



WEBINAR
5 Marzo 2021

PORTUGAL RECOVERY AND RESILIENCE PROGRAMME

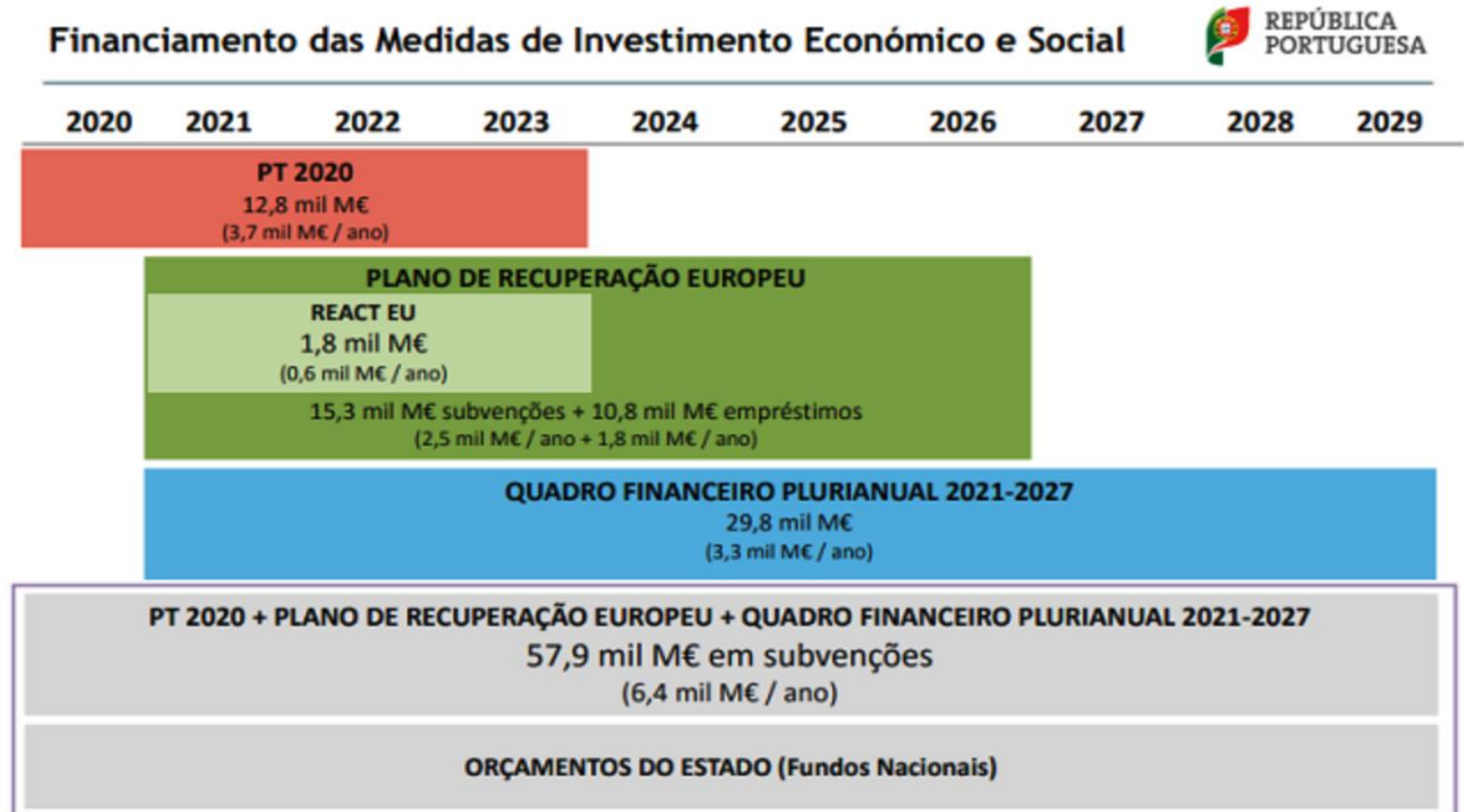
Is R&D and Innovation a priority?

