



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

UPV's past experiences and future perspectives in EU Framework Programmes (H2020 and Horizon Europe)



UPV' Strategy for H2020

Participation in H2020 was designed under a **strategic approach**

- Design of participation strategies by research group
- Foster collaboration with other agents
- Promote positioning at European level
- Professionalize and support the preparation of proposals

For that purpose a new Programme called CPI2020 was created in the Scientific Park of UPV (Ciudad Politécnica de la Innovación)

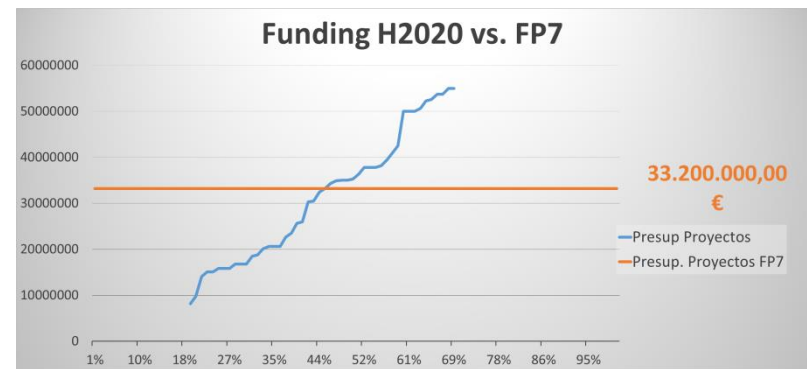
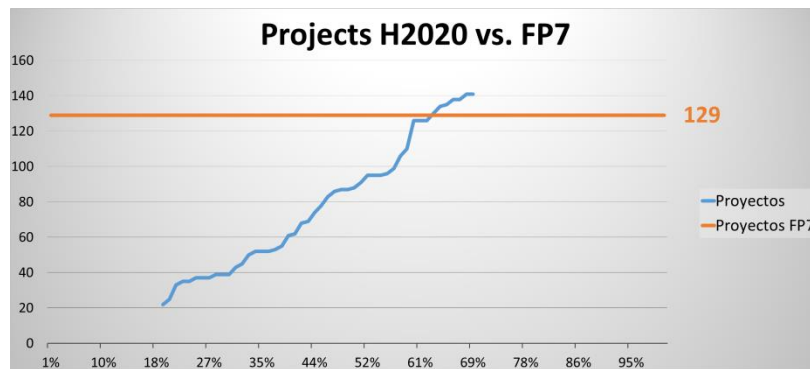


UPV`s participation results in Horizon 2020

UPV is the first entity in its region in terms of funding obtained H2020

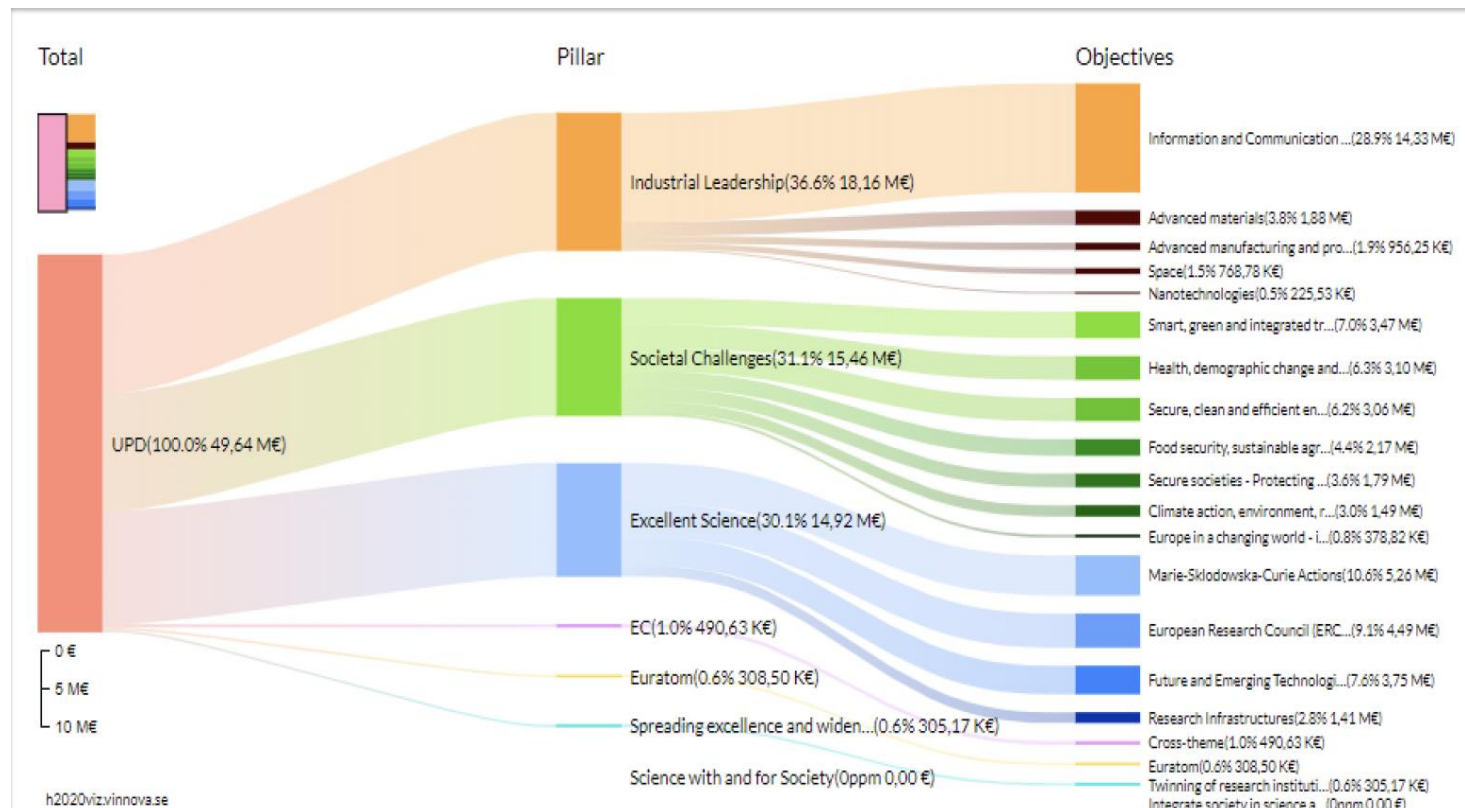
UPV has already **more** funded **projects** than in the whole FP7

