance is rapidly increasing with 24.2% points, which is a much higher rate than the EU average of 9.9% points. Hence, Greece’s performance gap to the EU is becoming smaller<sup>1</sup>.

According to the Global Innovation Index for 2023, Greece is ranked 42nd among the 132 economies featured in the GII 2023, which is a slight improvement from 2022, when it was 44th)

Greece’s strong points include:

- spending on software as a percentage of GDP (13th)
- logistics performance (18th)
- environmental performance (28th).

However, it ranks in the bottom half in capital formation:

- as a percentage of GDP (109th)
- labor productivity growth (109th)
- firms offering formal training (76th)
- and entrepreneurship policies and culture (69th).

Also, Greece is ranked first among the 132 surveyed countries in the percentage of the population enrolled in tertiary education and 118th in “University-industry research and development collaboration.”

---

<sup>1</sup> Karakatsani, Evelyn. n.d. “Greece Economy Briefing: Greece’s Path to Economic Recovery through Innovation and Digital Transition.” ([https://china-cee.eu/wp-content/uploads/2023/03/2023e03\\_Greece.pdf](https://china-cee.eu/wp-content/uploads/2023/03/2023e03_Greece.pdf)).



According to GII 2023, the country ranks 37th among the 50 high income group economies and 27th among the 39 economies in Europe<sup>2</sup>.

According to OECD<sup>3</sup>, Greece has already achieved 18 of the 123 SDG targets for which comparable data are available and is expected to meet 7 additional targets by 2030. As virtually all OECD countries, Greece has already met (or is close to meeting) most targets related to securing basic needs and implementing policy tools and frameworks mentioned in the 2030 Agenda. The quality of the environment is one of the country's main assets. Yet, Greece has undergone extensive reforms to cope with a deep recession and the legacy of the crisis still weighs heavily on many aspects of people lives and has undergone extensive reforms to cope with the 2009 financial crisis. While the economy started to recover in 2017, the legacy of the crisis weighs on innovation as well as on income and jobs:

Specifically:

- **SDG.8:** Hampered by the COVID-19 pandemic and the legacy of the financial crisis, both GDP and labour productivity declined over the past 15 years (Targets 8.1 and 8.2).The unemployment rate (Target 8.5), as well as the share of young people not in education, employment or training (Target 8.6), remain above the OECD average.
- **SDG.9:** Indicators supporting the assessment of Goal 9 on industries, innovation and infrastructure show that manufacturing value added is declining and accounted for only 8% of GDP in 2020 – 6 percentage points below the OECD average (Target 9.2).The proportion of R&D expenditure in GDP also remains low (Target 9.5).
- **SDG.10:** When it comes to income distribution, both relative income poverty and multi-dimensional poverty are high (Targets 1.2 and 10.2) while inequality has been on the rise, with the income of the bottom 40% growing at a slower pace than the national average (Target 10.1). In general, Greece is far away from achieving Targets 10.3 on inequalities for racial and ethnic minorities.
- **SDG.4:** Skills need to be improved while a low share of adults engage in lifelong learning. While participation and completion rates from pre-primary to upper secondary education are very high, too many children and young people lack minimum proficiency in reading and mathematics (Targets 4.1 and 4.2) and disparities in education outcomes are large among students from different socio-economic backgrounds (Target 4.5). In addition, around three in ten adults lack functional numeracy and reading skills (Target 4.6). Greece also has the lowest participation rate of adults in formal and non-formal education among OECD

---

<sup>2</sup> Global Innovation Index 2023, (<https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023/gr.pdf>).

<sup>3</sup> Guillaume, COHEN. 2022. "Measuring Distance to the SDG Targets – Greece."

(<https://www.oecd.org/wise/measuring-distance-to-the-sdg-targets-country-profile-greece.pdf>).



- countries (Target 4.3). Although increasing, only a small share of young people and adults have diverse set of ICT skills, hampering their employment prospects (Target 4.4).
- **SDG.5:** Tackling unequal opportunities for minorities and women requires further efforts. Greece still lacks a comprehensive legal framework to foster gender equality – except in the area of employment and economic benefits (Targets 5.1 and 5.3). Women bear the lion share of unpaid care and housework (Target 5.4) and they are underrepresented in decision-making in both the public and economic spheres (Targets 5.5 and 16.7) – only 20% of seats in the national parliament are held by women.
  - **SDG.10:** Beyond gender inequality, more should be done to meet targets relating to equality of opportunity and to improve conditions for minorities – more than four in ten people believe that Greece is a not good place to live for racial and ethnic minorities (Target 10.3).
  - **SDG.16:** Greece remains far from achieving targets relating to governance and institutions. Trust in others and in government are low, reflecting a mix of economic, social and political factors. Greece has not yet made enough progress towards targets in areas that are critical for creating well-functioning institutions. In Greece citizen’s confidence in the judicial system is very low (Target 16.6). One in three detainees are un-sentenced while unofficial data from the World Justice Project suggest that there is wide scope for improvement on civil justice (Target 16.3). Diversity of the central government workforce also appears to be limited (Target 16.7)

In relation to innovation, Greece performs better in innovation outputs than innovation inputs. For 2023 Greece ranks 42nd in innovation inputs and 41st in innovation outputs. According to the European Innovation Scoreboard for 2023, GREECE is a Moderate Innovator with performance at 79.5% of the EU average. Performance is below the average of the Moderate Innovators and is increasing at a rate higher than that of the EU (8.5%- points). The country’s performance gap to the EU is becoming smaller<sup>4</sup>.

The country’s relative strengths are:

- Product innovators
- Innovative SMEs collaborating with others
- Employment in innovative enterprises
- Sales of innovative products
- Business process innovators

Whereas the relative weaknesses are:

- Foreign doctorate students

---

<sup>4</sup> European Innovation Scoreboard 2023 – Country profile Greece, European Commission ([https://ec.europa.eu/assets/rtd/eis/2023/ec\\_rtd\\_eis-country-profile-el.pdf](https://ec.europa.eu/assets/rtd/eis/2023/ec_rtd_eis-country-profile-el.pdf)).



