

Engaging in Horizon Europe projects: What's first?







What's in?

Main objective: Provide a detailed tour guide on the necessary sequential steps to take from newcomer organisations wanting to get engaged on Horizon Europe projects, from conceiving the project to the basics of proposal writing.

- Luxembourg's Industry National Contact Points will guide you through the <u>key first actions</u> to take towards engaging in European projects;
- Talented newcomers & experienced top innovators will share their stories and provide relevant tips successful
 participation
- Qualified applicants will guide you through the <u>Horizon Europe proposal template</u>, and explain how to generally structure your proposal







10:30 – 11:00 From idea to project: key actions to take
11:00 – 12:00 Success stories: ARISTENG & INTRASOFT cases
12:00 – 12:30 Discussion and Q&A
12:30 – 13:30 Networking lunch
13:30 – 14:30 Light intro to HE proposal template (part 1)
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From idea to project: key actions to take







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Welcoming talented newcomers to Horizon Europe









Main objective



Increase the participation of **talented newcomers*** from **underrepresented regions**** in the Horizon Europe programme in Nanotechnologies, Advanced Materials and Advanced Manufacturing and Processing (NMP).

^{**} Underrepresented regions = regions in EU-13, EU-15 and Associated Countries (AC) which have NMP innovation capacities but had a low participation in Horizon 2020 NMP (about 75% of EU-13 regions, 10% of EU-15 regions, 35% of AC regions)





^{*}Talented newcomers = promising NMP innovation organisations (SMEs, MNEs, PROs, HEIs) which did not participate in a Horizon 2020 NMP project.





Research & Innovation focus - Horizon Europe Pillar 2, Cluster 4 Destinations 1 and 2



Advanced Materials

New sustainable-by-design materials with enhanced functionalities and applications in a wide range of industrial processes and consumer products.



Manufacturing Technologies

Sustainable, flexible, responsive and resilient processes and factories, enabled by digitisation, AI, data sharing, advanced robotics and modularity.



Clean and Circular Industries

Decarbonised energy and feedstock, usage of hydrogen, CO2 capture and usage, waste heat recovery, catalysis and artificial photosynthesis, and materials for re-use and recycling.







FIT-4-NMP's Free Support Services



- Promote your organization as a potential partner for Horizon Europe proposals;
- Organise workshops with organizations highly-experienced in Horizon 2020/Horizon Europe (e.g. CEA, VTT, Fraunhofer, etc.);
- Give training on grant proposal writing and use of European networking portals;
- Provide access to expressions of interest from proposal coordinators looking for partners;
- Provide opportunities to participate in important European Partnerships (e.g. Made in Europe, Processes4Planets, BEPA, etc.);
- Support participation in EU conferences, networking and brokerage events.







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Horizon Europe R&D for a more innovative and

R&D for a more innovative and competitive, sustainable and just Europe







What is?







EU R&I funding programme 2021-2027: €95.5 B€ for 7 years, of which 35% for funding climate change related projects





European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures





European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system



- Bottom-up
- Any area
- Often lower TRL
- Mostly no consortia



- Thematic calls, predefined (top down)
- Consortia
- Mid high TRL



- Bottom-up
- Any area
- From low to high TRL
- Both consortia and individual companies



Who can participate?

Legal entities

Public or private

All players in research and innovation participate:

- Research organizations
- Institutions of higher education
- Companies (SME, large group)
- Associations
- Hospitals...









Some basics!

Funding instruments

- Research and Innovation Actions (RIA): 100 % funding | Develop new knowledge test your solutions to develop a proof-of-concept, a prototype
- Innovation Action (IA): 70% funding (100% to public research) | bring your proof of concept closer to real life application
- Coordination and Support Actions (CSA): 100% funding | network with your colleagues on key policy issues

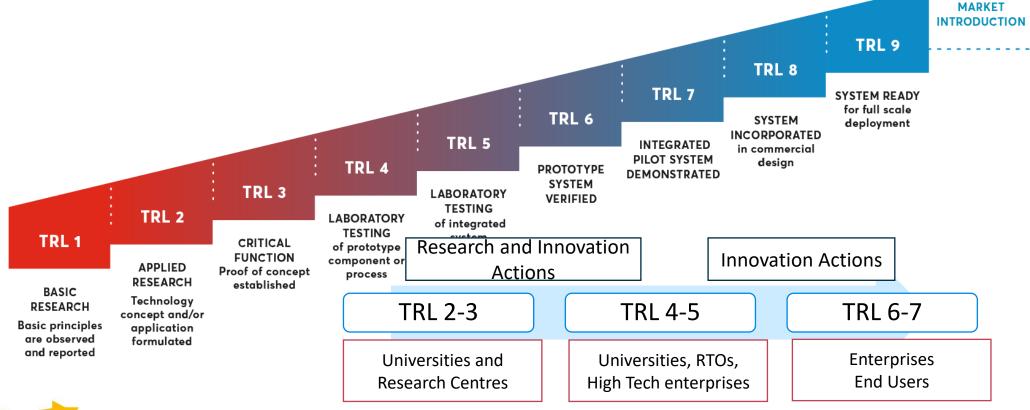






Technological Readiness Level (TRL)

Continuity from research to innovation









Where to start?







