

## HORIZON EUROPE

LE OPPORTUNITÀ NEI WP 2023-24 CON FOCUS SU ERC E  
CLUSTER 6 FOOD, BIOECONOMY, NATURAL RESOURCES,  
AGRICULTURE AND ENVIRONMENT

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*6 dicembre 2022*



# AGENDA

|       |   |
|-------|---|
| 9.30  | Presentazioni e introduzione  |
| 9.40  | <b><i>Horizon Europe: opportunità di finanziamento tra ERC, Cluster, Partnership e Mission.</i></b><br>Panoramica del Programma Horizon Europe <ul style="list-style-type: none"><li>▪ Verso il WP 2023 dell' ERC – European Research COuncil</li><li>▪ Verso I WP 2023-24 dei Cluster di Horizon Europe</li><li>▪ European Partnership e Mission</li><li>▪ Le regole di partecipazione</li></ul> |
| 13.00 | Pausa pranzo  |
| 14.00 | <b><i>Il Cluster 6 e il template della proposta. Eccellenza, Impatto, Implementazione.</i></b> <ul style="list-style-type: none"><li>▪ Focus Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture &amp; Environment</li><li>▪ Analisi del template della proposta</li></ul>  |
| 17.00 | Conclusioni   |



**Mariya Gabriel**, European Commissioner for Innovation, Research, Culture, Education and Youth

*“The programme aims at giving Europe a new push to a global positioning. Horizon Europe is to be **the biggest and most ambitious EU Research Innovation programme ever**. It builds on the success of Horizon 2020 and improves it further by fostering a stronger support to **breakthrough innovation** through the European Innovation Council, by creating greater **impact** through R&I **missions** and by streamlining **partnerships landscape**.”*



# 6 Commission priorities for 2019-24

## A European Green Deal

Striving to be the first climate-neutral continent



## A Europe fit for the digital age

Empowering people with a new generation of technologies

## An economy that works for people

Working for social fairness and prosperity



## A stronger Europe in the world

Europe to strive for more by strengthening our unique brand of responsible global leadership

## Promoting our European way of life

Building a Union of equality in which we all have the same access to opportunities.



## A new push for European democracy

Nurturing, protecting and strengthening our democracy





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# HORIZON EUROPE

#HorizonEU

THE EU RESEARCH &  
INNOVATION PROGRAMME  
2021 - 2027



# HORIZON EUROPE

95,5 Mlr €

L'ambizioso programma quadro dell'UE per la ricerca e l'innovazione (2021-2027)