Isabel Caetano

1. THE NEW FRAMEWORK

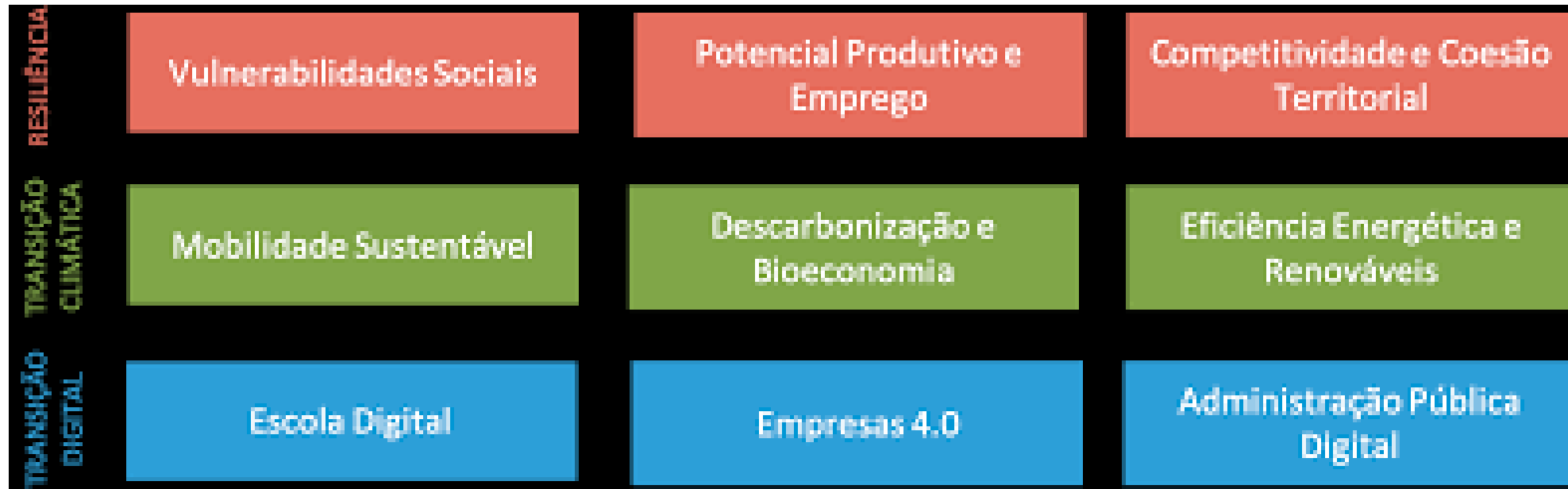
2021-2027

1.1 PT: NATIONAL FRAMEWORK 2021-2027



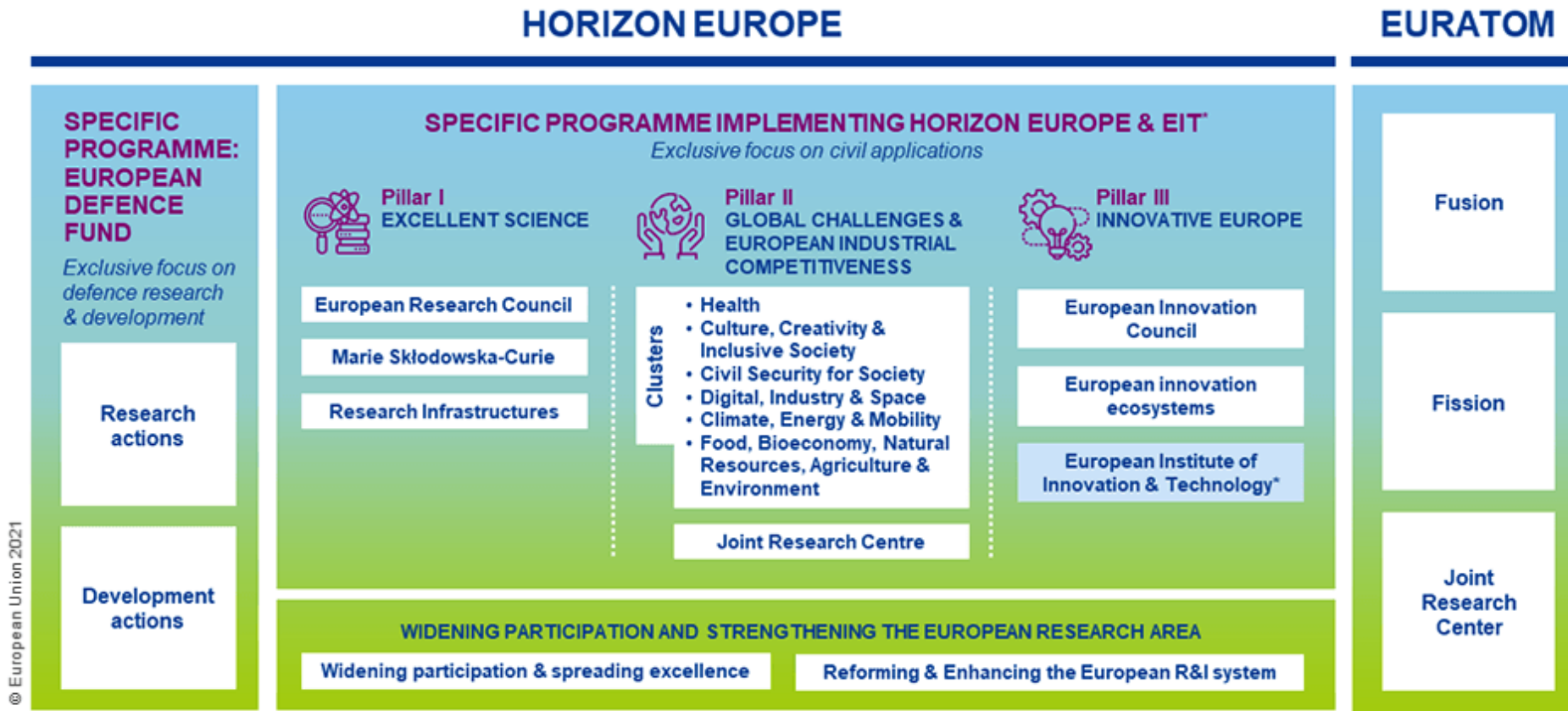
3 Major Funding Umbrellas: 1) Structural Funds/PT2020 (extended till 2023);
 2) PRR 2021-2027; 3) New Structural Funds Programme (to launch in 2022)