Before mid-H2020 UPV had already reached the same **financing** as in the whole of FP7



UPV's participation results in H2020

UPV stands out in the LEIT pillar but has a very **balanced** participation in all three

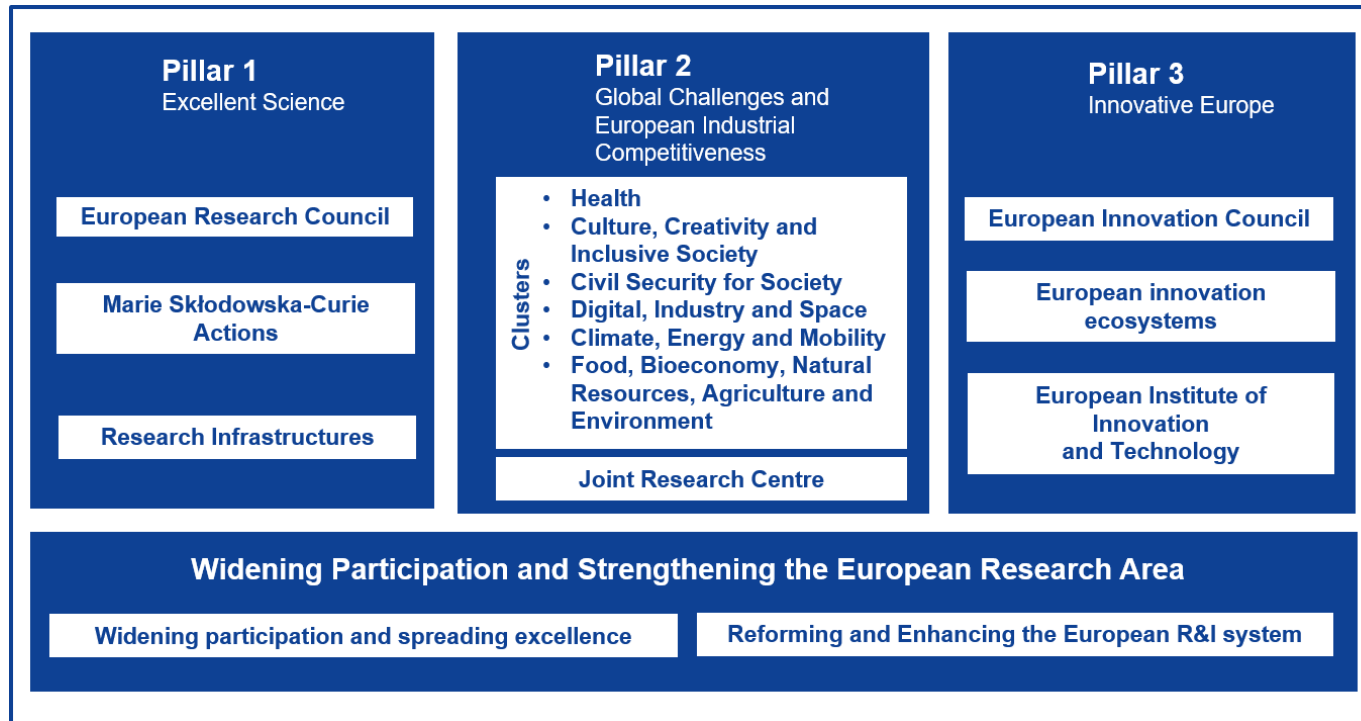


Source: VINNOVA <http://bit.do/vinnova-upv>



Perspectives for Horizon Europe

As in previous Framework Programmes UPV strategy aims at **leveraging all the opportunities** offered by Horizon Europe from Basic Science to Innovation



Source: European Commission. https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en



Excellent Science and Talent

Excellent Science

- ERC as a way to boost excellent researches from starting to advance stages
- Reaching a critical mass excellent research in key areas. Centres of Excellence.

Attracting international talent (MSCA)

- From Doctoral stages (ITN), to post doc and Experience Researchers (IF).
- Personal linkages with international researchers reinforce International Research Networks.
- MSCA combined with national and UPV actions can even be an instrument for reincorporation of excellent Spanish researchers working now outside Spain

*Programmable
photonics*
UMWP-CHIP.



*Subconscious
Biometrics*



Challenges as Opportunities

Focus on **Sustainable Development Goals** is not only a way to contribute to solve Societal Challenges but also an opportunity for technology development.

Disruptive technologies for obtaining added value chemicals from plastic



Use of captured CO2 from carbon intensive industries for jet renewable fuels



Co-funded by the Horizon 2020 programme of the European Union

Deep tech companies expect to have an impact on a wide variety of the (SDGs). Good health and well-being (51%), industry, innovation, and infrastructure (50%), and mitigating human impact on the environment (28%) (*)

*** Source: The dawn of the deep tech ecosystem. BCG-Hello Tomorrow**



Challenges as Opportunities