**rafforzare le basi scientifiche e tecnologiche dell'UE e lo spazio europeo della ricerca (SER)**



**migliorare la capacità innovativa, la competitività e l'occupazione in Europa**



**conseguire gli obiettivi prioritari per i cittadini e sostenere il nostro modello socio-economico e i nostri valori**

dimensione

SCIENTIFICA

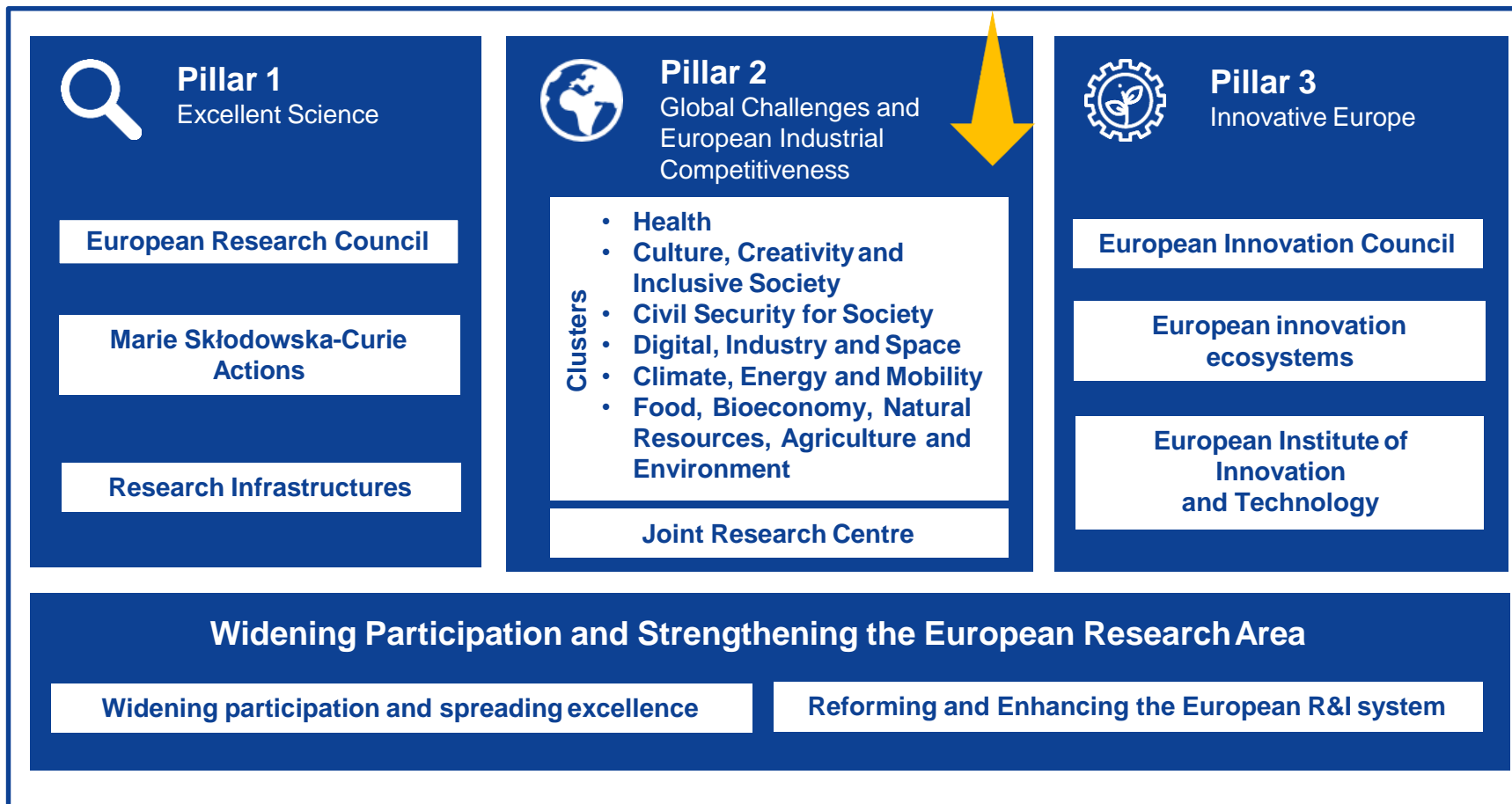
ECONOMICA

SOCIALE

di Horizon Europe

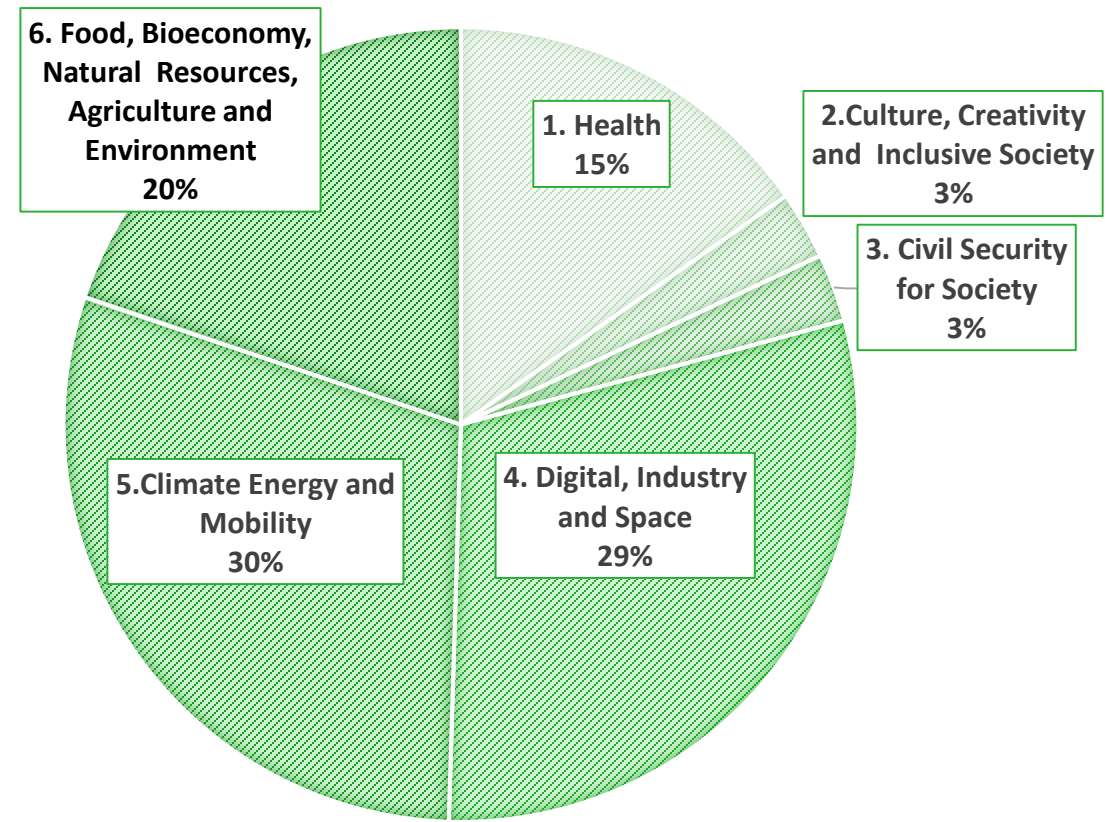
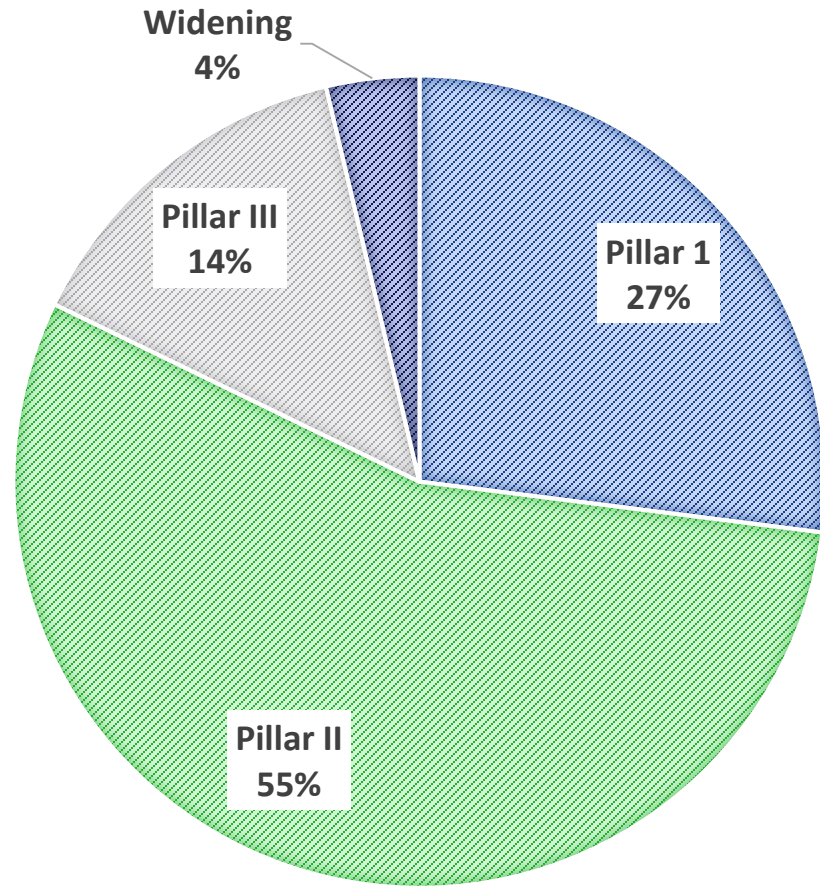


# Horizon Europe: struttura



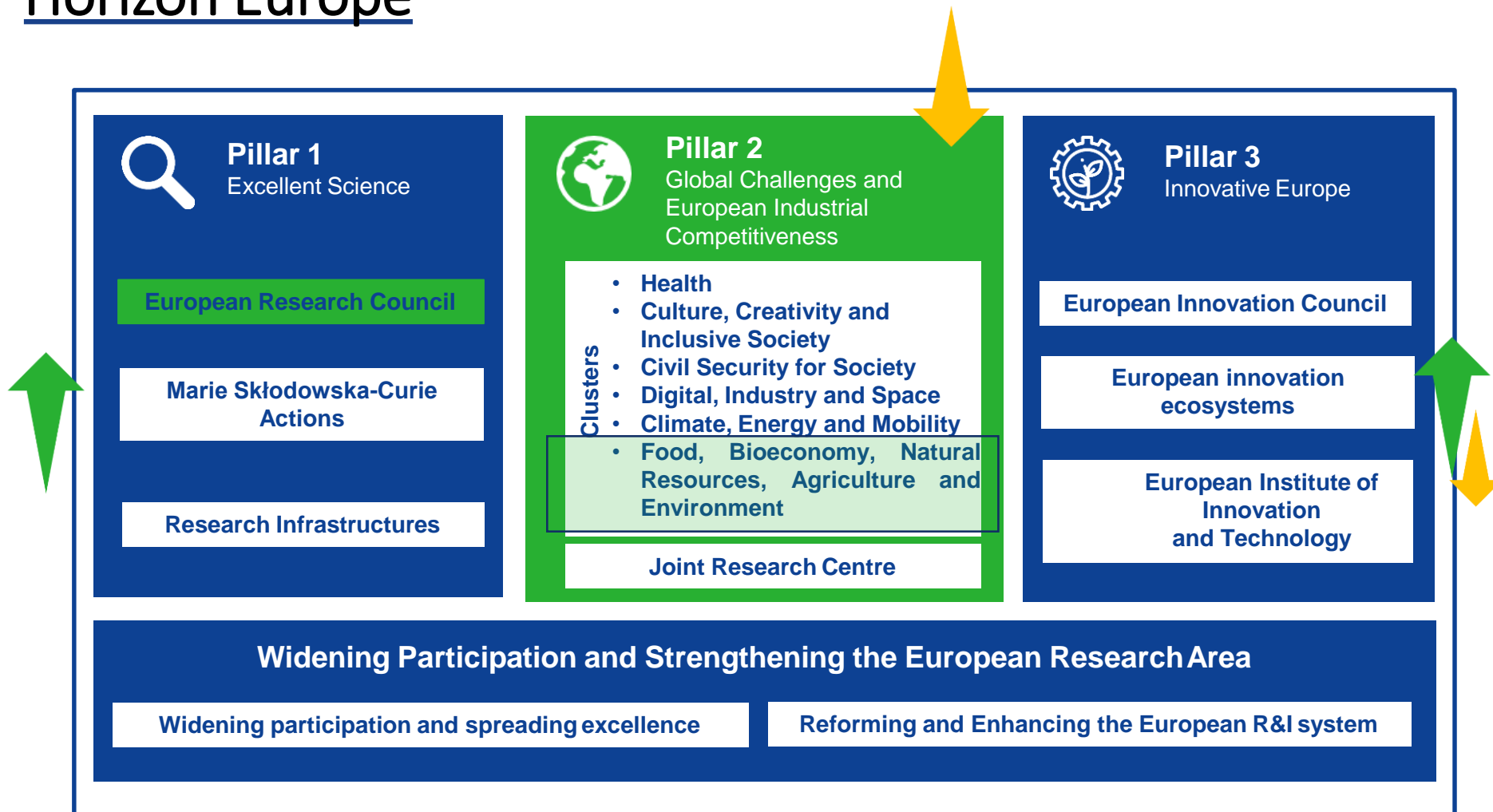


# Budget - Distribuzione





# Horizon Europe

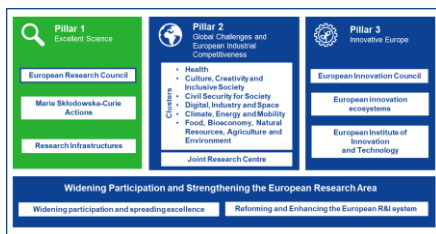


## Programmi nei programmi:

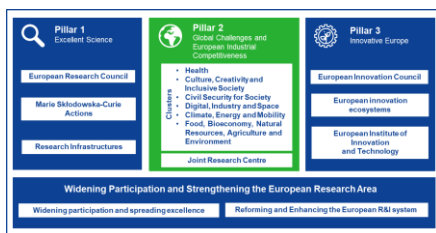
- Missions
- European Partnerships
- KIC FOOD