1.2 OVERVIEW OF RECOVERY & RESILIENCE PROGRAMME FOR PORTUGAL



Focus of PRR: public sector initiatives and target domains
“Digital & Climate”

1.3 HORIZON EUROPE

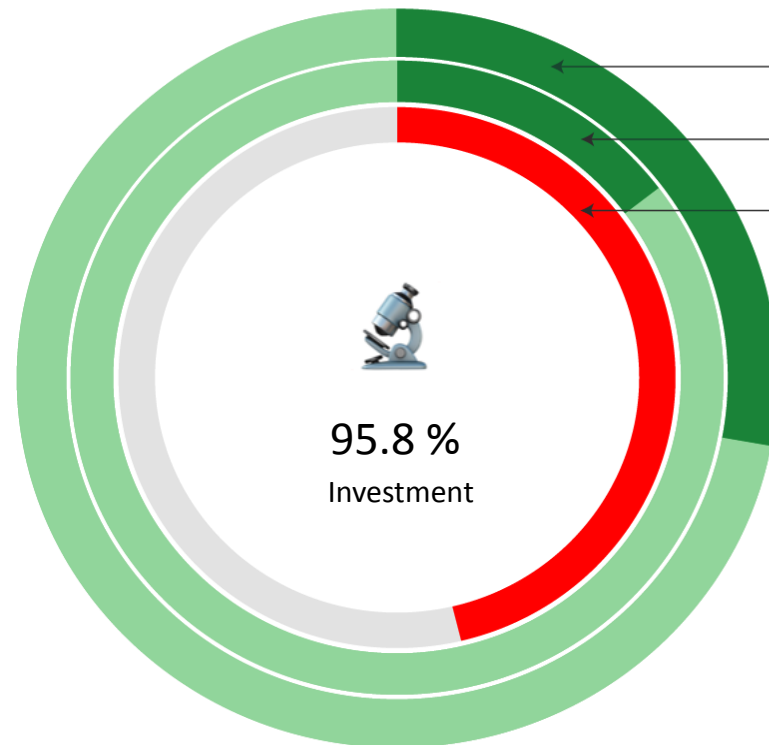


* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

In the same period, Horizon Europe (2021-2027) focuses several similar target domains and type of projects or initiatives.

2. BUSINESS CHALLENGES AND PUBLIC PRIORITIES

2.1.1 PT: BUSINESS R&D INVESTMENT



Enterprises providing ICT training
 Non-R&D innovation expenditures
 R&D expenditure in the business sector

KEY MESSAGES:

- Business R&D investment is below EU average (46.3%).
- Innovation investment (non R&D) is above EU average (114%)
- Enterprises providing training digital skills is above EU average (127,8%)