- Lifelong learning
- Medium and high-tech goods exports
- Design applications
- Broadband penetration

The evolution of innovation performance over time against the performance of the country in 2016. Innovation performance increased strongly over time between 2018 and 2022 leading to an overall improvement of 35%. In 2023 performance did almost not change. Performance increased most strongly for finance and support and innovators performance. It declined for digitalisation, information technologies and environmental sustainability.

Structural differences of Greece with the EU are shown below:

- Greece has lower per capita income but a faster growing economy. Business services takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Enterprise births and FDI net inflows add positively to the innovation climate, top R&D spenders add negatively.
- Greece has higher shares of In-house product innovators with and without market novelties and In-house business process innovators.
- Entrepreneurial training and government procurement are below the EU average.
- Greece shows a mixed performance on Climate change related indicators, with below average performance on the circular material use rate and environmental innovation, but a stronger reduction in greenhouse gas emissions.

Following the post-economic crisis and the COVID-19 pandemic, Greece has entered the path to economic recovery. The government has accelerated efforts to build a strong and resilient economy. In order to achieve this, one of the main priorities is to increase innovation and digitalization. During the last couple of years much progress has been made and the country is rapidly minimizing its gap to the EU average.

The ambitious National Recovery and Resilience Plan, one of the main tools for the economic recovery of the country, introduces a plethora of reforms towards this end. Additional public and private initiatives also reveal the emphasis given to increasing the country's innovation and digitalization. One of the main factors constraining the economic development of the country is low innovation and digitalization in the business sector. The end of the pandemic and the efforts of the European Union through the "Next Generation EU" to assist and further develop the national economies of the member states offers a great opportunity for Greece to increase reforms and investments in the sectors of innovation and digitalization.



Greece through its NRRP, aims to boost the link between research and businesses, increase public and private investments for Small and Medium Enterprises (SMEs) and startups, as well as enhance the digitalization of the public and private sector. In addition, efforts to increase extroversion in business and expand the exports of innovative and technological products are also being made<sup>5</sup>.

Gender equality is a fundamental human right and a prerequisite for sustainable development. Despite the sound institutional provisions in place for decades, the country's actual performance in gender equality shows a discordance with their aims, affecting women's position in society and the economy. During the Covid pandemic, the risk of domestic violence rose while the negative socio-economic consequences on the economy affected women more than men. Longstanding challenges persist, such as the prevention and elimination of all forms of gender-based abuse, sexual and domestic violence, the eradication of harassment or gender discrimination in the workplace, the enhancement of equal pay and participation of women in the labour market as well as in leadership and decision-making processes. Finally, yet importantly, gender-based stereotypes have not yet ceased to exist, affecting participation of girls and women in sports and STEM.

With regards to the gender pay gap, the difference between the average gross hourly earnings of male and female employees has declined significantly between 2010 and 2018, dropping from 15% to 10.4%. In a context of an overall low employment affected by the financial crisis, low female employment rates (48.7%, see SDG 8), high female long- and short-term unemployment rates, and their stable significant difference to men's (20% difference in employment), have been persisting issues for the economy since even before the crisis. Participation of women in senior management positions was traditionally extremely low, marking around 6% until 2011. An impressive change has been observed since, with a recent decisive support of legislation (2020), which elevated the rate to around 20% for both board members and executives<sup>6</sup>.

---

<sup>5</sup> Karakatsani, Evelyn. n.d. "Greece Economy Briefing: Greece's Path to Economic Recovery through Innovation and Digital Transition." ([https://china-cee.eu/wp-content/uploads/2023/03/2023e03\\_Greece.pdf](https://china-cee.eu/wp-content/uploads/2023/03/2023e03_Greece.pdf)).

<sup>6</sup>

<https://www.statistics.gr/documents/20181/13491320/VNR+2022+Greece+Report.pdf/d0b97502-84b4-866f-e32e-2d91dff2538a>



## 2. Funding

Public and private investment in research and development (the well-known R&D) is fundamental for the promotion of innovation, for the competitiveness of the economy, but also for dealing with important social problems such as climate change. Research and technological development help Europe to regain its strategic autonomy and preserve its competitiveness in the global arena. Consequently, research and development are closely linked to European Union's key priorities such as the green and digital transition.

In 2022, the total government budget allocation for R&D across the EU stood at €117, 3 billion (0.74% of GDP). In 2022, the biggest share of the government budget allocation for R&D, namely 35.5%, was directed to the general advancement of knowledge financed in a large majority by a public block grant known as public general university funds, which many public higher education institutions receive to support all their activities. Next, 16.5% was invested for the general advancement of knowledge from other sources going to different institutions, followed by 10.2% to industrial production and technology, 8.3% to health and 5.9% to exploration and exploitation of space. A significant increase was observed in defence (from 2.6% in the previous year to 4.2% in 2022).

In 2022, R&D expenditure in Greece reached 3,084.82 million euro, increased by 438.37 million euro compared to 2021 (16.6% increase). More specifically, according to R&D expenditure data, there is an increase in all sectors of activity: the business sector, the higher education sector, the government sector and the sector of private non-profit institutions.

in 2022 Greece was in 6th place in the EU ranking based on total government budget allocations for R&D as a percentage of GDP, and in 16th place based on absolute figures (1.6 billion). Public expenditure on R&D (which has been very low in the past) is now slightly above the European average. It should be noted that the expenditure on R&D in Greece and in other countries is financed both by the governments' budget and by European structural funds. Now, recourses from the Recovery Fund will also be allocated for R&D.

Yet, Greece still lags behind in terms of private spending on R&D. While in the EU as a whole 58% of total R&D expenditure comes from businesses, Greek businesses share does not exceed 40% of total R&D spending. For this reason, the total expenditure on R&D in our country (private and public) is still significantly below the European average (1.45% of GDP in Greece compared to 2.26% in the EU).

The new tax framework provides incentives to boost private spending on R&D in Greece. In particular, according to the Law 4712/2020, the entire expenditure of companies on research and development is deducted from the taxable amount (compared to only 30% before 2020).



It is also worth mentioning that despite the significant increase in public spending on R&D, the commercial use of the research findings from universities and research centres remains low. According to recent research, an important reason for this is the lack of cooperation between universities, research centres with the industry and the business sector<sup>7</sup>.