# SPECIFIC OBJECTIVES



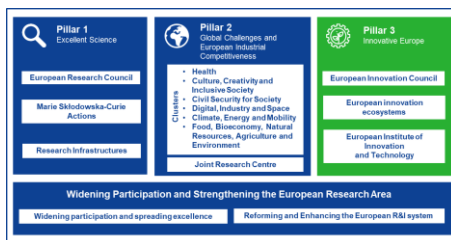
to develop, promote and advance scientific excellence, support the creation and diffusion of **high-quality new fundamental and applied knowledge, skills, technologies and solutions**, training and mobility of researchers, attract talent at all levels and contribute to full engagement of Union's talent pool in actions supported under this Programme; bottom up.



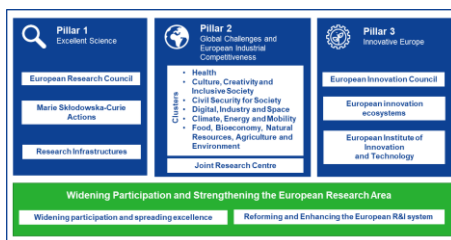
to generate knowledge, strengthen **the impact of research and innovation** in developing, supporting and implementing Union policies and support the access to and uptake of innovative solutions in European industry, notably in SMEs, and society to address global challenges, including climate change and the Sustainable Development Goals; top down.



# SPECIFIC OBJECTIVES



to foster **all forms of innovation**, facilitate technological development, demonstration and knowledge and technology transfer, strengthen deployment and exploitation of innovative solutions; bottom up



to optimise the Programme's delivery for **strengthening and increasing the impact and attractiveness of the European Research Area**, to foster the excellence-based participations from all Member States, including low R&I performing Member States, in Horizon Europe and to facilitate collaborative links in European research and innovation. Top down





# ERC – EUROPEAN RESEARCH COUNCIL



## MISSION

- The ERC's **mission** is to encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields, on the basis of scientific excellence.
- The **aim** here is to recognise the best ideas, and confer status and visibility on the best brains in Europe, while also attracting talent from abroad.

## OBJECTIVES

- to provide attractive, long-term funding to support excellent investigators and their research teams to pursue *ground-breaking, high-gain/ high-risk research*.
- Scientific excellence is the sole criterion
- Applications can be made in any field of research



## Scientific excellence & Independent researchers

- ↗ The fundamental activity of the ERC is to provide attractive, long-term funding to support excellent investigators and their research teams to pursue ground-breaking, high-gain/high-risk research.

***Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded***

- ↗ The ERC awards funding to excellent investigators looking to set up or consolidate their own independent research team or programme, as well as to already established research leaders

***Independent researchers of any age and career stage can apply for attractive long-term funding***



## Focus on Principal Investigators

***The ERC frontier research grants aim to empower individual researchers and provide the best settings to foster their creativity***

- ▣ The ERC supports individual Principal Investigators. Support for consortia is provided by other calls under Horizon Europe

Starting  
Grant

Consolidator  
Grant

Advanced  
Grant

Synergy  
Grant



| Grant                     | Objectives  | Maximum size and duration of the award   |
|---------------------------|---|--|
| <b>Starting Grant</b>     | <p>Support for excellent Principal Investigators at the career stage at which they are starting their own independent research team or programme.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p>                                    | <p>Up to EUR 1 500 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p> |
| <b>Consolidator Grant</b> | <p>Support for excellent Principal Investigators at the career stage at which they may still be consolidating their own independent research team or programme.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p>                      | <p>Up to EUR 2 000 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p> |
| <b>Advanced Grant</b>     | <p>Support for excellent Principal Investigators at the career stage at which they are already established research leaders with a recognised track record of research achievements.</p> <p>Principal Investigators must demonstrate the ground-breaking nature, ambition and feasibility of their scientific proposal.</p> | <p>Up to EUR 2 500 000 for a period of 5 years.</p> <p>Additional funding up to EUR 1 000 000.</p> |



🔗 [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023/wp\\_horizon-erc-2023\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023/wp_horizon-erc-2023_en.pdf)



|                        | <i>Starting Grant</i> | <i>Consolidator Grant</i> | <i>Advanced Grant</i> | <i>Synergy Grant</i> |
|------------------------|-----------------------|---------------------------|-----------------------|----------------------|
| <i>Call identifier</i> | <b>ERC-2023-StG</b>   | <b>ERC-2023-CoG</b>       | <b>ERC-2023-AdG</b>   | <b>ERC-2023-SyG</b>  |
| <i>Call opens</i>      | 12/07/2022            | 28/09/2022                | 08/12/2022            | 13/07/2022           |
| <i>Call deadline</i>   | 25/10/2022            | 02/02/2023                | 23/05/2023            | 08/11/2022           |





|  | <i>Starting Grant</i> | <i>Consolidator Grant</i> | <i>Advanced Grant</i> | <i>Synergy Grant</i> |
|--|-----------------------|---------------------------|-----------------------|----------------------|
| <i>Budget million EUR<br/>(estimated number of grants)</i> | 628<br>(407)          | 595<br>(300)              | 597<br>(246)          | 300<br>(30)          |
| <i>Planned dates to inform applicants after each step</i>  | 26/05/2023            | 07/07/2023                | 19/01/2024            | 04/05/2023           |
|  | 25/08/2023            | 08/12/2023                | 19/04/2024            | 04/09/2023           |
|  |                       |                           |                       | 14/11/2023           |
| <i>Indicative date for signature of grant agreements</i>   | 23/12/2023            | 06/04/2024                | 17/08/2024            | 02/04/2024           |



# PRINCIPALI NOVITÀ WP ERC 2023

- *For ERC Starting and Consolidator Grants, as from 2023, the reference date towards the calculation of the eligibility period **is the certified date of the successful defence (and not the award)** of their PhD degree.*
- *In addition to the previously existing grounds for extension of the PhD eligibility window for Starting and Consolidator Grants, the documented time of applicant Principal Investigator's inability to work before the call deadline **due to a natural disaster or for seeking asylum, which occurred after the date of successful PhD defence**, might be considered.*
- **PhD certificate.** You must submit scanned copies of documents proving your eligibility for the grant, i.e. the PhD certificate (or equivalent doctoral degree, see [Annex 4.3](#) to this document) **clearly indicating** the date of successful defence of PhD. Whenever the PhD certificate does not show the date of the successful defence of PhD, applicants should provide a written confirmation from the awarding institution stating the said date. In case the PhD defence was not successful (failed) it is the date when the PhD requirements were met and/or the date of the following successful defence. In case no defence/viva was organised in the awarding institution, the applicant should provide a written confirmation from that awarding institution stating that no defence/viva was organised and indicating the date when the PhD was approved.  
If you request an **extension of the eligibility window** (beyond 7 years after PhD for STG applicants and beyond 12 years after PhD for COG applicants), the relevant documentary evidence should be uploaded together with the PhD certificate (and document from the awarding institution indicating the successful defence date if applicable) or as separate annexes. Please see [Annex 4.4](#) for details.