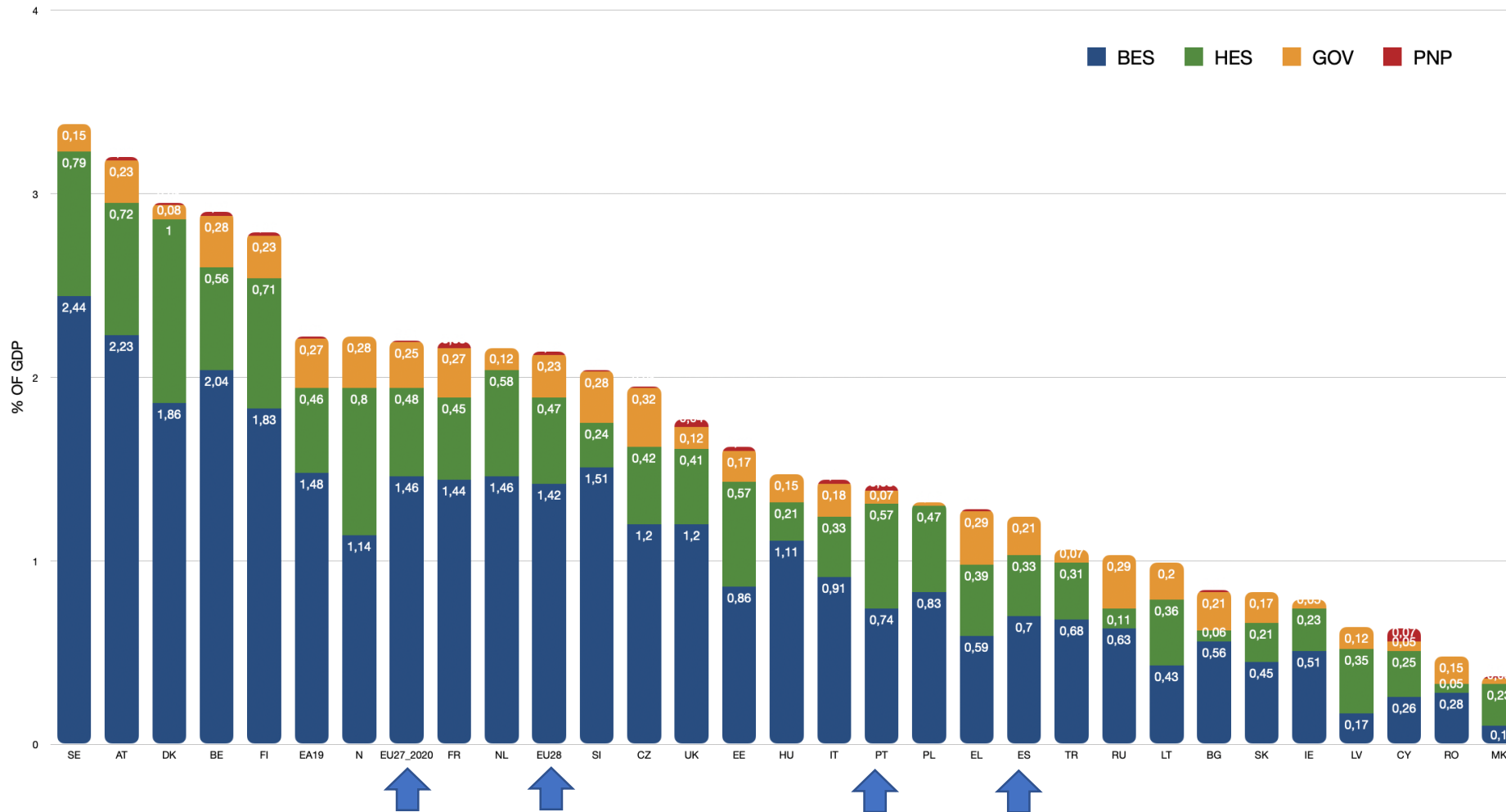
OECD Alert:

“The ambitious **European convergence goals** – reaching 3% of R&D intensity by 2030 – will require that public R&D expenditures double, and that private R&D expenditures quadruple.”

Source: OECD Review: Portugal (2019)

2.1.1 PT: R&D EXPENDITURES BY SECTORS

R&D EXPENDITURES BY COUNTRY BY SECTORS



Source: Statistics | Eurostat (europa.eu)

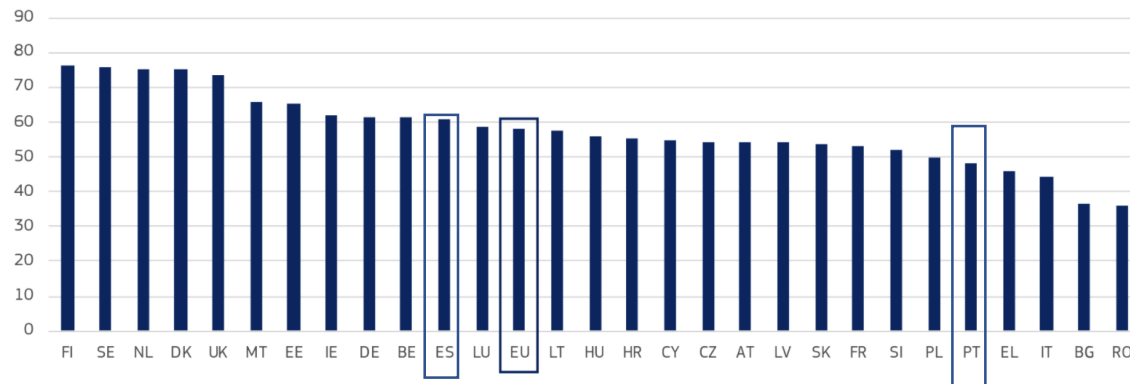
2.1.2 PT: DIGITAL INVESTMENT

KEY MESSAGES:

- The use of internet services is below EU average, but pandemic effects may change this situation in near future;
- More than 60% of Portuguese people **still lack basic digital skills**.



