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Public consultation on the past, present and future of the European Research & Innovation Framework programmes 2014-2027

Fields marked with * are mandatory.



PUBLIC CONSULTATION ON THE PAST, PRESENT AND FUTURE OF THE EUROPEAN RESEARCH & INNOVATION FRAMEWORK PROGRAMMES 2014-2027



#EUHaveYourSay

INTRODUCTION

This consultation aims to collect the views of research institutions, businesses, consumer organisations, as well as non-governmental organisations, public authorities, and other stakeholders on the European Union Framework Programmes (FP) for Research & Innovation, **Horizon 2020** (8th FP) and **Horizon Europe** (9th FP).

The consultation has five sections:



- Section A "About you" asks information about the respondent's profile.
- Section B focuses on the past programme Horizon 2020 (2014 2020) and aims to collect feedback and evidence to draw lessons from the past. This part of the consultation will feed into the ex-post evaluation of Horizon 2020.
- Section C focuses on the current programme Horizon Europe (2021 2027) and aims to take stock of what stakeholders are currently experiencing to possibly adapt current actions. This part of the consultation will feed into the mid-term evaluation of Horizon Europe, covering the period 2021 2023.
- Section D collects views and opinions for the upcoming Strategic Plan of Horizon Europe
 (2025 2027). The questionnaire concerns the future societal challenges that should shape
 future EU research and innovation activities, the strengths and weaknesses of the European
 R&I system, EU Missions, European Partnerships and synergies with other EU programmes.
- Section E asks about the key lessons learned and messages for the future. If you wish so, you can upload a position paper in this section.

You can choose to **complete only one or more sections** of the consultation.

You can save your contribution as a draft on the server and continue later or on a different day.

As the consultation looks at the **past, the present and the future of European Research Framework Programmes**, some topics are addressed under multiple sections.

For example, both section B (Horizon 2020) and section C (Horizon Europe) examine how the programmes contributed (or is contributing) to climate, health, digital and industrial transitions. Likewise, questions on the programme's implementation and administrative procedures are asked in the two sections to account for the simplification measures introduced in Horizon Europe.



Your answers will be **treated confidentially** and will be statistically processed. **The results will be anonymised and presented at an aggregate level** only in a report that will be published in the "Have your say" web portal.

CLOSING DATE: 23 February 2023

By participating, you will help shape the future of the European Research and Innovation Programme.

Thank you!



Please select your language preference on top of the page before starting the survey.

Need help? Please contact: RTD-PUBLIC-CONSULTATION-HORIZON@ec.europa.eu

SECTION A. ABOUT YOU

*	Language of	f my	contrib	ution

English

*I am giving my contribution as

Non-governmental organisation (NGO)

Are you providing your personal views or the views of an institution/organisation?

- Personal views
- Views of an institution / organisation
- *First name

Nineta

*Surname

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*Fmail	(this	won'	t he	published)	١
"Lilian v		WOLL	\cdot	Dublished	,

nineta.hrastelj@euchems.eu

*Organisation name

255 character(s) maximum

European Chemical Society (EuChemS)

*Organisation size

Micro (1 to 9 employees)

Transparency register number

255 character(s) maximum

Check if your organisation is on the transparency register

(http://ec.europa.eu/transparencyregister/public/homePage.do?redir=false&locale=en). It's a voluntary database for organisations seeking to influence EU decision-making.

03492856440-03

*Country of origin

Please add your country of origin, or that of your organisation.

This list does not represent the official position of the European institutions with regard to the legal status or policy of the entities mentioned. It is a harmonisation of often divergent lists and practices.

Belgium

*Please select the option(s) that best describe(s) your experience with the European Union Research and Innovation programmes:

between 1 and 6 choices

I/my organisation has participated/is currently participating in at least	one project funded by
Horizon 2020 (2014 – 2020)	

- I/my organisation has **participated/is currently participating** in at least one project funded by **Horizon Europe** (2021 2027)
- I/my organisation has **proposed project(s)** to receive funding from Horizon 2020 (2014 2020) but was **unsuccessful**.
- I/my organisation has proposed project(s) to receive funding from Horizon Europe (2021 2027) but was unsuccessful.
- I/my organisation supports other entities that apply for / participate in the EU R&I Framework Programmes
- I/my organisation is interested in research and innovation but did not apply so far for EU funding under the European Research and Innovation Programme None of the above

