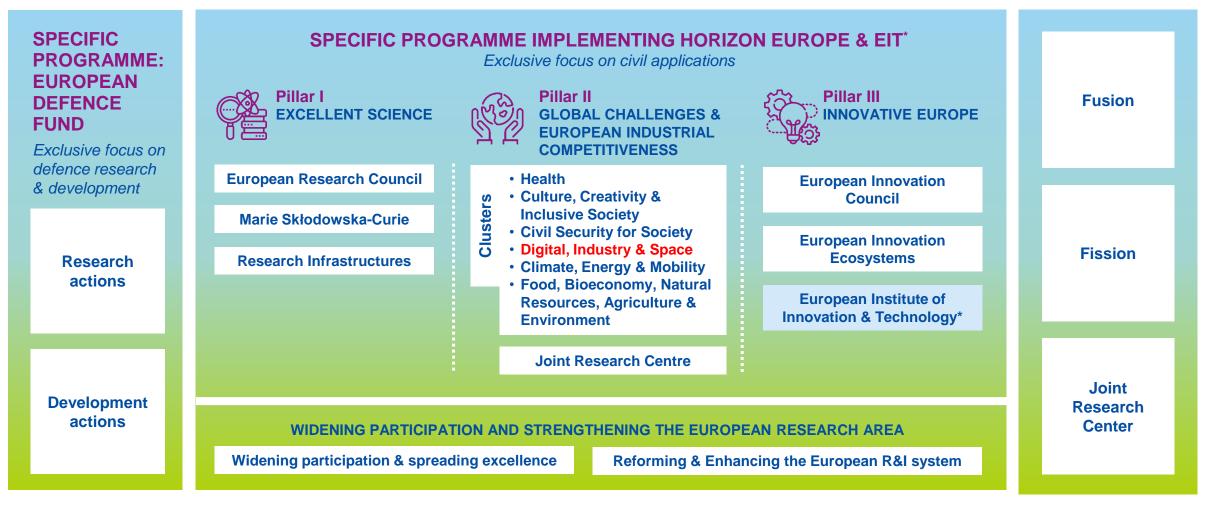
Pillar 2 of HORIZON Europe Digital, Industry and Space Cluster



HORIZON EUROPE

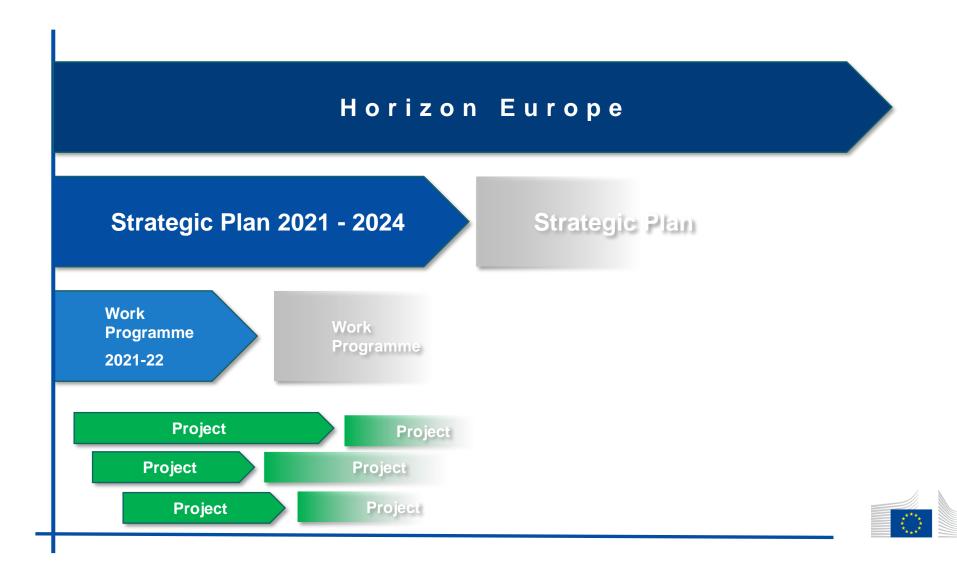
EURATOM



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



From policy priorities to concrete action



European

Commission

R&I as important driver of change



Accelerate the twin transition

and find solutions in areas such as the decarbonisation of industry or sustainable mobility



Strengthen resilience and prepare crises

R&I in the fields of health, digital, socioeconomic and climate are essential



Support Europe's competitive edge

in the global race for knowledge and tech sovereignty in cybersecurity, space, Al, 5G and e-mobility