## CARATTERISTICHE DEI FINANZIAMENTI ERC

- Finanziamenti assegnati a ricercatori **individuali**
- **1 Progetto, 1 ricercatore, 1 istituto, 1 criterio di valutazione**
- Unico criterio di selezione: *eccellenza*
- Finanziamenti sostanziosi (1.5 mln € → 3.5 mln )
- Nessuna priorità tematica pre-definita ('su iniziativa dei ricercatori' – bottom-up);
- Aperto a **tutti i settori della scienza**
- No network ma TEAM
- Portabilità del finanziamento



# ERC - DOMINI

## Quali settori?

- ✓ Tutti gli argomenti  
Tranne energia nucleare e temi sensibili da un punto di vista etico
  
- ✓ Per motivi pratici divisi in:
  - Scienze naturali, fisiche e ingegneria (PE)
  - Scienze della vita (LS)
  - Scienze sociali ed umanistiche (SH)

## COS'È LA RICERCA DI FRONTIERA?

Oggi la distinzione tra ricerca "di base" e "applicata" è minima, poiché le aree emergenti della scienza e della tecnologia spesso coprono elementi di entrambe.

Di conseguenza, il termine "ricerca di frontiera" è stato coniato per le attività ERC in quanto saranno dirette verso progressi fondamentali e oltre la "frontiera" della conoscenza.



# Elementi chiave di un progetto ERC

## **Principal Investigator (PI)**

- *Qualsiasi nazionalità, età, posto di lavoro/stato contrattuale*

## **Host Institution (HI)**

- *Ente situato in un paese membro dell'Unione europea o paese associato a Horizon Europe*

## ***Team di ricerca individuale***

- *Il Principal Investigator ha libertà di scelta dei membri del suo team*



# ERC Starting Grant





## **StG: budget e durata**

Quant'è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 1,5M€
- ✓ Max. 2,5M€ a progetto\*

\*In casi eccezionali e ben specificati: fino a 3 M€

- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- Accesso ad infrastrutture di ricerca
- Fieldwork



## **Principal Investigator**

- Il PI non deve essere necessariamente “employed” o “strutturato” dall’Host Institution al momento della presentazione della proposta, ma impiegato/assunto (“engaged”) dalla HI per tutta la durata del Grant
- Il PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 50% del suo tempo lavorativo
- Unico responsabile del progetto, sia per l’attività scientifica che per il management



## **Principal Investigator: requisiti**

- ✓ at least one important publication as main author or without the participation of their PhD supervisor.

### **Altri elementi di valutazione:**

#### **Early achievements track record**

*In the Track record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):*

- 1. Up to five publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);**
- 2. Research monographs and any translations thereof;**
- 3. Granted patent(s);**
- 4. Invited presentations to internationally established conferences and/or international advanced schools;**
- 5. Prizes, awards, academy memberships.**



## *Principal Investigator: requisiti*

### Starting Grant

> 2 and  $\leq$  7 years

prior to  
1 January 2023

Cut-off dates:  
Successful defence of PhD between 1  
January 2016 to 31 December 2020  
(inclusive)



# ERC Consolidator Grant



## CoG: budget e durata

Quanto è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 2 M€
- ✓ Budget aggiuntivo 1M€ - Max. 3M€ a progetto\*

\*In casi eccezionali e ben specificati: fino a 3 M€

- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- Accesso ad infrastrutture di ricerca
- Fieldwork



## **Principal Investigator**

- ✓ Il PI non deve essere necessariamente “employed” o “strutturato” dall’Host Institution al momento della presentazione della proposta, ma impiegato/assunto (“engaged”) dalla HI per tutta la durata del Grant
- ✓ Il PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 40% del suo tempo lavorativo
- ✓ Unico responsabile del progetto, sia per l’attività scientifica che per il management





## **Principal Investigator: requisiti**

- ✓ A competitive Consolidator Grant Principal Investigator must have already shown **research independence** and evidence of maturity, for example by having produced **several important publications as main author or without the participation of their PhD supervisor**.

### ***Altri elementi di valutazione:***

#### **Early achievements track record**

*In the Track Record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):*

- 1. Up to ten publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);*
- 2. Research monographs and any translations thereof;*
- 3. Granted patent(s);*
- 4. Invited presentations to internationally established conferences and/or international advanced schools;*
- 5. Prizes, awards, academy memberships.*



## *Principal Investigator: requisiti*

### Consolidator Grant

> 7 and ≤ 12 years

prior to  
1 January 2023

Cut-off dates:

Successful defence of PhD between 1 January  
2011 to 31 December 2015 (inclusive)



# ERC ADVANCED GRANT (ADG)



## **AdG: budget e durata**

Quant'è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 2,5M€
- ✓ Max. 3,5M€ a progetto\*

\*In casi eccezionali e ben specificati: fino a 3 M€

- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- Accesso ad infrastrutture di ricerca
- Fieldwork



## **Principal Investigator**

- ✓ Il PI non deve essere necessariamente “employed” o “strutturato” dall’Host Institution al momento della presentazione della proposta, ma impiegato/assunto (“engaged”) dalla HI per tutta la durata del Grant
- ✓ Il PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 30% del suo tempo lavorativo
- ✓ Unico responsabile del progetto, sia per l’attività scientifica che per il management



## **Principal Investigator: requisiti**

- Almeno 10 pubblicazioni da autore senior nelle principali riviste scientifiche peer-reviewed del proprio settore
- Almeno 3 monografie (pref. una tradotta in un' altra lingua)
- **Altri elementi di valutazione:**
- brevetti
- presentazioni da 'invited speaker/lecturer' in importanti conferenze/scuole avanzate internazionali
- conferenze internazionali organizzate / membro del comitato d' organizzazione o di indirizzo strategico
- Premi internazionali / membership accademie internazionali



# **Eccezioni nei criteri di eleggibilità e valutazione**



## **Principal Investigator: possibilità di estensione della finestra di eleggibilità**

*The date of the first PhD considered for the calculation of the eligibility period shall be the date of the actual award according to the national rules of the country where the degree was awarded.*

*The eligibility periods set out in the table above can be extended beyond 7 and 12 years for the Starting and Consolidator Grants respectively for the following properly documented circumstances<sup>1</sup>, provided they started before the call deadline:*

- **Maternity:** 18 months extension for each child born before or after the PhD award. If the applicant can document a longer maternity leave, the eligibility period will be extended by the documented amount of actual leave taken until the call deadline.
- **Paternity:** extension by the documented time of paternity leave taken until the call deadline for each child born before or after the PhD award.
- **Long-term illness<sup>2</sup> or national service:** extension by the documented amount of leave taken by the Principal Investigator until the call deadline for each incident which occurred after the PhD award date.
- **Clinical training:** extension by the documented amount of clinical training received by the Principal Investigator **after** the award of the first eligible degree and until the call deadline, **up to a maximum of 4 years.**