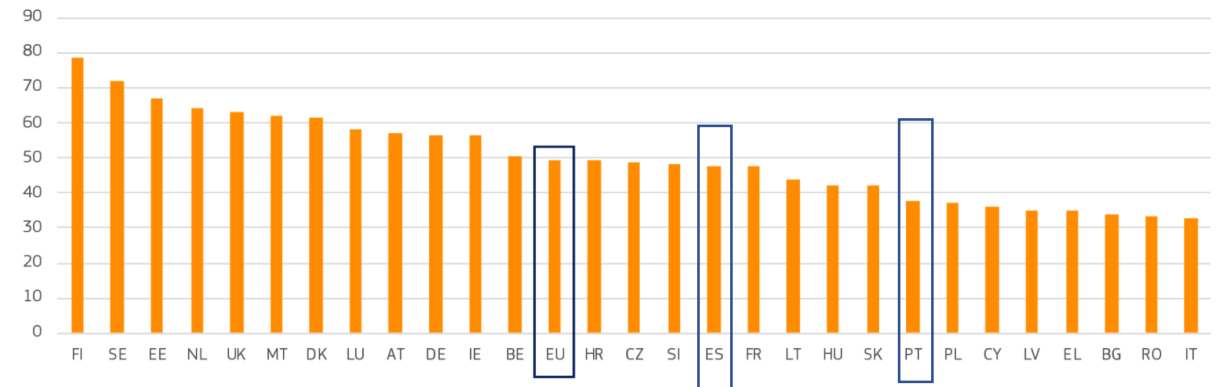
USE OF INTERNET SERVICES



Source: <https://ec.europa.eu/digital-single-market/en/use-internet-and-online-activities>

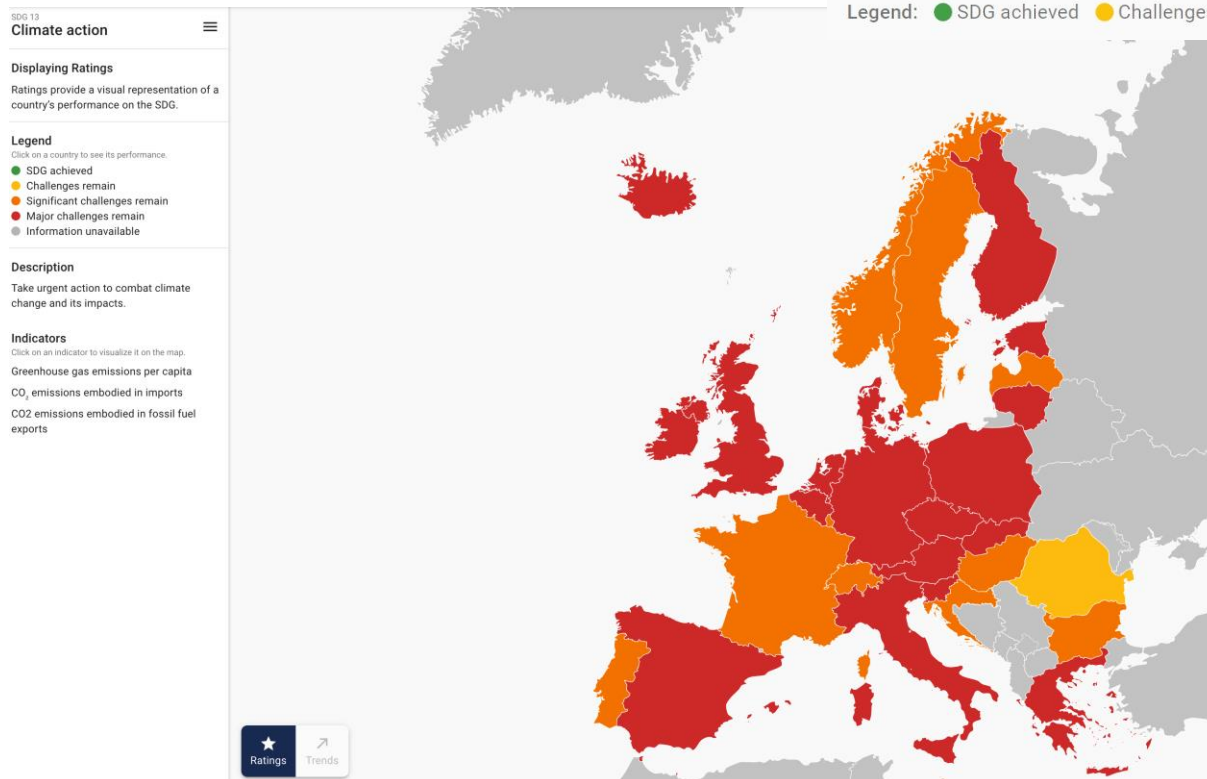


HUMAN CAPITAL



Source: <https://ec.europa.eu/digital-single-market/en/human-capital-and-digital-skills>