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. For the purpose of transparency, the type of respondent (for example, 'business association, 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published. Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

*Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

Anonymous

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

Public

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

- I agree with the personal data protection provisions (https://ec.europa.eu/info/law/better-regulation/specific-privacy-statement)
- *Which part of the survey would you like to fill in?

between 1 and 3 choices

- Performance of the past programme Horizon 2020 (input for the Horizon 2020 ex-post evaluation)
 Performance of Horizon Europe (input for the Horizon Europe interim evaluation)
- ✓ Looking into the R&I future priorities 2025-2027 (input for the Horizon Europe Strategic Plan)
- *In which of the following areas of Horizon Europe are you or your organisation mainly active / interested in? Please select all that apply (Horizon Europe structure) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en):
 - Frontier research: European Research Council
 - Researcher training, career development and mobility: Marie Skłodowska-Curie Actions
 - European Research Infrastructures
 - R&I to tackle global challenges: Health (Cluster 1)
 - R&I to tackle global challenges: Culture, creativity and inclusive society (Cluster 2)

R&I to tackle global challenges: Civil security for society (Cluster 3)
R&I to tackle global challenges: Digital, industry and space (Cluster 4)
R&I to tackle global challenges: Climate, energy and mobility (Cluster 5)
R&I to tackle global challenges: Food, bioeconomy, natural resources, agriculture and
environment (Cluster 6)
Developing and scaling up of breakthrough technologies and game changing innovations:
European Innovation Council
Support systems for innovation: European Innovation Ecosystems
 Entrepreneurial innovation & training: European Institute of Innovation and Technology
☑ Widening participation & strengthening the European Research Area (widening component)
☑ Widening participation & strenghtening the European Research Area (ERA component)
None of the above

SECTION D. LOOKING INTO THE R&I FUTURE PRIORITIES (INPUT FOR THE HORIZON EUROPE STRATEGIC PLAN 2025 - 2027)

The Horizon Europe strategic plan defines the strategic orientations for research and innovation investments for a period of up to four years.

It focuses on the six thematic Clusters of Horizon Europe, which cover the following areas respectively:

- Health (Cluster 1) (https://research-and-innovation.ec.europa.eu/funding/fundingopportunities/funding-programmes-and-open-calls/horizon-europe/cluster-1-health_en)
- Culture, Creativity and Inclusive Society (Cluster 2) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-2-culture-creativity-and-inclusive-society en)
- Civil Security for Society (Cluster 3) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-3-civil-security-society_en)
- Digital, Industry and Space (Cluster 4) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-4-digital-industry-and-space_en)
- Climate, Energy and Mobility (Cluster 5) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-5-climate-energy-and-mobility_en)
- Food, Bioeconomy, Natural Resources, Agriculture and Environment (Cluster 6) (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/cluster-6-food-bioeconomy-natural-resources-agriculture-and-environment_en)

The first Horizon Europe strategic plan (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1) covers the period 2021-2024. You can find more information about the Strategic Plan 2021-2024 in the

following factsheet. (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/publication/c5f77da0-8c52-11eb-b85c-01aa75ed71a1)

The societal challenges

Name the most important R&I solution that would help you in your life over the next 10 years.

All the challenges in the options selection are important. The Chemical Sciences will play an important role in providing solutions on climate, energy, healthy ageing, measures to reduce biodiversity loss and international competition for technology.

In the next **ten years**, which societal challenges should be the focus of EU investments for research and innovation activities?

	Not a priori ty	Low prior ity	Mediu m priorit y	High prior ity	Es se nti al	I do not know
Climate change	0	0	•	0	0	0
Loss of biodiversity	0	0	•	0	0	0
Energy supply	0	0	0	•	0	0
Migration flows	0	0	•	0	0	0
Social justice	0	0	•	0	0	0
Strained healthcare systems and ageing European population	0	0	0	•	0	0
Global competition for technological leadership	0	0	•	0	0	0
Global instability and EU societal preparedness for large-scale disruptions	0	0	0	•	0	0
Other	0	0	0	0	0	•

If other, please specify.

- skilled and diverse European research and innovation workforce
- food and water security (links to climate change and social justice and global insecurity)
- pollution and waste, (has links to biodiversity)
- chemistry of the oceans (has links to biodiversity)
- sustainable agriculture

In the next **three years**, which societal challenges should be the focus of EU investments for research and innovation activities?