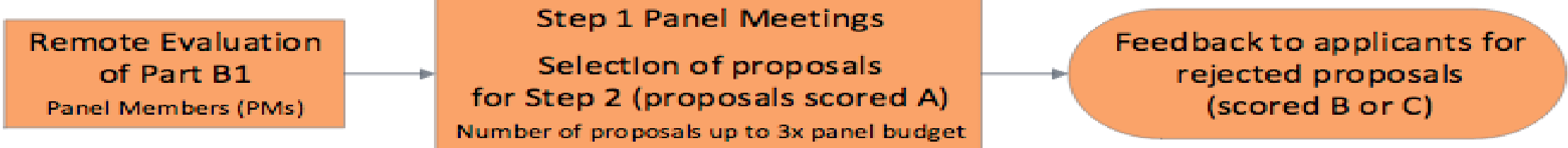


# Evaluation process

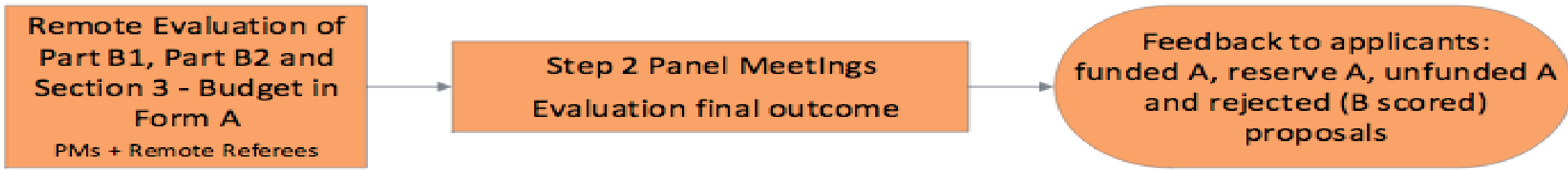
After the call deadline



Step 1



Step 2





| Call to which the Principal Investigator applied under previous ERC Work Programmes and proposal evaluation outcome |   | 2023 ERC calls to which a Principal Investigator is <i>not</i> eligible |
|---|---|---|
| 2021 and 2022 Starting, Consolidator, Advanced Grant or 2022 Synergy Grant  | Rejected on the grounds of a breach of research integrity | Starting, Consolidator, Advanced, and Synergy Grant                     |
|   | C at Step 1   | Starting, Consolidator, and Advanced Grant                              |
| 2022 Synergy Grant  | A or B at Step 3  | No restrictions   |
|   | B at Step 1 or 2  | No restrictions   |
|   | C at Step 1   | Advanced and Synergy Grant  |
| 2022 Starting, Consolidator, or Advanced Grant  | A or B at Step 2  | No restrictions   |
|   | B or C at Step 1  | Starting, Consolidator, and Advanced Grant                              |



# VALUTAZIONE: PROGETTO

## **1. Research Project**

**Ground-breaking nature, ambition and feasibility**

### **Starting, Consolidator and Advanced**

#### ***Ground-breaking nature and potential impact of the research project***

*To what extent does the proposed research address important challenges?*

*To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development across disciplines)?*

*To what extent is the proposed research high risk/high gain?*

#### ***Scientific Approach***

*To what extent is the outlined scientific approach feasible (based on the Extended Synopsis)?*

*To what extent is the proposed research methodology appropriate to achieve the goals of the project (based on the full Scientific Proposal)?*

*To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?*

*To what extent are the proposed timescales and resources necessary and properly justified (based on the full Scientific Proposal)?*



# VALUTAZIONE: PI

## Intellectual capacity and creativity

### Starting and Consolidator

*To what extent has the PI demonstrated the ability to conduct ground-breaking research?*

*To what extent does the PI provide evidence of creative independent thinking?*

*To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?*

## Cosa NON è necessario

- ❏ Avere una posizione permanente o essere un professore ordinario
- ❏ Presentare un progetto in un'area “alla moda”
- ❏ Avere un elevato numero di pubblicazioni
- ❏ Applicare per una Host Institution prestigiosa
- ❏ Articoli su riviste top di settore (per esempio, Science o Nature)
- ❏ h-index astronomico

## Cosa è necessario

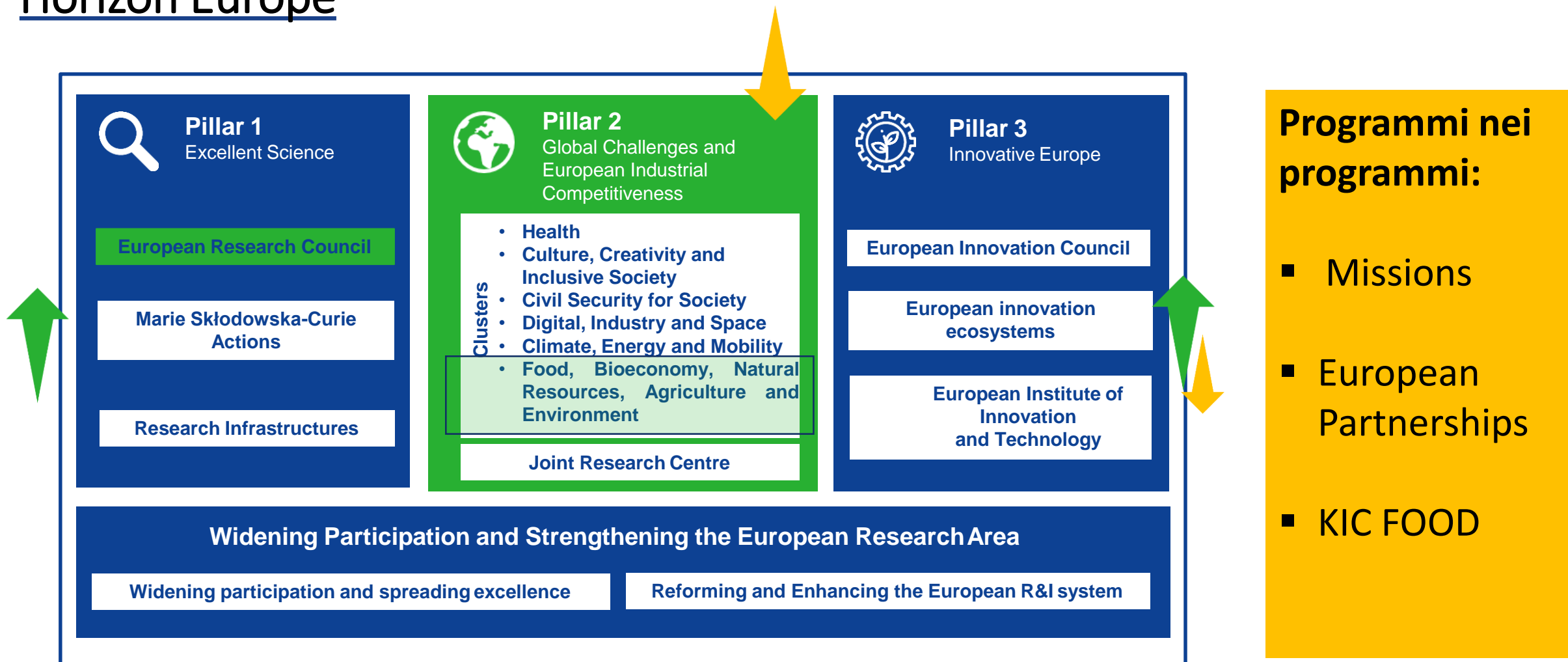
- ▣ Essere indipendenti ed avere successo nella ricerca
- ▣ Esperienza nel gestire laboratori e/o progetti di ricerca (fondamentale nei Consolidator, Advanced)
- ▣ Avere finanziamenti
- ▣ Interessante e/o originale percorso di carriera nella ricerca