On a European Level and according to the new EKT publications, Greece has consistently taken advantage of the opportunities offered by the EU Framework Programmes for Research and Innovation with remarkable performance that positions the country among the top performers of 27 member countries in a series of crucial indicators, such as the number of approved projects, the number of participations in projects and the amount of approved funding<sup>8</sup>.

During the period 2021-2022, Greece ranks 7th in Horizon Europe, as it accounted for 829 projects or 16.5% of all EU states' projects and for approved funding of 644.72 million euros, or 4.5% of all EU projects. In these projects, there are 505 unique Greek institutions involved, with a total of 1,716 participations. The approved projects involve businesses, Greek universities, research centers and other public bodies, as well as non-profit organizations. Participation comes from all 13 Regions, while the greatest number of participants and the greatest share of funding were found in the sectors of 'Digital Technologies, Industry and Space' and 'Climate, Energy and Mobility'. Also noteworthy is the networking achieved by Greek organizations, creating collaborative links with organizations from 92 countries.

Other European Funded Program opportunities that Greece is eligible for are:

- EU4Health ([https://hadea.ec.europa.eu/programmes/eu4health\\_en](https://hadea.ec.europa.eu/programmes/eu4health_en))
- Cohesion Fund ([https://ec.europa.eu/regional\\_policy/funding/cohesion-fund\\_en](https://ec.europa.eu/regional_policy/funding/cohesion-fund_en))
- LIFE Climate Change Mitigation and Adaptation ([https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls_en))
- European Regional Developmental Fund ([https://ec.europa.eu/regional\\_policy/funding/erdf\\_en](https://ec.europa.eu/regional_policy/funding/erdf_en))

---

<sup>7</sup> Anon. 2023. "In Focus – Total Government Budget Allocations for R&D in Greece and in the EU." *ELIAMEP*. Retrieved November 17, 2023 (<https://www.eliamep.gr/en/publication/in-focus-%ce%b7-%ce%b4%ce%b7%ce%bc%cf%8c%cf%83%ce%b9%ce%b1-%ce%b4%ce%b1%cf%80%ce%ac%ce%bd%ce%b7-%ce%b3%ce%b9%ce%b1-rd-%cf%83%cf%84%ce%b7%ce%bd-%ce%b5%ce%bb%ce%bb%ce%ac%ce%b4%ce%b1-%ce%ba%ce%b1/>).

<sup>8</sup> Dynamic Presence and High Performance of Greek Organisations and Businesses in Horizon Europe Programme for Research and Innovation." *EKT*. (<https://www.ekt.gr/en/news/29284>).





- Technical Support Instrument ([https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/technical-support-instrument\\_en](https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/technical-support-instrument_en))
- European Structural and Investment Funds (ESIF) ([https://commission.europa.eu/funding-tenders/find-funding/funding-management-mode/2014-2020-european-structural-and-investment-funds\\_en](https://commission.europa.eu/funding-tenders/find-funding/funding-management-mode/2014-2020-european-structural-and-investment-funds_en))
- Research Fund for Coal and Steel (RFCS) ([https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/research-fund-coal-and-steel-rfcs\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/research-fund-coal-and-steel-rfcs_en))

On a national level, Elevate Greece<sup>9</sup> is an initiative launched by the Greek Government, intended to identify promising startups and support their growth nurturing a robust innovation ecosystem along the way. The initiative provides a digital gate through which Greek startups can apply requesting to be officially accredited by competent State Ministry (Ministry of Development & Investments – General Secretariat for Research & Innovation).

Other funding programs at national level are:

- Operational Program “Competitiveness 2021-2027” ([http://www.antonistokotita.gr/epanek\\_en/events.asp?cs=21](http://www.antonistokotita.gr/epanek_en/events.asp?cs=21))
- ESIF ERDF Guarantee Fund (<http://www.antonistokotita.gr/epanek/prokirixeis.asp?id=75&cs=>
- ANAPTYXIAKOS NOMOS 4887/2022-Greece (<https://www.ependyseis.gr/anaptyxiakos/nomothesia.htm>)

### 3. National Strategies and Policies

According to the STIP Compass Greece Overview there are 118 Policy initiatives reported in the OECD database<sup>10</sup>.

The key responsible organizations supporting these initiatives are:

- Ministry of Education and Religious Affairs
- Ministry of Development and Investments
- General Secretariat for Research and Innovation (GSRI)

<sup>9</sup> <https://elevategreece.gov.gr/>

<sup>10</sup> EC/OECD(2023), STIP Compass Greece Overview, generated from [https://stip.oecd.org/stip/interactive-dashboards/countries/Greeceon\\_16October\\_2023.](https://stip.oecd.org/stip/interactive-dashboards/countries/Greeceon_16October_2023.))



- Ministry of Digital Governance (MDG)
- Higher Education Institutes

All National strategies, agendas and plans are listed below:

- Working group of the era forum for global approach (2022- )
- Strategic plan for higher education (2022- )
- National recovery and resilience plan
- National R&I roadmap for the just transition plan (2021-)
- National smart specialization strategy 2021-2027
- Growth plan for the Greek economy (2020-2030)
- Greece national strategy for sustainable and inclusive growth (2019-2023)
- National research and innovation strategy for smart specialization (2014-2023)

The Main Policy Initiatives are the following:

- **REGULAR FUNDING FOR HIGHER EDUCATION INSTITUTIONS AND PUBLIC RESEARCH ORGANISATIONS:** The Ministry of Development and Investments allocates institutional block funding to the Public Research Organisations (PROs) that operate under its auspices. Respectively, the Ministry of Education and Religious Affairs provides regular funding to Higher Education Institutions. Furthermore, several sectoral Ministries ensure the regular funding for PROs operating in the relevant sectors<sup>11</sup>.
- **CLUSTERS OF RESEARCH EXCELLENCE:** This action refers to the development of Clusters of Research Excellence scheme (CREs) in the form of research group consortia between Greek Universities and private sector companies for the development of R&D innovative, internationally competitive products and services, with emphasis in areas of cutting-edge technologies, to be applied in the real economy<sup>12</sup>.