Partnerships with Industry

- UPV participate in several PPPs
 - Big Data, Factories of the Future, Robotics, BioBased Industries, Process Industries....
- New partnerships offer new possibilities e.g. Artificial Intelligence



Co-funded by the Horizon 2020 programme of the European Union

Outreach and Societal engagement with research

- Responsible Research and Innovation
- Missions focused in science/citizens common goals

(All available and proven channels of communication with citizens should be explored so citizens can feel enthusiasm and trust in the process of change.*

** Source: Mazzucato, M. Mission-Oriented Research & Innovation in the European Union A problem-solving approach to fuel innovation-led growth*



Open Science and Innovation

Interdisciplinarity is key for development of new technologies.

Drones for creative Industries



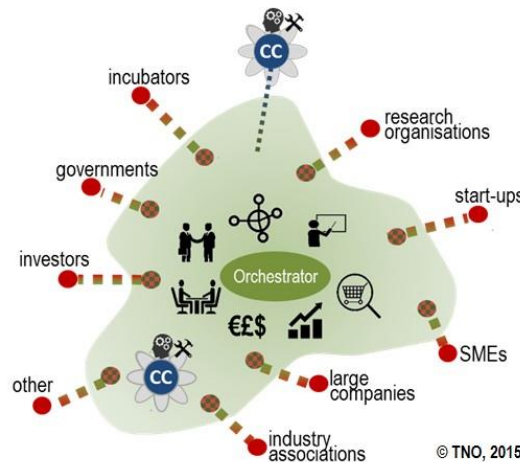
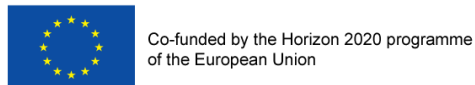
Robotics for Agriculture



Co-funded by the Horizon 2020 programme of the European Union

Ecosystems/Digital Innovation Hubs/ RIS3 – Hub4.0 Manual

Co-funded by:



© TNO, 2015

Source: TNO. Digital Innovation Hubs Catalogue Final Report TNO 2017 R11340.



UNIVERSITAT POLITÈCNICA DE VALÈNCIA

Universitat Politècnica de València
www.upv.es



Innovative Europe / Digital Europe

Innovation (EIC)

- From Future Emerging Technologies to Innovation
 - A good opportunity for funding disruptive technologies in technical Universities
- Focus on Deep Tech
 - 30% of deep tech companies are spin off of Universities(*)



Co-funded by the Horizon 2020 programme of the European Union

Digital Europe and Horizon Europe

- Linkages of centres of excellence with Digital Innovation Hubs

* **Source:** *The dawn of the deep tech ecosystem. BCG-Hello Tomorrow*





UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

www.upv.es