2.1.3 PT: SUSTAINABILITY PERFORMANCE



Source: <https://eu-dashboards.sdgindex.org/profiles/portugal>

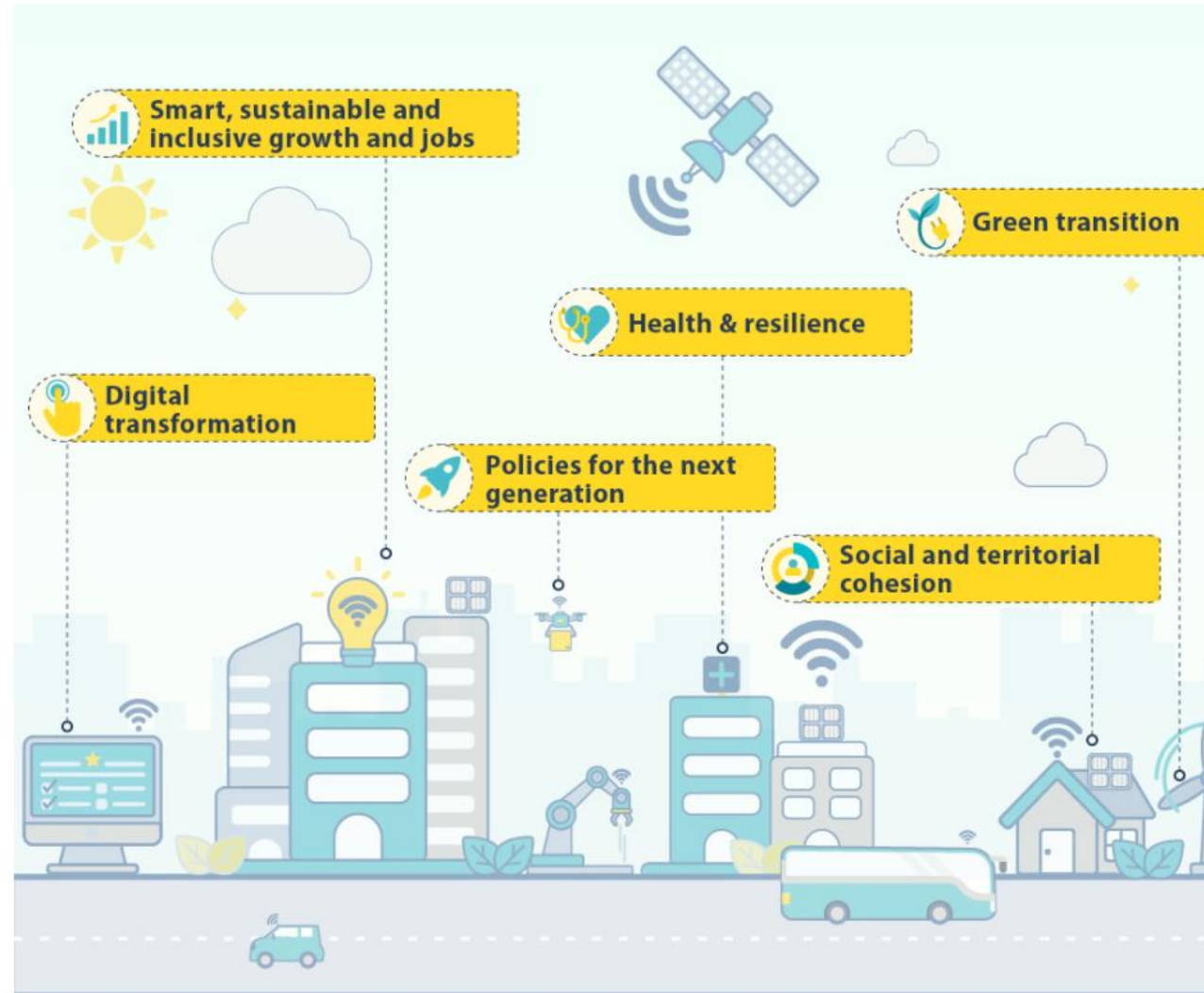
KEY MESSAGES:

- Portugal needs to improve its situation in all the Sustainable Development Goals (SDG);
- AND
- In Climate Action, significant challenges remain.