---

<sup>11</sup> REGULAR FUNDING FOR HIGHER EDUCATION INSTITUTIONS AND PUBLIC RESEARCH ORGANISATIONS | STIP Compass.”

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F14732>).

<sup>12</sup> CLUSTERS OF RESEARCH EXCELLENCE | STIP Compass.” Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99997320>).



- **DIGITAL TRANSFORMATION OF SMES:** The purpose of the project is to support the digital transformation of the Greek SMEs<sup>13</sup>.
- **National Council for Research, Technology and Innovation (NCRI):** The National Council for Research and Innovation (NCRI) is the supreme advisory body for the formulation, monitoring and evaluation of the National Policy for Research, Technology and Innovation. The Council is appointed by the Vice-Minister for Development and Investments, responsible for R&I and reports to the Minister of Development and Investments, the Vice-Minister responsible for R&I, as well as to the General Secretary for Research and Technology. Council's secretariat is provided by the General Secretariat for Research and Technology. The Chairman, vice-Chairman and members of the current Council were appointed a Decision of the Vice - Minister of Development and Investments, responsible for R&I, in November 2020 (Ministerial Decision no 113744/5.11.2020)<sup>14</sup>.
- **VISITING PROFESSORS/VISITING RESEARCHERS:** This refers to the funding of distinguished academic staff and researchers in foreign universities or research institutes, primarily targeting universities outside the EU, to join Greek universities for a period of maximum 3 years. Visiting professorships will be linked to a collaborative research project with private sector companies from Greece or abroad. Higher education institutions will hold open calls for experienced researchers to introduce new subjects within departments<sup>15</sup>.

Other Key Policy Initiatives are:

- **PARTICIPATION TO PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA:** The PRIMA programme is an Art.185 initiative supported and financed through a combination of funding from PRIMA Participating States (currently €274 million), and a €220 million contribution from the EU through Horizon 2020s: Algeria, Croatia, Cyprus, Egypt, France,

---

<sup>13</sup> DIGITAL TRANSFORMATION OF SMES | STIP Compass.” Retrieved November 17, 2023 (<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99997062>).

<sup>14</sup> National Council for Research, Technology and Innovation (NCRI) | STIP Compass.” Retrieved November 17, 2023 (<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99991751>).

<sup>15</sup> VISITING PROFESSORS/VISITING RESEARCHERS | STIP Compass.” Retrieved November 17, 2023 (<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99997321>).



Germany, Greece, Israel, Italy, Jordan, Lebanon, Luxembourg, Malta, Morocco, Portugal, Slovenia, Spain, Tunisia and Turkey<sup>16</sup>.

- **BILATERAL & MULTILATERAL R&D COOPERATION AGREEMENTS & PROGRAMS:** Bilateral research agreements support the implementation of common research projects between higher education institutions, non-university research institutions and commercial companies (small and medium-sized enterprises (SMEs) in particular)<sup>17</sup>.
- **PARTICIPATION IN THE KEY DIGITAL TECHNOLOGIES JOINT UNDERTAKING / KDT-JU:** The Key Digital Technologies Joint Undertaking - the Public-Private Partnership for research, development and innovation – funds projects for assuring world-class expertise in these key enabling technologies, essential for Europe's competitive leadership in the era of the digital economy. KDT JU is the successor to the ECSEL JU programme, supporting its ongoing projects<sup>18</sup>.
- **PUBLIC STATISTICAL INFORMATION SERVICES OF THE NATIONAL DOCUMENTATION CENTRE:** Provision of a variety of integrated digital statistical information services to support evidence-based policies to different public administration bodies and user communities<sup>19</sup>.
- **PARTICIPATION IN EUROPEAN RD&I CO-FUNDED PARTNERSHIPS:** The International Cooperation Directorate of the GSRT designed and is implementing a program funded with national and EU funds to support participation of Greek teams from public research and academic institutions and enterprises in selected European RD&I co-funded Partnerships (Innovative SMEs/Eurostars, Water4ALL, Driving Urban Transition, Biodiversa+, Clean Sustainable Transition Partnership)<sup>20</sup>.

---

<sup>16</sup> PARTICIPATION TO PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99994295>).

<sup>17</sup> BILATERAL & MULTILATERAL R&D COOPERATION AGREEMENTS & PROGRAMS | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F4965>).

<sup>18</sup> PARTICIPATION IN THE KEY DIGITAL TECHNOLOGIES JOINT UNDERTAKING / KDT-JU | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99996779>).

<sup>19</sup> PUBLIC STATISTICAL INFORMATION SERVICES OF THE NATIONAL DOCUMENTATION CENTRE | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99996863>).

<sup>20</sup> EC-OECD STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).



- **NATIONAL RECOVERY AND RESILIENCE PLAN: INVESTMENT IN RESEARCH INFRASTRUCTURES:** Infrastructure in 13 Research Centers operating under the auspices of GSRI will be upgraded and expanded; a new one will be established in Ioannina (Epirus)<sup>21</sup>.
- **HELLENIC FOUNDATION FOR RESEARCH AND INNOVATION (H.F.R.I):** The Hellenic Foundation for Research and Innovation (H.F.R.I) was founded in 2016 as an independent institution through which a profound reforming effort is being undertaken in the field of Research and Innovation in the country. HFRI is governed by representatives of the scientific community, which ensures its autonomy and certifies its role as an active sustainer to researchers in the country. The institution supports unrestricted research and new researchers by providing scholarships for doctoral candidates, as well as research projects for post-doctoral students, Researchers and Faculty Members.

Through H.F.R.I., the research and academic community is, for the first time, actively involved in shaping the country's research and innovation policy without thematic or geographical exclusions, but with the sole criterion of scientific quality and excellence.

H.F.R.I. was created out of the vital need to support scientists and as a necessary tool in reversing the outflow of outstanding scientists abroad. Indeed, one of H.F.R.I.'s key goals is to impede the scientific and economic hemorrhage that the loss of gifted Greek researchers' entails.

Thus far (April 2023), more than 1.400 Scholarships and 900 research projects are funded so far from 19 calls/actions amounting up to 202,3 million € in the last 7 years.

The planning by the end of 2023 are for 6 calls/actions to be completed with a total amount of 128,316 million €<sup>22</sup>.