# VERSO I WP 2023-24 DEI CLUSTER DI HORIZON EUROPE



# Horizon Europe

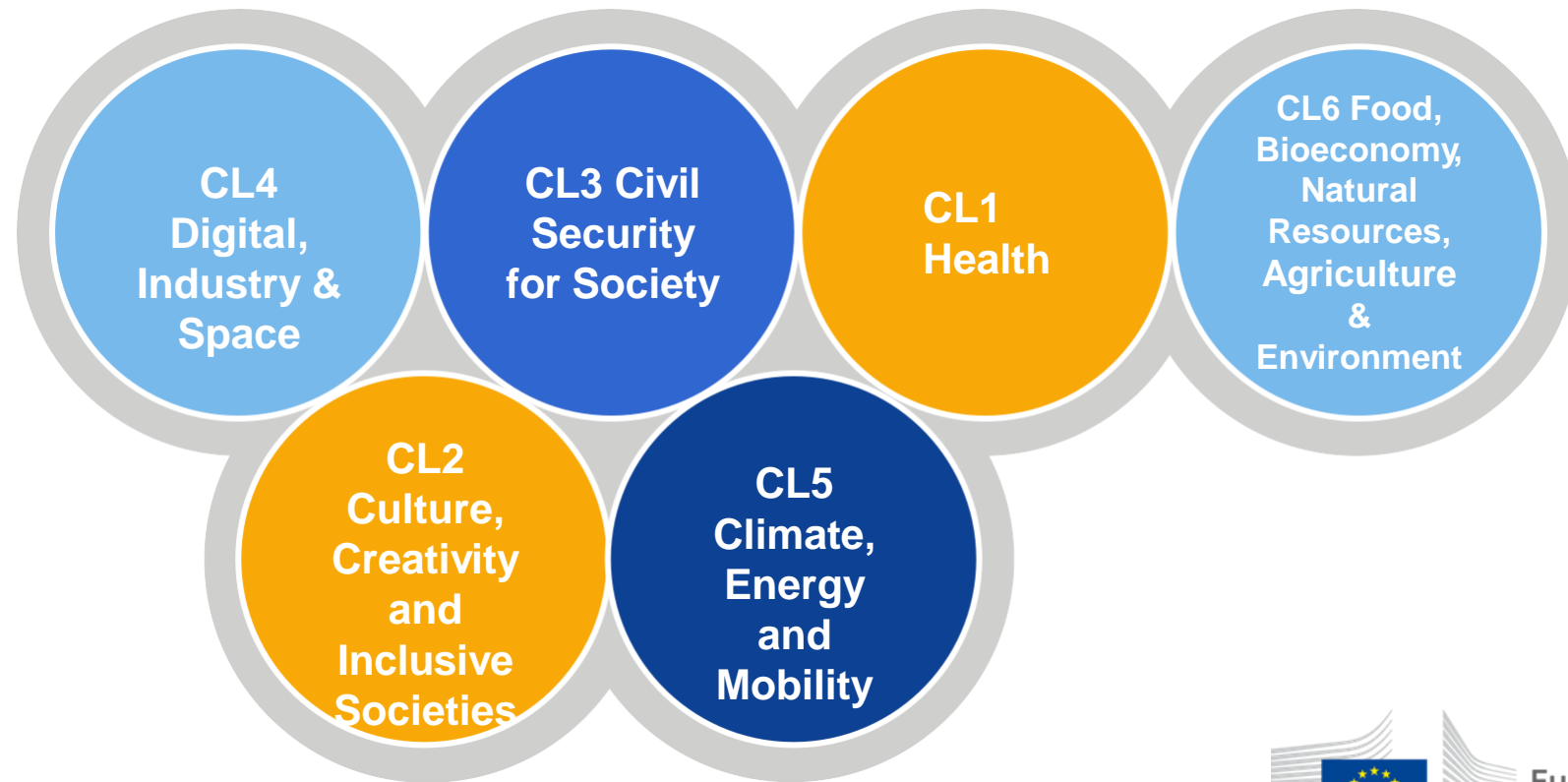






**SFIDE GLOBALI E COMPETITIVITÀ  
INDUSTRIALE EUROPEA:**

*promuovere tecnologie fondamentali e soluzioni a supporto delle politiche dell'UE e degli obiettivi di sviluppo sostenibile*  
**Proposta della Commissione per il bilancio: 52,7 miliardi di EUR**





| Cluster   | Aree di intervento   |  |
|---|--|--|
| <b>Sanità</b>   | <ul style="list-style-type: none"> <li>• Salute lungo l'arco della vita</li> <li>• Malattie non trasmissibili e rare</li> <li>• Strumenti, tecnologie e soluzioni digitali per la salute e l'assistenza, compresa la medicina personalizzata</li> </ul>                              | <ul style="list-style-type: none"> <li>• Determinanti ambientali e sociali della salute</li> <li>• Malattie infettive, comprese le malattie correlate alla povertà e trascurate</li> <li>• Sistemi sanitari</li> </ul>   |
| <b>Cultura, creatività e società inclusiva</b>                                    | <ul style="list-style-type: none"> <li>• Democrazia e governance</li> <li>• Trasformazioni sociali ed economiche</li> </ul>  | <ul style="list-style-type: none"> <li>• Cultura, patrimonio culturale e creatività</li> </ul>   |
| <b>Sicurezza civile per la società</b>  | <ul style="list-style-type: none"> <li>• Società in grado di far fronte alle calamità</li> <li>• Protezione e sicurezza</li> </ul>   | <ul style="list-style-type: none"> <li>• Cibersicurezza</li> </ul>   |
| <b>Digitale, industria e spazio</b>   | <ul style="list-style-type: none"> <li>• Tecnologie produttive</li> <li>• Materiali avanzati</li> <li>• Internet di prossima generazione</li> <li>• Industrie circolari</li> <li>• Spazio, compresa l'osservazione della terra</li> <li>• Tecnologie abilitanti emergenti</li> </ul> | <ul style="list-style-type: none"> <li>• Tecnologie digitali fondamentali, comprese le tecnologie quantistiche</li> <li>• Intelligenza artificiale e robotica</li> <li>• Calcolo avanzato e Big Data</li> <li>• Industria a basse emissioni di CO<sub>2</sub> e pulita</li> <li>• Tecnologie abilitanti emergenti</li> </ul> |
| <b>Clima, energia e mobilità</b>  | <ul style="list-style-type: none"> <li>• Scienza e soluzioni climatiche</li> <li>• Sistemi energetici e reti</li> <li>• Comunità e città</li> <li>• Competitività industriale nei trasporti</li> <li>• Mobilità intelligente</li> </ul>  | <ul style="list-style-type: none"> <li>• Approvvigionamento energetico</li> <li>• Edifici e strutture industriali in transizione energetica</li> <li>• Trasporti e mobilità puliti, sicuri e accessibili</li> <li>• Immagazzinamento energetico</li> </ul>   |
| <b>Prodotti alimentari, bioeconomia, risorse naturali, agricoltura e ambiente</b> | <ul style="list-style-type: none"> <li>• Osservazione ambientale</li> <li>• Agricoltura, silvicoltura e zone rurali</li> <li>• Sistemi circolari</li> <li>• Sistemi alimentari</li> </ul>  | <ul style="list-style-type: none"> <li>• Biodiversità e risorse naturali</li> <li>• Mari, oceani e acque interne</li> <li>• Sistemi di innovazione biologici nell'UE</li> <li>• Bioeconomia</li> </ul>   |



## ELEMENTI CHIAVE

### Pillar 2- Global Challenges and European Industrial Competitiveness

- ▣ incentrato sulle **sfide globali e la competitività industriale**,
- ▣ migliorare **le problematiche della società e le tecnologie industriali** con un approccio *top-down*
- ▣ integrazione in cluster, con una serie di settori di intervento ciascuno, per incentivare la **collaborazione interdisciplinare, intersettoriale, trasversale e internazionale**, ottenendo così un **impatto** più elevato e cogliendo meglio il potenziale di innovazione che spesso è maggiore i punti di intersezione di discipline e settori
- ▣ il ruolo essenziale dell'**industria** nel conseguimento di tutti gli obiettivi del programma, favorito anche dagli investimenti nelle tecnologie abilitanti fondamentali del futuro.