Source: <https://eu-dashboards.sdgindex.org/map>

2.2 RECOVERY & RESILIENCE PROGRAMME PRIORITIES

2.2.1 EU TARGETS



Targets: Min. 37% climate | Min. 20% digital



2.2.2 PT - RESILIENCE PROGRAMME: INNOVATION-RELATED COMPONENTS

C5 COMPONENT – INVESTMENT&INNOVATION:

- FOCUS ON AGENDAS OR PARTNERSHIPS:
 - 1) REINDUSTRIALIZATION (558M€)
Topics: Ciências da vida, medicamentos e dispositivos médicos; Novos sistemas e serviços espaciais para a segurança e observação Terra/Mar/Clima; Aeronáutica ligeira de nova geração; Automação industrial, robótica e integração de sistemas industriais; Plataforma para a produção cultural e indústrias criativas
 - 2) GREEN TRANSITION (372M€)
Topics: Energia; Mobilidade; Biotecnologia verde e floresta sustentável; Novos materiais avançados; Biotecnologia alimentar avançada; Economia azul.
 - 3) R&I FOR SUSTAINABLE AGRICULTURE, FOOD AND AGRO INDUSTRY (93M€)
- INTERFACE MISSION: Support for the scientific and technological network oriented for productive sectors (186M€)

C16 COMPONENT – BUSINESS DIGITALIZATION:

- Empresas 4.0 (650M€)

2.2.3 PT-IMPLEMENTATION PERSPECTIVES

Some implementation issues not yet discussed or considered in the public debate and documents available:

- 1) Implementation Model and Structure
- 2) Interagency coordination
- 3) Simplification and uncertainty reduction
- 4) Transparency and accountability mechanisms
- 5) Public Administration capabilities to manage heterogeneity and complexity
- 6) Sense of Urgency

So: Implementation matters

AND

Recovery and Resilience Programmes can fail if implementation fails

2.2.4 PT: BUSINESS CHALLENGES

Why Portugal still has a long way to be really a strong innovator country?

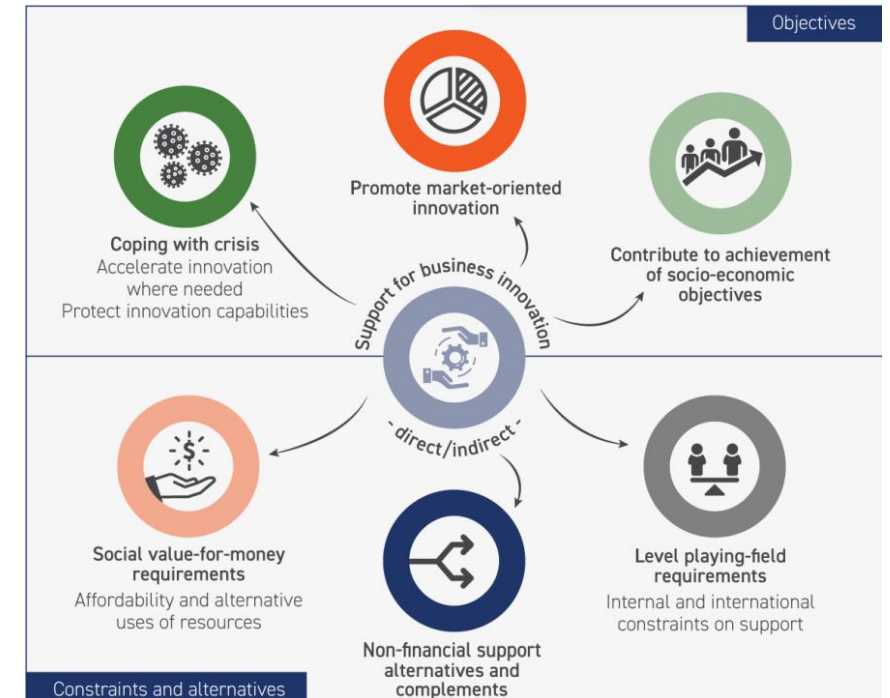
- Low level of business R&D investment
- Limited number of companies officially registered as executing R&D activities (but...some islands of excellence)
- Limited business capabilities development
- Lack of regular collaboration
- Low level of use of online services
- Low level of digital skills
- Lack of experts and professionals in digital skills and ICT

IS PORTUGUESE RESILIENCE PROGRAMME TARGETING THOSE NEEDS AND LIMITATIONS? ONLY PARTIALLY...

3.FUTURE CHALLENGES

3.1 MACRO LEVEL PERSPECTIVE: INSIGHTS FROM OECD

- Policy mix is not entirely consistent with the ambition.
- National self-interest, also when it comes to business support for innovation, will be most often best served by international collaboration.
- Incentivize and influence research and innovation in firms can have major implications for our future.
- **Preserving innovation capabilities is an imperative for survival** but in many industries are under significant stress.