	Not a priori ty	Low prior ity	Mediu m priorit y	High prior ity	Es se nti al	I do not know
Climate change	0	0	0	•	0	0
Loss of biodiversity	0	0	•	0	0	0
Energy supply	0	0	0	•	0	0
Migration flows	0	0	•	0	0	0
Social justice	0	0	•	0	0	0
Strained healthcare systems and ageing European population	0	0	0	•	0	0
Global competition for technological leadership	0	•	0	0	0	0
Global instability and EU societal preparedness for large-scale disruptions	0	0	0	•	0	0
Other	0	0	0	•	0	0

Please feel free to add further comments to your selection.

There is currently too much focus on quantity (over quality), and becoming "leaders" just for the sake of being leaders, rather than to build a socially, economically, and environmentally sustainable world. Fundamental research under "Other".

	1 2 1 11 2			1.1 2 11	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
in vour opinior	ı. wnich Horizor	i Europe Gluster(s)	contributes(s) to	addressind the	societal challenges?

С			
lu			

	st er 1 - H e al t	Cluster 2 - Culture, Creativity and Inclusive Society	Cluste r 3 - Civil secur ity for societ y	Cluster 4 - Digital , Indust ry and Space	Cluster 5 - Climat e, Energy and Mobilit y	Cluster 6 - Food, Bioeconomy, Natural Resources, Agriculture and Environment
Climate change	▽	0		0	▽	✓
Energy supply					▽	\checkmark
Migration flows		\checkmark	✓			0
Social justice	✓	✓	✓			
Loss of biodiversity		0	0	0	✓	\checkmark
Strained healthcare systems and ageing European population	>	✓	0	0	0	
Global competition for technological leadership		0	0	▽	√	
Global instability and EU societal preparedness for large-scale disruptions		⊘	✓	✓		
Other		✓			√	▽

If other, please specify.

• skilled and diverse European research and innovation workforce - links to Cluster 2 Culture, Creativity and Inclusive Society

- food and water security clusters 5 and 6 need to enable
- pollution and waste clusters 5 and 6 need to enable. This is important to support the emerging UN panel on Chemicals, Waste and Pollution Prevention
- chemistry of the oceans clusters 5 and 6 need to enable

Are there European scientific areas of strengths or weaknesses which should be prioritised in Horizon Europe to keep Europe at the forefront of international scientific competition?

Collaboration across national and disciplinary boundaries makes for great science. Collaborations across Europe are vital to make scientific progress and we call on the Commission urgently to progress UK and Swiss Association to Horizon Europe.

Fundamental research seems to be missing.

Expected impacts across the six Clusters

In your view, for which expected impacts under Cluster 1 (Health) is EU support more impactful than national and/or regional support alone?

	N ot at all	S li g h tl	So me wh at	Mo der atel y	Ex tre m ely	I do not know / No opinion
Staying healthy in a rapidly changing society	0	0	0	0	•	0
Living and working in a health-promoting environment	0	0	0	0	•	0
Tackling diseases and reducing their burden	0	0	0	0	•	0
Ensuring access to innovative, sustainable & high-quality health care	0	0	0	0	•	0
Unlocking the full potential of new tools, technologies and digital solutions for a healthy society	0	0	0	0	•	0

Maintaining an innovative, sustainable and globally competitive health-related	0	0	0	0	•	0	
industry							

Please feel free to specify any other area missing from the list above.

The Pharmasea project, funded by a previous Framework Programme, enabled a consortium to take a whole-pipeline approach to drug discovery, bringing together experts in science, policy, administration and publicity. This really showcases the unique role the Horizon Programmes can play. Project website is https://www.pharmasea-aquatpoll.eu/

In your view for which expected impacts under Cluster 4 (Digital, industry and space) is EU support more impactful than national and/or regional support alone?

	N o t a t a	S li g h tl y	S o m e w h at	M o d er at el y	E xt re m el y	I do not know / No opinion
Global leadership in clean & climate-neutral industrial value chains, circular economy and climate-neutral digital systems and infrastructures	0	0	0	•	0	0
Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials	0	0	0	•	0	0
Globally attractive, secure and dynamic data-agile economy	0	0	0	•	0	0
Open strategic autonomy in digital technologies and in future emerging enabling technologies	0	0	0	•	0	0
Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data	0	0	0	•	0	0
A human-centred and ethical development of digital and industrial technologies	0	0	0	•	0	0

Please feel free to specify any other area missing from the list above.