## ELEMENTI CHIAVE

### Pillar 2- Global Challenges and European Industrial Competitiveness

- ▣ includono le **Partnership** (nuova razionalizzazione su tre categorie) e le **Missions** (che perseguiranno obiettivi ambiziosi ma realizzabili e circoscritti nel tempo, incoraggiando la partecipazione dei cittadini)
- ▣ aumento della quota di partecipazione nella ricerca e nel finanziamento da parte di **entità provenienti da paesi con basso e medio reddito**
- ▣ il ruolo dello **JRC** come fonte di dati scientifici e assistenza tecnica a sostegno delle politiche dell'Union



Testo Consolidato di Horizon Europe



Comitato di Programma Shadow (Strategico)



Consultazione degli stakeholder sul Piano Strategico (in diverse fasi)

Priorità von der Leyen



5 Board per le Missioni

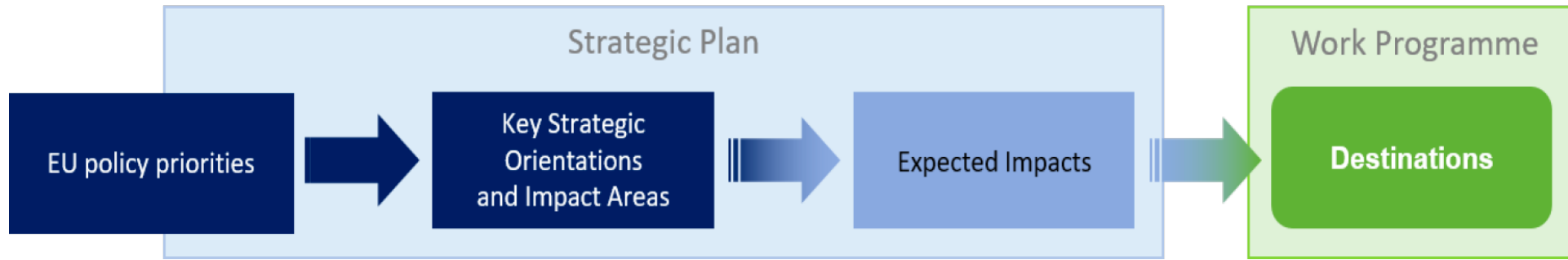
- Missioni specifiche
- Piano Strategico
- Priorità di R&I
- Aree per la Cooperazione Internazionale
- Partenariati co-programmati e co-finanziati



Programmi di Lavoro di Horizon Europe  
Calls for Proposals

Processo di revisione dei Partenariati di R&I

Partenariati Istituzionalizzati



# From policy priorities to concrete action







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# HE Key Strategic Orientations

Mirroring political priorities of the EU

## A // Digital Transformation

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



## B // Environmental Protection

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment



## C // Sustainable Development

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

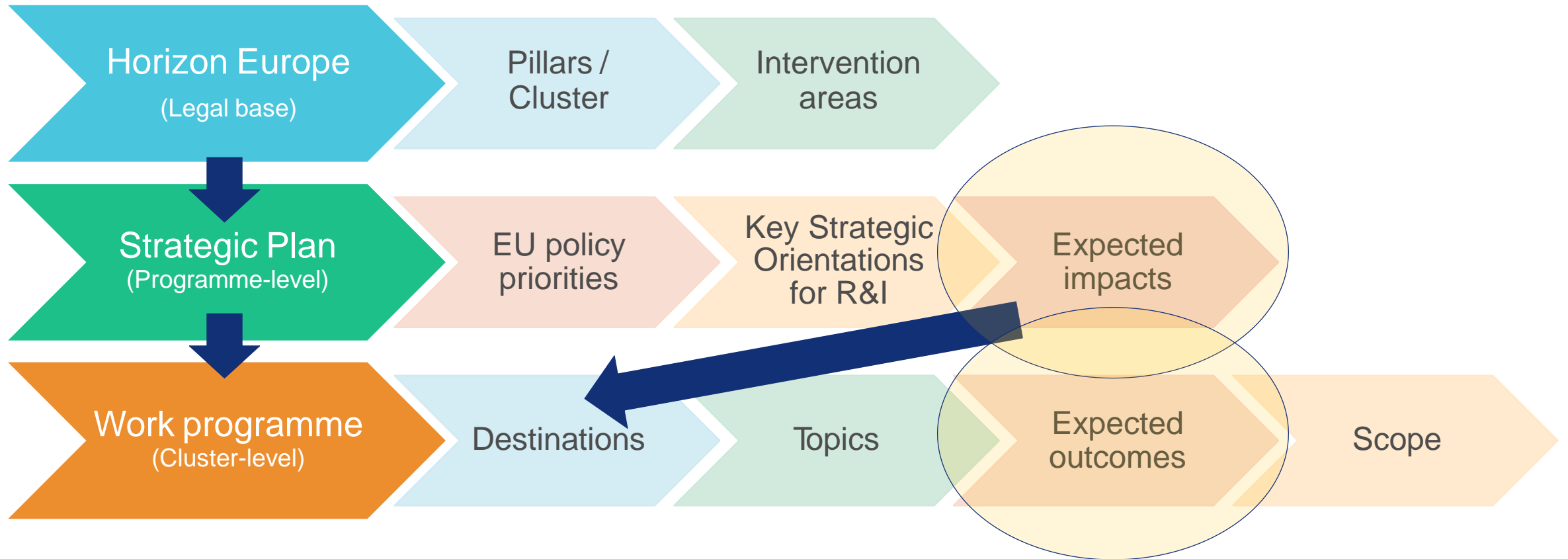


## D // Resilience & Inclusiveness

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



# Horizon Europe Intervention Logic





STRATEGIC PLAN

**EC POLICY PRIORITIES**

Political Guidelines for the European Commission 2019-2024 (and other key strategic documents - e.g. Green Deal)

**KEY STRATEGIC ORIENTATIONS FOR R&I**

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**

= General objectives

Wider effects on society (incl. the environment), the economy and science enabled by the outcomes of R&I investments (long term)

|                |  |   |
|----------------|--|---|
| <b>EXAMPLE</b> | <i>Strategic Plan &amp; Work Programme: R&amp;I contribution to seamless, smart, inclusive and sustainable mobility services</i> | <i>Project : Increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs</i> |
|----------------|--|---|

**EXPECTED OUTCOMES**  
=> **TOPICS**

= Specific objectives

Effects of Horizon Europe projects such as uptake, diffusion, use and deployment of the projects' results by direct target groups (medium term)

|                |   |  |
|----------------|---|--|
| <b>EXAMPLE</b> | <i>Work Programme : Innovative accessibility and logistics solutions applied by the European Transport sector</i> | <i>Project : At least 9 European airports adopt the advanced forecasting system that was demonstrated during the project</i> |
|----------------|---|--|

**EXPECTED OUTPUTS**  
=> **PROJECT RESULTS**

= Operational objectives

What is produced during the project implementation, such as innovative solutions, algorithms, new business models, guidelines, policy recommendations, methodologies, publications, database, prototypes, trained researchers, new infrastructures, proof of feasibility, networks, etc. (short term)

|                |   |  |
|----------------|---|--|
| <b>EXAMPLE</b> | <i>Project (by the end of its implementation): Successful large-scale demonstration trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management</i> |  |
|----------------|---|--|





CLUSTER IMPACT SUMMARY

Cluster 1  
**HEALTH**



- Introduction
- HOW WILL CLUSTER 1 OF HORIZON EUROPE MAKE A DIFFERENCE?
  - 1. Expected impacts of cluster 1
  - 2. International cooperation
  - 3. Cross-cluster complementarities

Cluster 1 will support in particular the following two Horizon Europe key strategic orientations and impact areas associated to them<sup>29</sup>



| KEY STRATEGIC ORIENTATIONS FOR R&I | KSO A: Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains  | KSO D: Creating a more resilient, inclusive and democratic European society   |
|------------------------------------|--|---|
| IMPACT AREAS                       | Competitive and secure data-economy<br>High quality digital services for all   | A resilient EU prepared for emerging threats<br>Good health and high-quality accessible healthcare  |
| EXPECTED IMPACTS                   | <ol style="list-style-type: none"> <li>Unlocking the full potential of new tools, technologies and digital solutions for a healthy society</li> <li>Maintaining an innovative, sustainable and globally competitive health-related industry</li> </ol> | <ol style="list-style-type: none"> <li>Staying healthy in a rapidly changing society</li> <li>Living and working in a health-promoting environment</li> <li>Tackling diseases and reducing their burden</li> <li>Ensuring access to innovative, sustainable &amp; high-quality health care</li> </ol> |