Source: OECD Science, Technology & Innovation Outlook (2021)

Figure: Confluence of objectives and constraints to government support for business innovation

3.1 MACRO LEVEL PERSPECTIVE: INSIGHTS FROM OECD REVIEW (PORTUGAL)

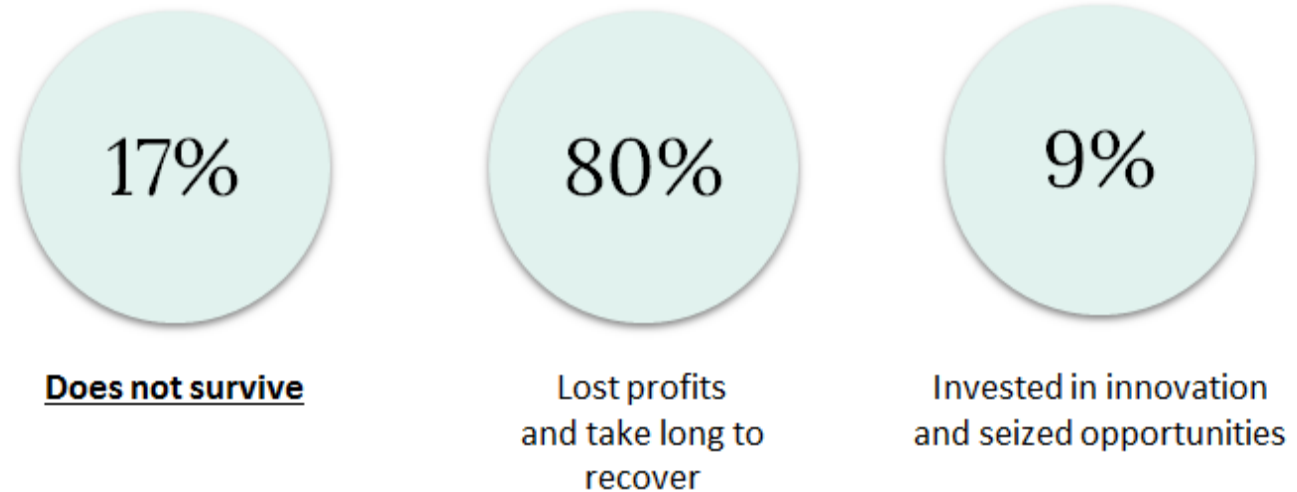
SOME HIGHLIGHTS:

- Portugal has a crowded and fragmented strategic policy framework that limits the effectiveness and efficiency of public investment in research and innovation activities and does not assist in building critical mass in areas where the country can excel.
- Horizontal co-ordination mechanisms within government are not sufficient to ensure that departments and policies for higher education are coherently linked to research and innovation policies;
- Growth in spending needs to be complemented by reforms that support the capacity of firms to engage in knowledge-based innovation, and reforms in the governance of the public research sector.
- The Portuguese government does not require nor encourage higher education institutions to develop profiles in line with their respective strengths and weaknesses, and to situate those within a clear national policy framework. This leads to a lack of specialization, inefficient duplications, missed opportunities for collaboration and weak alignment of activities with national priorities.

3.2 MICRO LEVEL PERSPECTIVE: FOCUSING BUSINESS CAPABILITIES

What to learn from past crisis?

Gulati & Wieldman (2020; 2010), analysed 4700 companies in three different crises and suggest that companies obtain different results:



Due to different behaviours.
Those having better results:

- Master the balance between efficiency (reducing costs) and investment (focus in value creation)
- Deploy a combination of defensive and offensive strategies
- Capture new market opportunities, investing more than competitors in R&D and marketing

3.3: KEY DRIVERS:

MACRO AND MICRO PERSPECTIVES COMMON PRIORITIES

1

Reinforce business
capabilities



2

Focus on **R&D and
innovation activities
(I+D+I)** and adjust policy
mix



3

Promote **collaboration**,
synergetic and
complementary linkages
(value chain logic)



4

Seize opportunities and
create **value**



3.4: INNOVATION @ PT - PRR - A MISMATCH BETWEEN AMBITION AND ACTION ?

In spite of ambition and targets, PRR does not have innovation as a main driver.

- R&D
- Business capabilities
- Market driven collaboration



Source: PRR, Word Cloud (occurrence >70)

Are not priorities except (and in a limited way) for digital or climate domains

KEY IDEAS

- There is a favourable public funding portfolio of programmes from 2021-2027 but Portugal must select priorities to tackle needs and limitations, specially considering business sector;
- The Portuguese Recovery and Resilience Programme (PRR) is more focused on public priorities than on contributing to business competitiveness;
- There is inconsistency in implementing innovation policy measures, limited use of systemic instruments and the national innovation system is immature;
- The limited number of companies doing R&D activities (nearly 4 000) and their size/technological intensity and the topics identified for Horizon Europe may difficult portuguese participation;
- Portugal has a better position in soft indicators (qualitative) than in hard indicators;

In a nutshell: funding will be available for next years but there is a danger of fragmentation, dispersion or even lack of efforts to accelerate innovation and achieve defined targets (eg. R&D investment).

Thank you!

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