- **INDUSTRIAL PHDs:** This refers to the funding of an industrial PhD scheme, for industrially focused research projects which will be conducted jointly by a private sector company, an Industrial PhD student and a university<sup>23</sup>.

---

<sup>21</sup> NATIONAL RECOVERY AND RESILIENCE PLAN: INVESTMENT IN RESEARCH INFRASTRUCTURES | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99994305>).

<sup>22</sup> EC-OECD STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F14730>).

<sup>23</sup> INDUSTRIAL PHDs | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99997324>).



- **UPDATING THE MULTI-ANNUAL BUDGETARY PLAN FOR NATIONAL RESEARCH INFRASTRUCTURES:** This is the update to NRI's Multi-Year Budget Plan for 2021-2027 and builds on the 2014-20. This new budgetary plan includes changes in the system such as the financing of research and technology infrastructures, smart specialisation strategy, internationalization and the digitization of RIs and companies<sup>24</sup>.
- **REGIONAL EXCELLENCE:** An initiative targeting Greek regions that are lagging behind in R&D performance (Eastern Macedonia & Thrace, Western Macedonia, Epirus, Peloponnese, Continental Greece, North Aegean, South Aegean, Ionian Islands). It provides funding for research infrastructure and equipment in HEIs and public research centres, as well as for the support of research teams in order to respond to the priorities of the respective regional RIS3 strategies<sup>25</sup>.
- **RESEARCH-CREATE-INNOVATE:** Funding programme aiming to increase competitiveness, productivity and business extroversion towards international markets<sup>26</sup>.
- **SUPPORT TO START-UPS OF "ELEVATE GREECE" AGAINST THE COVID-19 PANDEMIC:** A special financial support scheme for a non-refundable capital injection (max 100K euros) to the startup ecosystem of Greece ( in order to cope with the negative impact of the COVID 19 pandemic. 521 startups out of 728 registered startups benefited and 294 received the max amount<sup>27</sup>.
- **ESTABLISHMENT AND SUPPORT OF INNOVATION CLUSTERS:** The aim of this action is the promotion and development of new clusters in promising areas with critical mass and export potential, relying on the most common practices in the EU. Existing clusters can also be supported following assessment of their performance and evaluation of the added value expected from additional public funding. The action focuses on improving competitiveness by developing innovative products and services through implementation of R&D results in areas with potentially competitive advantage<sup>28</sup>.

---

<sup>24</sup> EC-OECD STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).

<sup>25</sup> REGIONAL EXCELLENCE | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25646>).

<sup>26</sup> EC-OECD STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).

<sup>27</sup> SUPPORT TO START-UPS OF 'ELEVATE GREECE' AGAINST THE COVID-19 PANDEMIC | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99995998>).

<sup>28</sup> ESTABLISHMENT AND SUPPORT OF INNOVATION CLUSTERS | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F4956>).



- **ARTIFICIAL INTELLIGENCE CENTER OF EXCELLENCE:** This multi-million euro investment aims at creating a Center of Excellence, which will become a point of reference for Document Intelligence globally, connecting researchers, scientists and AI professionals with business experts from a wide range of industrial sectors, and using emerging technologies to accelerate Innovation<sup>29</sup>.
- **OPEN AND ENHANCED ACCESS TO PUBLICATIONS RELATED TO COVID-19:** Creation of a microsite with open and enhanced access services to publications related to COVID-19 in order to offer valid information to the research community and to every citizen interested in the developments of scientific research to deal with the COVID-19 pandemic<sup>30</sup>.
- **SCHOLARSHIPS FOR POST-GRADUATE AND POST-DOCTORAL STUDIES IN GREECE BY STATE SCHOLARSHIPS FOUNDATION (IKY) IKY:** IKY, through the European Social Fund (ESF), implements scholarships programmes for doctoral studies and post-doctoral research in Greece. In particular, during the programming period 2014-2020, in the framework of the Operational Programme “Human Resources Development, Education and Lifelong Learning” within the National Strategic Reference Framework (2014-2020), more than 1,100 PhD candidates benefited as well as 850 researchers for post-doctoral research in Greece<sup>31</sup>.
- **IMPLEMENTATION OF THE NEW EUROPEAN RESEARCH AREA:** Promotion and implementation of the New European Research Area through a) participation in the ERA-Forum, the European Research Area Committee (ERAC) and its Working Groups (European Strategy Forum for Research Infrastructures -ESFRI, Working Group for Global Approach and b) participation in selected ERA Policy Actions (Action 1- Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud, Action 4 - Promote attractive and sustainable research careers, balanced talent circulation and international transdisciplinary and intersectoral mobility across the ERA, Action 8- Strengthen sustainability, accessibility and resilience of Research Infrastructures in the ERA, Action 10- Make

---

<sup>29</sup> EC-OECD STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).

<sup>30</sup> OPEN AND ENHANCED ACCESS TO PUBLICATIONS RELATED TO COVID-19 | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99997167>).

<sup>31</sup> SCHOLARSHIPS FOR POST-GRADUATE AND POST-DOCTORAL STUDIES IN GREECE BY STATE SCHOLARSHIPS FOUNDATION (IKY) IKY | STIP Compass.” Retrieved November 17, 2023  
(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F16238>).



EU Missions and Partnerships key contributors to ERA, Action 11- ERA for Green Transformation: Green Hydrogen, Action 14 - Bring Science closer to citizens - Plastic Pirates<sup>32</sup>.