Strategic Planning

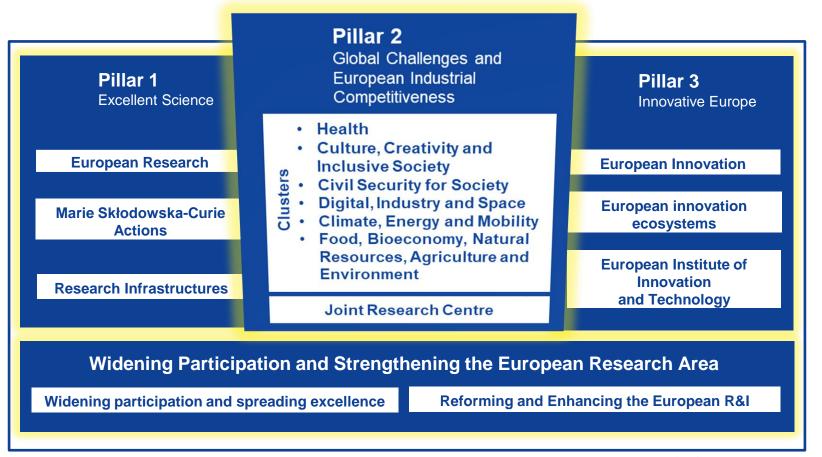
- Research and innovation projects funded by Horizon Europe will contribute to these and other important goals
- What is required is an effective interface between EU policy priorities and programme activities ⇒ strategic plan
- Strategic plan as intermediate step towards the work programme:
 - Defines key strategic orientations for the next years
 - Outlines important **approaches and instruments** for the implementation



Range and coverage of the strategic plan

Due to its directionality, the strategic plan is **particularly relevant for Pillar II** of Horizon Europe, which is more top-down in character.

Nonetheless, it links to (and has an effect on) almost all **other parts of Horizon Europe** as well.





Four key strategic orientations for greater impact

Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains to accelerate and steer the digital and green transitions through human-centred technologies and innovations Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment

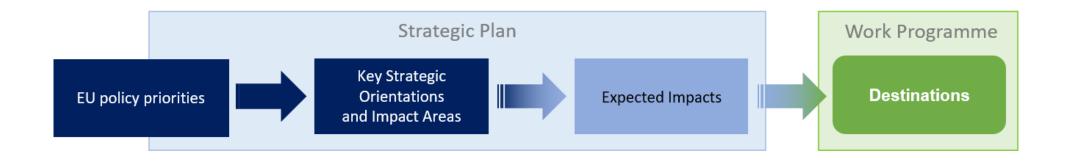
Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems

~ ~

Creating a more resilient, inclusive and democratic European society, prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions



From policy priorities to work programme parts



- Each 'Destination; in the Cluster-specific work programme parts mirrors one specific expected impact of the strategic plan, while also contributing to other expected impacts
- All 32 expected impacts of the strategic plan are covered by the work programme



The Horizon Europe impact logic

WORK PROGRAMME	EU POLICY PRIORITIES	Overall priorities of the European Union (Green Deal, Fit for the Digital Age,)
	KEY STRATEGIC ORIENTATIONS	Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference
	IMPACT AREAS	Group of expected impacts highlighting the most important transformation to be fostered through R&I
	EXPECTED IMPACTS = DESTINATIONS	Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&I investments (long term). It refers to the specific contribution of the project to the work programme expected impacts described in the destination. Impacts generally occur some time after the end of the project.
	EXPECTED OUTCOMES = TOPICS	The expected effects, over the medium term, of projects supported under a given topic. The results of a project should contribute to these outcomes, fostered in particular by the dissemination and exploitation measures. This may include the uptake, diffusion, deployment, and/or use of the project's results by direct target groups. Outcomes generally occur during or shortly after the end of the project.
	PROJECT RESULTS	What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc.) are 'Intellectual Property', which may, if appropriate, be protected by formal 'Intellectual Property Rights'

Application process (researchers)

> European Commission

Strategic Planning and Programming (EC)

STRATEGIC PLAN

Horizon Europe Programme Structure

Pillar 1 Excellent Science	Pillar 2 Global Challenges and European Industrial Competitiveness	Pillar 3 Innovative Europe			
European Research Council Marie Skłodowska-Curie Actions	 Health Culture, Creativity and Inclusive Society Civil Security for Society Digital, Industry and Space Climate, Energy and Mobility Food, Bioeconomy, Natural 	European Innovation Council European innovation ecosystems			
Research Infrastructures	Resources, Agriculture and Environment Joint Research Centre	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					



Cluster 4 - DIGITAL, INDUSTRY and SPACE (DIS)

 As Europe gears up for a more resilient, green, and digital recovery, the EU needs to maintain a strong industrial and technology presence in key parts of digital and other supply chains, in industrial ecosystems while safeguarding its ability to access and operate safely in space.