Where to start?

1. Think about what you want to do / achieve, and how







Where to start? The process

Call for proposals

Pert Diagram

Identify the main actors

Look for new partners to fill the gaps







Where to start? The process

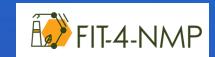
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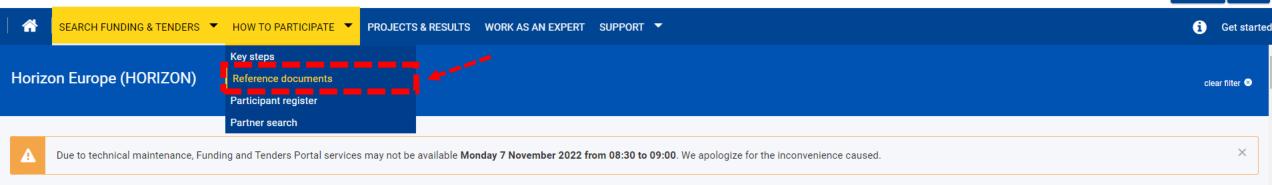


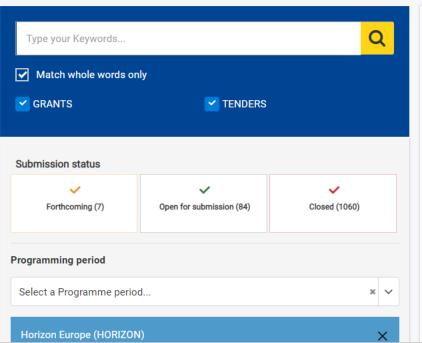
European Commission

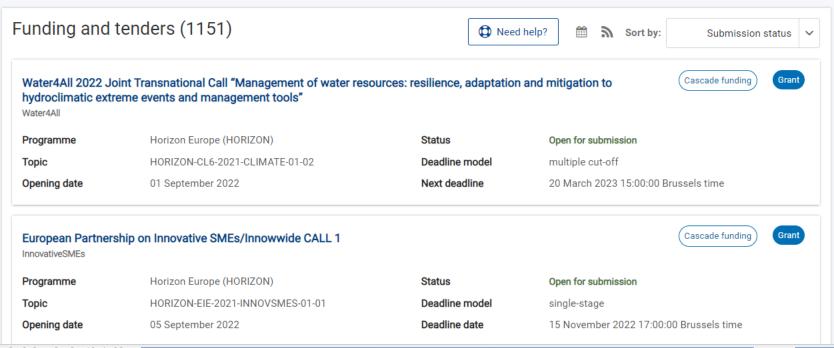
Funding & tender opportunities

Commission | Single Electronic Data Interchange Area (SEDIA)

Register Login









Where to start? Submission at the topic level **Topic** Section **Destination 1** Topic **Topic** Cluster 1 Work Programme Destination 2 Section Topic Horizon Topic Europe Cluster 2 Work Topic Programme **Topic** ...







HE: What is the structure?

Submission at the topic level

We take care of this, you don't have to worry about it!

We work together with you to find the topics fitting better your innovation agenda

Topic

Topic

Topic

Topic

Topic

Topic

Topic

• • •







Where to start?

<u>Scope</u>: Proposals should aim at near-zero discharge using closed-loop systems in combination with recovery of energy and/or substances (resources) through the development of integrated water-smart strategies for industrial processes.

Strategies should take into account:

- Better characterising the water usage and production in the industrial processes;
- Defining recycling options with a combined water, waste and energy approach in an integrative system design method considering investment and optimal operations;
- Future production demand through design, control options, and technologies integration
 that reduce water consumption, recycle water, and reduce the use of fresh water
 resources in closed-loop industrial processes including cascading use of different kinds
 of water in industrial settlements or for compatible re-use in urban and rural areas.

Reprograming of water resources and optimisation of water management in industrial processes should apply the principles of waste - water - energy design in a circular context.

Proposals should develop new technologies and approaches at a large scale. It is anticipated to combine:

 Real time smart monitoring and management systems with innovative digital solutions for sensors and actuators (e.g. modelling and artificial intelligence) and; Recycling technologies such as highly selective separation or extraction processes and new solutions for water treatment to prevent fouling and corrosion.

Integrated Water Management should consider different qualities and sources of water, including desalination, re-use of treated wastewater, rainwater harvesting and gas humidity condensation (e.g., cooling tower blowdown). Development of `tailor-made' system solutions with demand orientation and scale-up testing to robust industrial processes will be required. Water re-use will subsequently lead to accumulation of pollutants. In-line monitoring should include these water quality control parameters linked to the process.

Clustering and cooperation with other selected projects under this cross-cutting call, and with other relevant projects, in particular those selected under SC5-04-2019 "Building a watersmart economy and society", is strongly encouraged.

Proposals submitted under this topic should include a business case and exploitation strategy, as outlined in the Introduction of this part of the Work Programme.

Activities should start at TRL 5 and achieve TRL 7 at the end of the project.