	N ot at all	S li g h tl y	So me wh at	Mo der atel y	Ex tre me ly	I do not know / No opinion
Clean and sustainable transition of the energy and transport system	0	0	0	•	0	0
Transition to a climate-neutral and resilient society and economy	0	0	0	•	0	0
Efficient, clean, sustainable, secure, and competitive energy supply	0	0	0	•	0	0
Efficient and sustainable use of energy	0	0	0	0	0	0
Climate-neutral and environmental- friendly mobility	0	0	0	•	0	0
Safe, seamless, smart, inclusive, resilient, climate neutral and sustainable mobility systems	0	0	0	•	0	0
ease feel free to specify any other area missing fro	m the lis	st abo	ve.			
Energy efficient buildings your view, for which expected impacts under Clus	ster 6 (Fo	ood, b	ioecon	omy, na	tural res	sources,
riculture and environment) is EU support more imp	oactful t		ational a	and/or r	egional	support alon
•	•			-		

climate change

Preservation and restoration of biodiversity and ecosystems	0	0	0	0	0	0
Sustainable and circular management of natural resources; tackling pollution; bioeconomy	0	0	0	•	0	0
Food and nutrition security for all from sustainable food systems from farm to fork	0	0	0	•	0	0
Balanced development of rural, coastal and urban areas	0	0	0	0	0	•
Innovative governance models enabling sustainability, environmental observation	0	0	0	0	0	•

Please feel free to specify any other area missing from the list above.

- clean and sustainable water
- waste and pollution

How familiar are you with the strategic planning process for Horizon Europe?

- Not at all
- Slightly
- Somewhat
- Moderately
- Extremely

Synergies and complementarities

Compared to the Strategic Plan 2021-2024 (https://op.europa.eu/en/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1#:~:text=Strategic%20plan%202021-2024%20The%20strategic%20plan%202021-

24%20defines,EU%E2%80%99s%20multiannual%20framework%20programme%20for%20research %20and%20innovation.), do you see any unexploited potential for complementarities between different clusters?

	C lu st e r	Cluster 2 - Culture,	Clust er 3 - Civil	Cluste r 4 -	Cluster 5 - Climat	Cluster 6 - Food, Bioeconomy,
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	1 H e al t	Creativity and Inclusive Society	secur ity for socie ty	Digital , Indust ry and Space	e, Energy and Mobilit y	Natural Resources, Agriculture and Environment
Cluster 1 - Health	0	0	0	0		▽
Cluster 2 - Culture, Creativity and Inclusive Society	✓			0	0	0
Cluster 3 - Civil security for society	0		0	▽	0	0
Cluster 4 - Digital, Industry and Space			✓	0	0	0
Cluster 5 - Climate, Energy and Mobility			<	0	0	0
Cluster 6 - Food, Bioeconomy, Natural Resources, Agriculture and Environment	<	✓			▼	
ase elaborate. you see any unexploite s of Horizon Europe?	ed pot	ential for comp	lementariti	es between	the six clus	ters and the other
C				Clu	ster	I

	st er 1 - H e al t	Cluster 2 - Culture, Creativity and Inclusive Society	Cluste r 3 - Civil secur ity for socie ty	Cluster 4 - Digital , Indust ry and Space	5 - Climat e, Energy and Mobilit y	Cluster 6 - Food, Bioeconomy, Natural Resources, Agriculture and Environment	d o n o t k n o w
Pillar I - Marie Skłodowsk a-Curie Actions (MSCA)	0		0	0	0		0
Pillar I - Research Infrastructu res	✓	0	0	0	0	✓	
Pillar I - The European Research Council (ERC)	V			0			
Pillar III - European Innovation Council	0		0	0	0		▽
Pillar III – European Innovation Ecosystem s	0		0	0	0		▼
Pillar III – European Institute of Innovation	0		0	0	0		▽

and Technology						
Widening and ERA	√	▽	0	✓	✓	
The Joint Research Centre	>	0	0	0	✓	

Please elaborate.

Could note the complementarity between cluster 2 and MCSA, as the MCSA scheme enables early career researchers to develop new skills in research and working in other cultures through mobility to other EU member states/ associated countries.