CL 4 - DIS

Policy and strategy

- The overarching vision behind the proposed investments under Cluster 4 is that of Europe shaping competitive and trusted technologies for a European industry with global leadership in key areas, enabling production and consumption to respect the boundaries of our planet, and maximising the benefits for all parts of society in the variety of social, economic and territorial contexts in Europe.
- This will build a competitive, digital, low-carbon and circular industry, ensure sustainable supply of raw materials, develop advanced materials and provide the basis for advances and innovation in global challenges to society.
- The expected impacts of this cluster are contained in the Horizon Europe strategic plan.
- The final work programme 2021-2022 is now published on the EC Funding & Tenders Portal <u>here</u>



CL4 – Impact areas and Destinations 2021-2022

- The work programme 2021-2022 of Cluster 4 aims to contribute to six expected impacts as set by the <u>Horizon Europe Strategic Plan</u>, which are the six destinations (key areas) of this work programme:
 - 1. Climate neutral, circular and digitalised production
 - 2. Increased autonomy in key strategic value chains for resilient industry
 - 3. World leading data and computing technologies
 - 4. Digital and emerging technologies for competitiveness and fit for the green deal
 - 5. Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
 - 6. A human-centered and ethical development of digital and industrial technologies



CL4 – Interventions Areas

- Manufacturing Technologies
- Advanced Materials
- Circular Industries
- Low-Carbon and Clean Industries
- Key digital technologies
- Artificial Intelligence and Robotic
- Emerging enabling technologies
- Advanced Computing and Big Data
- Next Generation Internet
- Space, including Earth Observation



CL4 – European Partnerships

• The following are the candidate partnerships in the area of digital, industry and space:



For more information the DIS partnerships see <u>here</u> and EIT-KIC partnerships <u>here</u>.



Missions Areas

- Accomplishing missions will require a cross-cutting approach, drawing on research and innovation activities defined not only through individual Clusters, but across Horizon Europe and beyond. Research and innovation activities within this Cluster thus have the potential to support missions in all of the five mission areas:
 - <u>Cancer</u>
 - Adaptation to climate change including societal transformation
 - Healthy oceans, seas coastal and inland waters
 - <u>Climate-neutral and smart cities</u>
 - Soil health and food
- The Horizon Europe Missions Work Programme 2021-2022 has been published by the European Commission and is available <u>here</u>.



EC Priority Areas 2019 - 2024

- There are 6 Commission priorities for 2019-2024, Europe fit for a digital age is of particular relevance for Cluster 4:
 - Developing an economy that works for people
 - European Green Deal
 - Europe fit for the digital age
 - Stronger Europe in the world
 - Promoting our European way of life
 - New push for European democracy





All funding information and details on how to apply are on the <u>Funding and</u>
 <u>Tenders portal</u>

Work programme

- Funding opportunities under Horizon Europe are set out in multiannual work programmes, which cover the large majority of support available.
- Digital, Industry and Space work programme



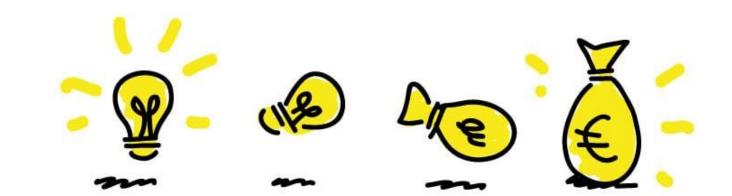
Adoption of the Digital Europe Work Programmes

 the Commission has adopted on the 10th of November, the Digital Europe Main Work Programme (C/2021/7914), the Digital Europe Cybersecurity Work Programme (C/2021/7913) and the Digital Europe EDIH Work Programme (C/2021/7911).

- The press package on these Work Programmes can be found at https://ec.europa.eu/commission/presscorner/detail/en/ip_21_5863
- Leading the Digital Decade | Shaping Europe's digital future (europa.eu)









Proposal writing ~EU funding~

 https://ec.europa.eu/info/funding-tenders/how-apply/you-apply-eu-fundingbeginners_en;



Proposal writing ~partner search~

- <u>Ideal-IST: https://www.ideal-ist.eu/;</u>
- <u>CORDIS: https://cordis.europa.eu/en;</u>
- FUNDING&TENDERS: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home;
- NCP -> mailing list: <u>Idealist-he-cl4@ici.ro</u>.





Thank You

Monica Barbu HE Cluster 4 Digital NCP monica.barbu@ici.ro Idealist-he-cl4@ici.ro