- **MODERNIZATION OF SPECIAL ACCOUNT FOR RESEARCH FUNDS:** Modernization of Special Account for Research Funds (ELKE) operating framework, by facilitating the research activity of Faculty Members and their research groups<sup>33</sup>.
- **HELLENIC STUDIES PROGRAMS, BEARING A DONOR'S NAME:** Hellenic Studies programs, bearing a donor's name (Law 4957/2022, article 168). By decision of a HEI, the establishment and operation of a Hellenic Studies program in a specific cognitive field it is approved, related to the subject of his/her Department of the Higher Educational Institution and is part of its development plan<sup>34</sup>.
- **ACTION PLAN FOR GENDER EQUALITY:** Action Plan for Gender Equality demonstrates the organization's priorities for the promotion of gender equality in research, technology and innovation activities<sup>35</sup>.
- **FLAGSHIP INITIATIVES:** Flagship Initiatives are horizontal research actions in emerging areas of research with a strong social dimension and innovation dynamics<sup>36</sup>.
- **TECHNOLOGY FORUM:** Annual event co-organised by the main stakeholders of the quadruple helix of Northern Greece with the participation of authorities from the central Government<sup>37</sup>.
- **NATIONAL IMPLEMENTATION REVIEW ON THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT:** Greece's second VNR reflects challenges and strategies related to three crises: the aftermath of a ten-year national depression, with persisting economic and social issues, the consecutive COVID-19 pandemic which put a significant strain on the national health system and

<sup>32</sup> EC-OECD STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).

<sup>33</sup> MODERNIZATION OF SPECIAL ACCOUNT FOR RESEARCH FUNDS | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F9999738>).

<sup>34</sup> HELLENIC STUDIES PROGRAMS, BEARING A DONOR'S NAME | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F9999734>).

<sup>35</sup> ACTION PLAN FOR GENDER EQUALITY | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F9999530>).

<sup>36</sup> FLAGSHIP INITIATIVES | STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F24989>).

<sup>37</sup> EC-OECD STIP Compass." Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25474>).





the economy and, before this is over, the repercussions of a war outbreak within the European continent causing deep global concern.

In spite of the adversities, Greece remains fully committed to the Agenda 2030. The 17 Goals are embedded in all its major binding political plans. Compact strategies are launched, policies are elaborated and institutional reforms are designed to accelerate the full implementation of the SDGs and to build back better from the COVID-19 pandemic. Greece is also reported as one of only two countries in the European Union (EU) that managed to not move away from any of the 17 Goals (2021)<sup>38</sup>.

- **NATIONAL START UP AWARDS:** Eligible for the National Start up award are only the businesses who are members of Elevate Greece<sup>39</sup>.

---

<sup>38</sup> NATIONAL IMPLEMENTATION REVIEW ON THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT | STIP Compass.” Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F25756>).

<sup>39</sup> NATIONAL START UP AWARDS | STIP Compass.” Retrieved November 17, 2023

(<https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2023%2Fdata%2FpolicyInitiatives%2F99996078>).



## GREECE - Local Strategic Urban Action Plan

### 1. **Regeneration of Built Environment:**

- Prioritize the revitalization of historic urban areas, balancing preservation with sustainable urban design.
- Introduce smart city technologies to enhance urban efficiency and resilience.

### 2. **Resilient and Renewable Energy Systems:**

- Invest in wind energy projects, capitalizing on Greece's windy regions.
- Implement energy-efficient solutions in public spaces and buildings, aligning with Greece's commitment to renewable energy.

### 3. **Urban Bio-economy:**

- Emphasize circular economy principles, with a focus on reducing waste and promoting recycling.
- Support initiatives for urban farming and local food production.

### 4. **Improved Access to Education:**

- Upgrade educational facilities, particularly in rural and underserved urban areas.
- Enhance vocational training programs to align with Greece's economic priorities.

### 5. **Improved Resilience to Climate Crisis:**

- Develop climate-adaptive measures in urban planning, addressing Greece's vulnerability to climate change.
- Implement strategies to protect coastal areas from rising sea levels and extreme weather events.



## 6. Entrepreneurial Ventures:

- Support startups in sustainable tourism, renewable energy, and eco-friendly technologies.
- Facilitate collaboration between entrepreneurs, local businesses, and academia to drive innovation.



# Urban entrepreneurial policy for sustainable development in GREECE

## Introduction

Entrepreneurship is considered to be an engine for economic development and hence is especially desirable for emerging countries to support rapid growth. Entrepreneurs can facilitate social transformation in favor of products and services produced in a sustainable way. Consequently, the sustainable orientation of entrepreneurship contributes to sustainable development goals (SDGs) and avoids environmental degradation. On the other hand, the sustainable development agenda can also affect entrepreneurship<sup>40</sup>.

This Urban Entrepreneurial Policy for Sustainable Development aims to foster a thriving entrepreneurial ecosystem that promotes economic growth, job creation, and sustainable urban development. The policy considers the maturity and orientation of the innovation ecosystem, entrepreneurial attitudes in problem-solving, resource management, stakeholder inclusion, and addressing environmental and social impacts.

## Existing Policies in Greece to support sustainable development

- Spatial and Urban Planning Reform - Sustainable Development: This policy sets new conditions and procedures for national, regional and local spatial and urban planning and the development of cities, replacing the previous law. It aims to promote balanced and sustainable development, protect the environment and natural resources, and enhance social cohesion and economic competitiveness<sup>41</sup>.

---

<sup>40</sup> Apostu, Simona-Andreea, and Iza Gigauri. 2023. "Sustainable Development and Entrepreneurship in Emerging Countries: Are Sustainable Development and Entrepreneurship Reciprocally Reinforcing?" *Journal of Entrepreneurship, Management and Innovation* 19(1):41–77. doi: [10.7341/20231912](https://doi.org/10.7341/20231912).

<sup>41</sup> OECD. 2010. *OECD Environmental Performance Reviews: Greece 2009*. OECD. (<https://www.oecd.org/regional/regionaldevelopment/national-urban-policy-Greece.pdf>).



- Environmental Improvement and Private Urban Planning - Sustainable Development - Regulation of Forest Legislature and Further Provisions: This policy further details the provisions for urban planning and land use, especially regarding the environmental impact assessment, the protection of forest areas, and the participation of private actors in urban development projects<sup>42</sup>.
- Competitiveness, Entrepreneurship and Innovation OP: This policy is part of the European Structural and Investment Funds (ESIF) 2014-2020. It aims to support the shift in the growth model of the Greek economy from non-tradable to tradable sectors, and cluster development of innovative and outward-oriented sectors with a sustainable competitive advantage. It also aims to upgrade the country's infrastructures in the sectors enhancing the development of entrepreneurship, innovation, and export of enterprises<sup>43</sup>.
- Building gender equality into urban planning in seven European cities: This policy is part of URBACT, the European Territorial Cooperation programme that fosters sustainable integrated urban development in cities across Europe. It aims to integrate a gender perspective into urban planning and design, by involving women and gender experts in decision-making processes, conducting gender impact assessments, and implementing gender-sensitive actions in public spaces<sup>44</sup>.