PLC commission considers that proposals requesting a contribution from the EU between EUR 8 and 12 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does proposals requesting other amounts.







Where to start? The process

Call for proposals

Pert Diagram

Identify the main actors

Look for new partners to fill the gaps







Where to start?

- 1. Think about what you want to do / achieve, and how
- 2. Find a suitable funding opportunity

HE Work Programmes

 Think about how to <u>puzzle your project</u> (in Work Packages) in order to deliver it successfully

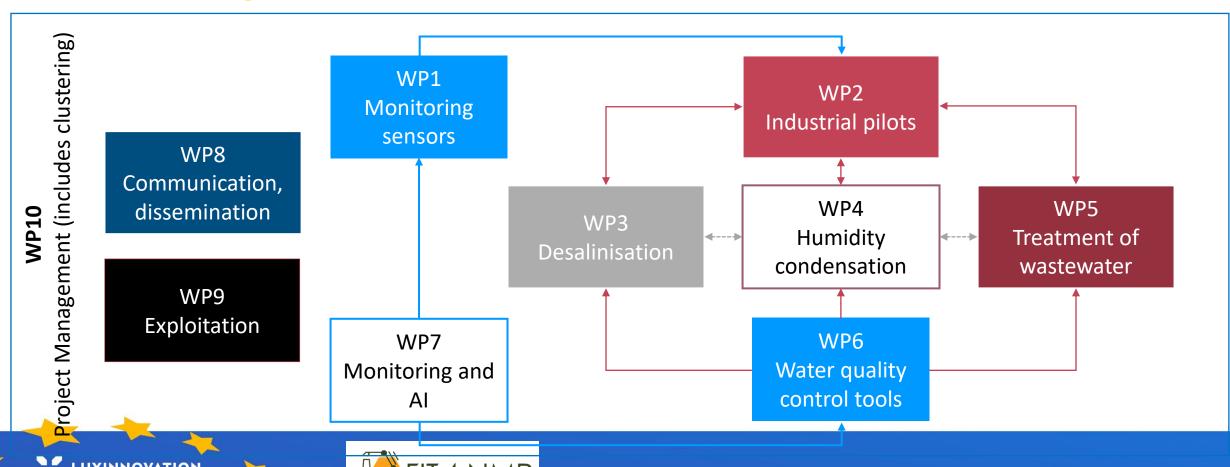






Imagine your consortium

The Pert Diagram





Where to start? The process

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Where to start?

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HE Work Programmes

- 3. Think about how to <u>puzzle your project</u> (in Work Packages) in order to deliver it successfully
- 4. Think about the competences needed to carry this out, and start forming a consortium starting from your network







Forming a consortium

The process

- First think about your existing network of collaborators: it is better to work with your friends!
- Think about geographic balance, but remember that excellence and impact are the driver of success
- Cover your whole value chain

Contact your National Contact Points! We can:

- Analyse the top performers from EU databases
- Scan and prioritise within European Partnerships
- Engage in direct contacts with coordinators and experts in Europe







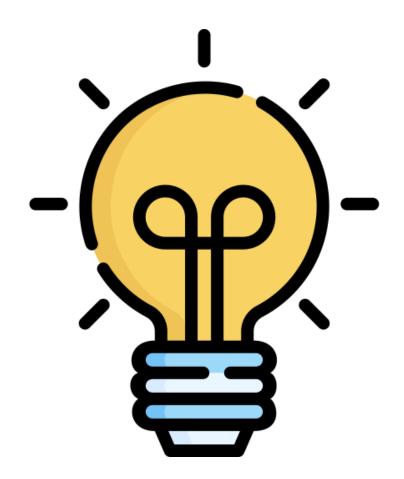
Some tips

Ask for advice:

- ✓ From your NCPs (me [©])
- From your institution services
- From more experienced colleagues
- There are also specialised consultances

Start early, plan in advance

Start gradually – don't rush it to coordinate.









Collaborating at EU level

Motivation

Excellence:

Competitive programme proves applicant's maturity & skills

Networking:

Work with relevant players in your field

Impact:

• Address scientific & economic issues in trans-European partnerships

Funding:

Advantageous funding rates (100% of eligible costs + 25% overhead)

Market:

• International consortia give partner more visibility & credibility vis-à-vis investors & customers









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Luxinnovation

European R&D and Innovation Support







European R&D and Innovation Support

At a glance



Collaborative and competitive projects

From idea to project

Identifying the EU funding relevant opportunities

Identifying excellent partners

Seeking complementarity, working with the best

Technical Support

Providing advice and training, critical proposal review, legal and financial Successful EU funded projects

Maninovation support throughout the application process and beyond







European R&D and Innovation Support

What we do

We answer questions such as:

- Where to get up-to-dated information on programmes and calls for project proposals;
- What programmes are the most suitable for you, or;
- Where and how to find European partners;
- What are the legal and financial requirements (e.g. eligible costs; how to build the budget).

We make sure relevant <u>opportunities aligned with your own strategy and RDI interests</u> are identified, but also opportunities that could support you to implement or accelerate the implementation of national policies.







Thank you!





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