To maximize the European innovation potential, Horizon Europe is designed to be implemented in synergy with other Union funding programmes. With which EU programme(s) could synergies be strengthened?

-	rengthened?
	European Agricultural Guarantee Fund and the European Agricultural Fund for Rural Developmen
	under the Common Agricultural Policy (CAP)
	European Maritime, Fisheries and Aquaculture Fund (EMFAF)
	☐ European Social Fund Plus (ESF)+
	European Regional Development Fund (ERDF)
	☐ Connecting Europe Facility (CEF)
	☐ Digital Europe Programme (DEP)
	 LIFE - Programme for Environment and Climate Action (LIFE)
	✓ Erasmus +
	☑ Union Space Programme
	☐ Neighbourhood, Development and International Cooperation Instrument (NDICI) and the
	Instrument for Pre-accession Assistance (IPA III)
	☐ Internal Security Fund (ISF)
	□ Border Management and Visa Instrument (BMVI)
	☐ InvestEU
	 Innovation Fund under the Emission Trading Scheme
	☐ Just Transition Mechanism
	Euratom Research and Training Programme
	☐ European Defence Fund
	☐ Creative Europe Programme
	Recovery and Resilience Facility
	☐ I don't know

Ple	ase elaborate.			

EU Missions, European Partnerships and horizontal issues

What added value do you think that EU Missions can bring to European, national, regional and local programmes and initiatives?

The Strategic Plan 2021–2024 identified a number of co-funded and co-programmed European Partnerships (https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/bb4f7575-0ebc-11ec-b771-01aa75ed71a1) in various areas to reinforce the impact of Horizon Europe. In the period 2025-2027, and apart from other Horizon Europe initiatives (other partnerships, Missions, clusters etc.), is there any other area where a partnership approach could deliver more impacts?

No

I do not know

The Strategic Plan 2021-2024 (https://op.europa.eu/en/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1#:~:text=Strategic%20plan%202021-

2024%20The%20strategic%20plan%202021-

24%20defines,EU%E2%80%99s%20multiannual%20framework%20programme%20for%20research %20and%20innovation.) identified specific issues to be considered in the implementation of Horizon Europe. Should any of these cross-cutting themes be further elaborated for the Strategic Plan 2025-2027?

	No t a pri orit y	Lo w pri ori ty	Med ium prio rity	Hi gh pri ori ty	E s e n ti al	I do not know / No opinion
Gender equality and inclusiveness	0	0	0	0	0	0
Social Sciences and Humanities	0	0	•	0	0	0
Ethics and integrity	0	0	0	0	•	0
Open science practices	0	0	0	•	0	0
Dissemination and Exploitation (D&E),						

including links to education and training, market uptake and deployment	0	0	0	•	0	0
Key Enabling Technologies	0	0	0	0	0	0
Social innovations	0	0	•	0	0	0
International cooperation	0	0	0	0	0	0
EU taxonomy	0	0	0	0	0	•

In addition to what has been addressed in the Strategic Plan 2021-2024, do you see any other cross-cutting themes that should be integrated in the Strategic Plan 2025-2027?

Currently missing: leadership training for young professionals, mental health support for young professionals, and targeted programmes to increase science policy involvement for young professionals.

Horizon Europe strategic planning process

The Strategic Plan 2021-2024 is organised around four Key Strategic Orientations (KSO) linked with the EU policy priorities. How easy is it to understand these KSOs?

	Ve ry dif fic ult	D if fi c u lt	N e u tr a	E a s y	V e r y e a s	I do not kno w / No opini on
Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains	•	0	0	0	0	0
Restoring Europe's ecosystems and biodiversity, and sustainably managed natural resources	0	0	•	0	0	0
Making Europe the first digitally enabled circular, climate-neutral and sustainable economy	0	0	•	0	0	0
Creating a more resilient, inclusive and democratic European society	0	0	0	0	0	•

EUSurvey - Survey 20/02/2023, 21:50 Please elaborate. The Strategic Plan 2021-2024 (https://op.europa.eu/en/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1#:~:text=Strategic%20plan%202021-2024%20The%20strategic%20plan%202021-24%20defines,EU%E2%80%99s%20multiannual%20framework%20programme%20for%20research %20and%20innovation.) is structured into: 4 four key strategic orientations 15 impact areas • 32 cluster specific expected impacts (each translated into a destination in the work programme) In your opinion, how easy is it to understand this structure? Very difficult Difficult Neutral Easy Very easy I do not know / No opinion How could the structure be improved (if needed)? SECTION E. KEY LESSONS AND MESSAGES FOR THE FUTURE What are your key lessons from the past and present European Framework Programmes for Research and Innovation and the messages you would like to pass on for the future of the programme? On the intervention modes and types of action 1,500 character(s) maximum On the identification of funding priorities 1,500 character(s) maximum

Other

1,500 character(s) maximum

On the implementation of the programme/projects and procedures

1,500 character(s) maximum

Promote and support regional research collaboration, in addition to pan-European.