## Policy challenges

### 1. Strengthening and mobilising networks of entrepreneurs and researchers

---

<sup>42</sup> OECD. 2010. *OECD Environmental Performance Reviews: Greece 2009*. OECD.

(<https://www.oecd.org/regional/regionaldevelopment/national-urban-policy-Greece.pdf>).

<sup>43</sup> Anon. n.d. "Inforegio - COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION OP." Retrieved November 17, 2023

([https://ec.europa.eu/regional\\_policy/in-your-country/programmes/2014-2020/el/2014gr16m2op001\\_en](https://ec.europa.eu/regional_policy/in-your-country/programmes/2014-2020/el/2014gr16m2op001_en)).

<sup>44</sup> Anon. n.d. "Inforegio - COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION OP." Retrieved November 17, 2023

([https://ec.europa.eu/regional\\_policy/in-your-country/programmes/2014-2020/el/2014gr16m2op001\\_en](https://ec.europa.eu/regional_policy/in-your-country/programmes/2014-2020/el/2014gr16m2op001_en)).



Targeted policy intervention should support actions for Greek regions in<sup>45</sup>:

- Strengthening their Entrepreneurial Discovery Process (EDP) and mobilising regional networks in a meaningful way in order for their smart specialisation strategies to be successful. These networks will look different in every region. Some regions have more developed formalised research institutions in the public sector while in others, this is more business-led. The RIS3 strategies need to be outward-facing and based on local intelligence.
- Ensuring that Regional Councils for Research and Innovation do not form a new layer of bureaucracy. They should be a flexible network that galvanises action to implement the RIS3. They should work to build trust among key actors and break down some of the well-recognised silos that currently exist between different research institutes and between the public and private sectors.
- Developing additional network structures. While Regional Research Councils are one important mechanism to strengthen the connections between research centres, universities, large enterprises and start-ups, other structures such as digital hubs, innovation districts etc. are also needed and should be set up on regional and inter-regional bases.
- Enhancing capacity in regions to formulate their own studies. For example, Greek regions lack systematic data on scientific research and institutional mapping of their entrepreneurship ecosystem.

Some regions are already taking positive steps. For example, Central Macedonia and Crete are making a priority focusing on facilitating ties between industry and research bodies as well as developing regional databases of entrepreneurship and stakeholders.

---

<sup>45</sup> OECD. 2020. *Regional Policy for Greece Post-2020*. OECD.  
(<https://www.oecd-ilibrary.org/sites/c3613465-en/index.html?itemId=/content/component/c3613465-en#section-d1e19761>).



## 2. Better linking research to the needs of businesses

Target policy intervention should support actions for<sup>46</sup>:

- Developing a comprehensive programme (e.g. Industry 4.0) with specific measures to support SME research and development needs. Greece has recently established the Hellenic Foundation for Research and Innovation with an initial budget of EUR 240 million over the next 3 years from public funds and the European Investment Bank (EIB). The foundation has been created to promote scientific quality and excellence financing research projects and researchers. The foundation could be used to put out special calls that are aligned with the Smart Specialisation Strategies and that include specific incentives for partnerships. The 2016 and 2019 Development Laws establishing state aid schemes for private investments also provide financial incentives to boost R&D and foster collaboration between industry and R&D centres. All these measures may be uniformed and united in a single strategy.
- Strengthening the “knowledge triangle” (education, research and innovation) through dedicated policies and aligned incentives (e.g. tax exemptions or tax incentives)<sup>57</sup> that promote research, technology diffusion, entrepreneurship and foster closer ties between businesses, research centres and universities. This would further contribute to increasing R&D spending and the ICT sector’s share in GDP. Overall, a strengthening of the knowledge triangle would lead to the digital transformation of the economy, an increase in the stock of knowledge and productive capital, the development of outward-oriented sectors and, more generally, to a knowledge economy and society (Bank of Greece, 2019).
- Simplifying procedures and speeding up time for financing from EU Structural Funds. Major shortcomings for the utilisation of Structural Funds from SMEs are the issues of complexity of procedures and timing. Very few private firms have the internal capacity to instruct dossiers for funding and no firm would wait for a year or so before they know if

---

<sup>46</sup> OECD. 2020. *Regional Policy for Greece Post-2020*. OECD.

(<https://www.oecd-ilibrary.org/sites/c3613465-en/index.html?itemId=/content/component/c3613465-en#section-d1e19817>).



they have obtained the financing to develop something related to their strategic growth. While attempts to simplify procedures are ongoing, late payments could be addressed by adopting an open season with revolving calls.

### **3. Strengthening and expanding business services for SMEs**

While Smart Specialisation Strategies are a key part of regions' entrepreneurship and innovation strategies, equally important are core services for businesses. This is particularly the case given the structure of Greek businesses and the preponderance of microenterprises. Greece does not have a well-developed system of business advisory services. There is a strong need for active face-to-face support in terms of mentoring, training, advisory and counselling services that can help business navigate regulations, access finance and connect to the relevant networks and expertise. Such services can support value-added in business activities, encourage firms to grow and access new markets and help smaller firms access local value chains.

These services need to be staffed by very knowledgeable people who can help businesses access a range of supports in a fluid way. One emerging best practice is to have business clients of one-stop-shops providing integrated services greeted by a business navigator who is able to discern the types of services that the client needs to access as opposed to requiring the client to navigate this themselves<sup>47</sup>.

### **4. Developing a broader view of innovation – Beyond the traditional science and technology-based model**

While the national government is focused on technology and science-driven innovation as the core of smart specialisation strategies, demand-driven innovation in the form of applications, entrepreneurship, user-driven innovation, and innovation in services and organisations is equally important for Greece. While the production of inventions may continue to be

<sup>47</sup> OECD. 2020. *Regional Policy for Greece Post-2020*. OECD.  
(<https://www.oecd-ilibrary.org/sites/c3613465-en/index.html?itemId=/content/component/c3613465-en#section-d1e19944>).





concentrated in a small number of metropolitan regions, all regions can benefit from adopting these inventions in the form of regional innovations. It is the ability to adopt and adapt new and existing knowledge that separates higher growth regions from slower growth ones.