If you wish to upload a position paper concerning the ex-post evaluation of Horizon 2020, the mid-term evaluation of Horizon Europe and/or the 2025 - 2027 Strategic Plan, you can do so here. Maximum file size is 1 MB.

Position_Paper_-_For_the_future.docx

Please click the button below to submit your answers!

Contact

RTD-PUBLIC-CONSULTATION-HORIZON@ec.europa.eu

RSC contribution to EuCheMS:

Commission's Public consultation on the past, present and future of the European Research & Innovation Framework programmes 2014-2027

Section D collects views and opinions for the upcoming Strategic Plan of Horizon Europe (2025 – 2027). The questionnaire concerns the future societal challenges that should shape future EU research and innovation activities, the strengths and weaknesses of the European R&I system, EU Missions, European Partnerships and synergies with other EU programmes.

Page 44: Name the most important R&I solution that would help you in your life over the next 10 years.

This one would get a range of solutions from the Chemistry Community. EuCheMS could do a twitter poll on this one with chemists across Europe. Ideas for options here:

- 1. Haber Bosch Process solution revisit Economist article
- 2. European chemistry workforce skilled for future challenges
- 3. Self-repairing materials

pp. 44-46 Societal challenges

All the challenges in the options selection are important. The Chemical Sciences will play an important role in providing solutions on climate, energy, healthy ageing, measures to reduce biodiversity loss and international competition for technology.

Others to suggest in the comments box (check 'other'):

- skilled and diverse European research and innovation workforce
- food and water security (links to climate change and social justice and global insecurity);
- pollution and waste, (has links to biodiversity)
- chemistry of the oceans (has links to biodiversity)

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In your opinion, which Horizon Europe Cluster(s) contributes(s) to addressing the societal challenges?

For 'other'

- skilled and diverse European research and innovation workforce links to Cluster 2 Culture, Creativity and Inclusive Society
- food and water security clusters 5 and 6 need to enable
- pollution and waste clusters 5 and 6 need to enable. This is important to support the emerging UN panel on Chemicals, Waste and Pollution Prevention
- chemistry of the oceans clusters 5 and 6 need to enable

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Are there European scientific areas of strengths or weaknesses which should be prioritised in Horizon Europe to keep Europe at the forefront of international scientific competition?

For text box:

Collaboration across national and disciplinary boundaries makes for great science. Collaborations across Europe are vital to make scientific progress and we call on the Commission urgently to progress UK and Swiss Association to Horizon Europe.

Expected impacts across the six Clusters

In your view, for which expected impacts under Cluster 1 (Health) is EU support more impactful than national and/or regional support alone?

On the options, chemistry researchers will be involved with the first 4 through their research, so EU support is either moderately or extremely more impactful than just national.

For text box on what is missing, tacking emerging health threats including antimicrobial resistance. Potential case study for text box: The Pharmasea project, funded by a previous Framework Programme, enabled a consortium to take a whole-pipeline approach to drug discovery, bringing together experts in science, policy, administration and publicity. This really showcases the unique role the Horizon Programmes can play. Project website is https://www.pharmasea-aquatpoll.eu/

In your view, for which expected impacts under Cluster 2 (Culture, creativity and inclusive society) is EU support more impactful than national and/or regional support alone?

From narrow chemical sciences perspective, 'don't know' for all options.

In your view, for which expected impacts under Cluster 3 (Civil security for society) is EU support more impactful than national and/or regional support alone?

From narrow chemical sciences perspective, 'don't know' for all options.

In your view for which expected impacts under Cluster 4 (Digital, industry and space) is EU support more impactful than national and/or regional support alone?

All options likely to be 'moderately' from the perspective of chemical sciences heavy industrial sectors and practices.

In your view, for which expected impacts under Cluster 5 (Climate, energy and mobility) is EU support more impactful than national and/or regional support alone?

All benefit at least moderately from international chemistry collaboration and chemistry researchers internationally work on all these issues.

Add 'energy efficient buildings' in comments box.

In your view, for which expected impacts under Cluster 6 (Food, bioeconomy, natural resources, agriculture and environment) is EU support more impactful than national and/or regional support alone?

For the first four, chemistry researchers will be contributing and benefitting from international contribution, so suggest at least 'moderately'. For the last 2, 'don't know' from narrow chemical sciences perspective.

Add:

- clean and sustainable water
- waste and pollution

In comments box

p. 58 Synergies and complementarities

Compared to the Strategic Plan 2021-2024, do you see any unexploited potential for complementarities between different clusters?

p. 60 Do you see any unexploited potential for complementarities between the six clusters and the other parts of Horizon Europe?

Could note the complementarity between cluster 2 and MCSA, as the MCSA scheme enables early career researchers to develop new skills in research and working in other cultures through mobility to other EU member states/ associated countries.

p. 62 To maximize the European innovation potential, Horizon Europe is designed to be implemented in synergy with other Union funding programmes. With which EU programme(s) could synergies be strengthened?

Don't know/ no comment

p. 63 What added value do you think that EU Missions can bring to European, national, regional and local programmes and initiatives?

Don't know/ no comment

The Strategic Plan 2021-2024 identified specific issues to be considered in the implementation of Horizon Europe. Should any of these cross-cutting themes be further elaborated for the Strategic Plan 2025-2027?

High priorities for the chemical sciences:

Gender equality and inclusiveness

Ethics and integrity

Dissemination and Exploitation (D&E), including links to education and training, market uptake and deployment

International cooperation

Key Enabling Technologies

Open science practices

Medium priority

Social Sciences and Humanities

Social innovations

Don't know

EU taxonomy

p. 64 In addition to what has been addressed in the Strategic Plan 2021-2024, do you see any other cross-cutting themes that should be integrated in the Strategic Plan 2025-2027?

p. 65 Horizon Europe strategic planning process

The Strategic Plan 2021-2024 is organised around four Key Strategic Orientations

(KSO) linked with the EU policy priorities. How easy is it to understand these KSOs?

Don't know/ no opinion

p. 66 In your opinion, how easy is it to understand this structure?

Don't know/ no opinion

Section E asks about the **key lessons learned and messages for the future**. If you wish so, you can **upload a position paper** in this section.

What are your key lessons from the past and present European Framework Programmes for Research and Innovation and the messages you would like to pass on for the future of the programme?

For the future – increasing Importance of digital technologies

Harnessing digital technologies for science R&D will enable scientists to deliver new benefits for society and the economy faster. Using digital technologies in R&D will enable:

- Faster, cheaper, safer, more efficient innovation
- More effective diagnosis, prevention and treatment of disease
- New sustainable technologies, from better batteries and solar cells to next generation plastics and resource efficient industrial processes
- Environmental decision-making and regulation informed by high quality data and analysis from multiple sources
- Breakthroughs and new knowledge in physical, life and digital sciences.

The volume of scientific data and the sophistication of techniques to collect and interpret it will continue to increase. There are huge opportunities to harness this data to bring new insights, make discoveries and inform decisions. There are also significant challenges in sharing and in rigorously interpreting data.

To harness the chemistry-digital interface we need new digital skills, roles and careers in science discovery. New multidisciplinary collaborations, communities and capabilities will also be crucial.

The Horizon Programmes should increasingly play a key role in making the most of these technologies by:

- Facilitating two-way engagement between academia and industry, and between chemistry and other disciplines, for knowledge and skills transfer e.g. training and secondments.
- Providing opportunities to foster multidisciplinary exchange and communities e.g. shared spaces, networks, fora and events.
- Supporting and enabling data sharing
 - Driving proactive sharing of research data, including positive and negative results.
 - Enabling collaborations with digital experts to develop tools and platforms that facilitate data sharing, including making it easy for users and understanding IP, privacy and security concerns.
 - Embedding the use of agreed data standards and formats for data.
 - Creating cultures, incentives and mandates that ensure data sharing is the default insofar as is possible.
- Horizon-scanning and identification of research areas and capabilities where digital will have transformative impacts, in partnership with experts from other science and technology fields.