Thus, some key lessons for Greece in formulating regional smart specialisation strategies in regions that do not have a strong science and technology-based innovation system include the following<sup>48</sup>:

- It is important not to focus on the level of technology when identifying target sectors but on sectors that have future growth potential in the region. This could be in: primary industries, such as forestry, fishing, mining or agriculture; manufacturing, whether it is traditional heavy industry, boat building or specialised components; or services including tourism, healthcare delivery or job training.
- The selection has to reflect an existing competency, not simply an aspiration. It is also important that the projected demand for a particular good or service be large enough that providing it will have a noticeable impact on regional output and employment. There need not be an immediate increase but there should be clear potential for significant growth over time.
- Regions should build on existing capabilities. By extending the local demand for input or by using a by-product from the production of current output, the local economy can grow organically without having to establish a completely new production process.

### **Policy actions to be deployed**

#### **1. Strengthening the Innovation Ecosystem:**

1.1 Foster collaboration between academia, research institutions, and industry to drive innovation and knowledge transfer.

---

<sup>48</sup> OECD. 2020. *Regional Policy for Greece Post-2020*. OECD.

(<https://www.oecd-ilibrary.org/sites/c3613465-en/index.html?itemId=/content/component/c3613465-en#section-d1e20005>).



- 1.2 Establish entrepreneurship centers, incubators, and innovation hubs to provide support services, mentorship, and access to resources for startups and entrepreneurs.
- 1.3 Encourage public-private partnerships to promote research and development activities aligned with urban sustainability goals.
2. Entrepreneurial Attitude and Problem-Solving:
  - 2.1 Promote an entrepreneurial culture that encourages individuals to identify and solve urban challenges through innovative and sustainable business solutions.
  - 2.2 Facilitate entrepreneurship education and skill development programs at all levels of education to nurture entrepreneurial mindsets.
  - 2.3 Recognize and celebrate entrepreneurial successes to inspire and motivate aspiring entrepreneurs.
3. Efficient Resource Management:
  - 3.1 Encourage the use of sustainable and efficient resource management practices in urban entrepreneurship, such as renewable energy, waste reduction, and water conservation.
  - 3.2 Promote circular economy principles to minimize resource consumption, waste generation, and environmental impacts.
  - 3.3 Support startups and entrepreneurs developing technologies and solutions for sustainable resource management.
4. Inclusive Stakeholder Participation:
  - 4.1 Foster an inclusive entrepreneurial ecosystem by promoting diversity and inclusion, including the participation of women, marginalized communities, and persons with disabilities.
  - 4.2 Ensure accessibility to entrepreneurship support services, funding opportunities, and networks for all urban stakeholders.



4.3 Encourage public participation and engagement in the development and implementation of urban entrepreneurship policies and initiatives.

5. Environmental and Social Impact:

5.1 Encourage startups and entrepreneurs to integrate environmental and social considerations into their business models and operations.

5.2 Provide support and incentives for startups that contribute to environmental sustainability, social well-being, and community development.

5.3 Establish mechanisms to monitor and evaluate the environmental and social impacts of urban entrepreneurial activities and promote continuous improvement.

**Implementation and Monitoring:**

1. Develop an action plan with specific targets, timelines, and responsible stakeholders for implementing the policy.
2. Allocate necessary resources and funding to support the implementation of the policy and related programs.
3. Establish monitoring and evaluation mechanisms to assess the effectiveness of the policy in achieving sustainable development goals.
4. Regularly review and update the policy based on feedback, emerging trends, and changing urban contexts.
5. Foster collaboration and knowledge-sharing among relevant stakeholders, including government agencies, private sector entities, academia, and civil society organizations.

**A roadmap to create Urban Entrepreneurial Policy for Sustainable Development**

This roadmap should involve the following steps:

1. Identify and engage the relevant stakeholders, such as public authorities, private sector, civil society, academia, and local communities. The policy should be co-designed and



co-implemented with the participation and collaboration of all actors involved in the urban development<sup>49</sup>.

2. Analyze the existing urban entrepreneurial ecosystem, including its strengths, weaknesses, opportunities, and threats. The policy should build on the existing assets and resources of the city, such as talent, infrastructure, networks, culture, and institutions<sup>50</sup>.
3. Design and implement specific actions and measures to support urban entrepreneurs, such as providing funding, training, mentoring, networking, incubation, acceleration, and market access. The policy should address the specific needs and challenges of different types of entrepreneurs, such as women, youth, migrants, social entrepreneurs, green entrepreneurs, etc<sup>51</sup>.
4. Monitor and evaluate the impact and outcomes of the policy, using quantitative and qualitative methods and indicators. The policy should be flexible and adaptive to changing circumstances and feedback from stakeholders. The policy should also disseminate and share good practices and lessons learned with other cities<sup>52</sup>.

---

<sup>49</sup> Anon. 2022. "How Urban Entrepreneurs Can Help Build Sustainable Cities | UNCTAD." Retrieved November 17, 2023

(<https://unctad.org/news/how-urban-entrepreneurs-can-help-build-sustainable-cities>).

<sup>50</sup> Centre, European Commission-Joint Research. n.d. "Handbook of Sustainable Urban Development Strategies." *European Commission*. Retrieved November 17, 2023

(<https://urban.ec.europa.eu/urbanstrategies/>).

<sup>51</sup> Anon. n.d. "Conceptualizing the Potential of Entrepreneurship to Shape Urban Sustainability Transformations | Urban Transformations | Full Text." Retrieved November 17, 2023

(<https://urbantransformations.biomedcentral.com/articles/10.1186/s42854-023-00048-w>).

<sup>52</sup> Anon. n.d. "Conceptualizing the Potential of Entrepreneurship to Shape Urban Sustainability Transformations | Urban Transformations | Full Text." Retrieved November 17, 2023

(<https://urbantransformations.biomedcentral.com/articles/10.1186/s42854-023-00048-w>).