3. Cross-cluster complementarities

Table 2 Overview of Cross Cluster Complementarities

| NUMBER AND NAME OF CLUSTER                          | RELEVANT EXPECTED IMPACT OF THE CLUSTER DESCRIBED LEFT  | POSSIBLE COMPLEMENTARITIES   |
|---|---|--|
| <b>2. CULTURE, CREATIVITY AND INCLUSIVE SOCIETY</b> | <p><b>9.</b> Social and economic resilience and sustainability are strengthened through a better understanding of the social, ethical, political and economic impacts of drivers of change (such as technology, globalisation, demographics, mobility and migration) and their interplay.</p> <p><b>10.</b> Inclusive growth is boosted and vulnerabilities are reduced effectively through evidence-based policies for protecting and enhancing employment, education, social fairness and tackling inequalities, including in response to the socio-economic challenges due to the COVID-19 pandemic.</p> | <p><b>Expected impact 1</b> 'Staying healthy in a rapidly changing society': Synergies on health inequalities, on other inequalities affecting health, or on citizens' behaviour and engagement.</p> <p><b>Expected impact 4</b> 'Ensuring access to innovative, sustainable and high-quality health care': Synergies on health economics and economic models, on cost-effectiveness, fiscal sustainability and accessibility of healthcare, or on adaptation of public health systems to societal challenges (climate change, environmental degradation, migration, demographic change, emerging epidemics and One Health AMR) thereby contributing to building resilience.</p> |



# Annex

**KEY  
STRATEGIC  
ORIENTATIO  
Ns FOR R&**

**IMPACT  
AREAS**

**EXPECTED  
IMPACTS**

## KSO B: Restoring Europe’s ecosystems and biodiversity, and managing sustainably natural resources

Enhancing ecosystems and biodiversity on land and in waters

Clean and healthy air, water and soil  
Sustainable food systems from farm to fork on land and sea

- 27. Reduced emissions and enhanced CSS in ecosystems
- 28. Biodiversity and ecosystems preservation and restoration on land, inland water and at sea
- 30. Food and nutrition security for all from farm to fork
- 31. Sustainable rural, coastal and urban areas

KSO C: Making Europe the first digitally enabled circular, climate-neutral and sustainable economy

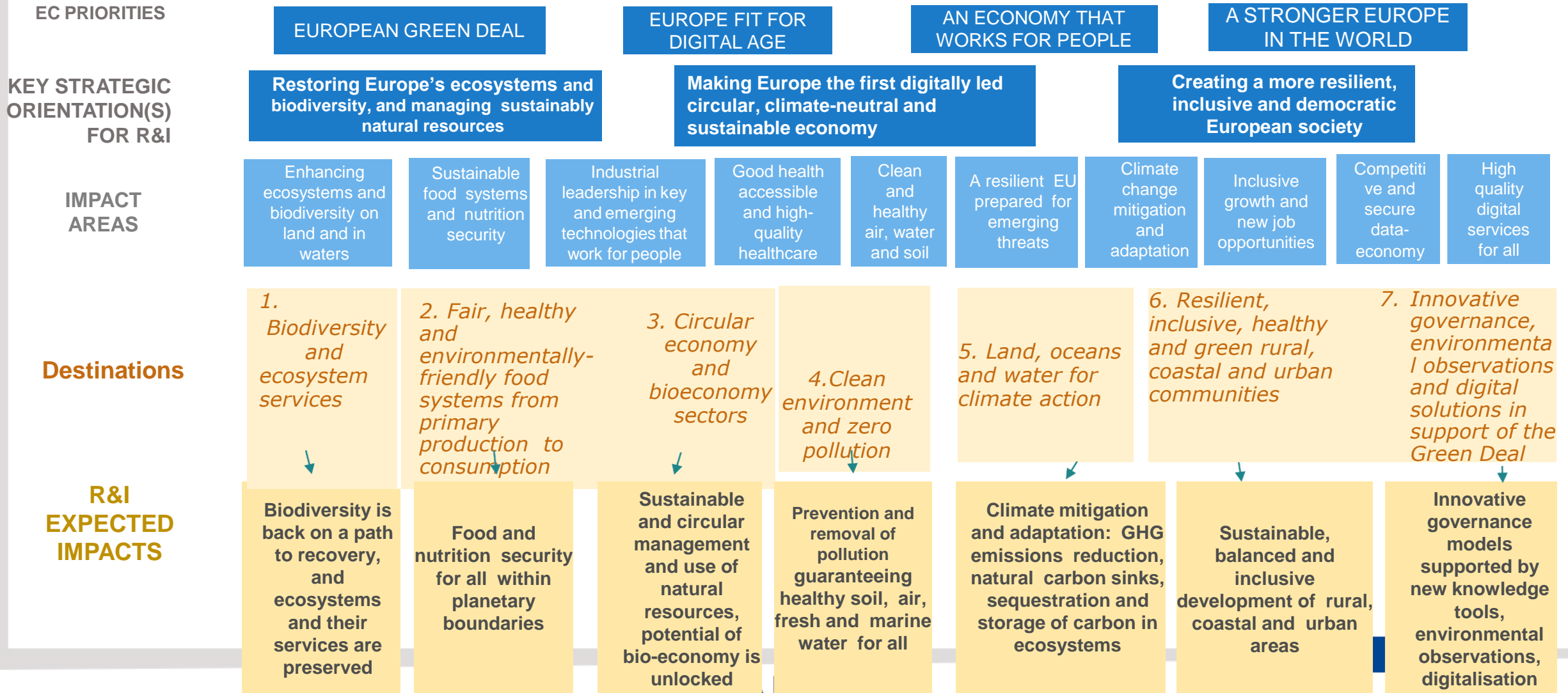
Circular and clean economy

- 29. Sustainable and circular management and use of natural resources
- 32. Innovative governance models enabling sustainability and resilience

# CLUSTER 6 INTERVENTION LOGIC



SDG 2 – Zero Hunger; SDG 3 – Good Health and Well-Being; SDG 6 - Clean Water and Sanitation; SDG 8 – Decent Work and Economic Growth; SDG 9 – Industry, Innovation, and Infrastructure; SDG 11 – Sustainable Cities and Communities; SDG 12 - Responsible Consumption and Production; SDG 13 – Climate Action, SDG 14 – Life Below Water and SDG 15 - Life on Land".





# HE Cluster 6 WP 2021-2022 structure



## Strategic Plan

## Work Programme

Impact 31 Climate neutrality and adaptation to climate change

- Destination 5 – Land, oceans and water for climate action

Impact 32 Preservation and restoration of biodiversity and ecosystems

- Destination 1 – Biodiversity and Ecosystem Services

Impact 33 Sustainable and circular management of natural resources; tackling pollution; bioeconomy

- Destination 3 – Circular economy and bioeconomy sectors
- Destination 4 – Clean environment and zero pollution

Impact 34 Food and nutrition security for all from sustainable food systems from farm to fork

- Destination 2 – Fair, healthy and environmentally-friendly food systems from primary production to consumption

Impact 35: Balanced development of rural, coastal and urban areas

- Destination 6 – Resilient, inclusive, healthy and green rural, coastal and urban communities

Impact 36: Innovative governance models enabling sustainability, environmental observation

- Destination 7 – Innovative governance, environmental observations and digital solutions in support of the Green Deal



# Horizon Europe: destination structure

|                               |  |
|-------------------------------|--|
| <b>Title</b>                  | <ul style="list-style-type: none"><li>• short and meaningful, communicating the essence of the expected impact and policy direction</li></ul>  |
| <b>Introductory narrative</b> | <ul style="list-style-type: none"><li>• sets the scene, describes briefly the challenges, includes the overall rationale for the choice of the topics</li></ul>  |
| <b>Expected impacts</b>       | <ul style="list-style-type: none"><li>• “Proposals for topics under this destination should set out a credible pathway to contributing to [title of the destination], and more specifically [to one or several of/all] the following impacts...”.</li><li>• list of expected impacts → primary impact of each destination corresponds to one of the expected impacts identified in the relevant Cluster-specific annex of the Strategic Plan</li></ul> |
| <b>Link to impact areas</b>   | <ul style="list-style-type: none"><li>• a final paragraph makes the link with impact areas set out in the draft Strategic Plan</li></ul>   |
| <b>Table</b>                  | <ul style="list-style-type: none"><li>• a table summarizing the calls in the Destination will be generated by the IT system</li></ul>  |





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Introduction .....

Destination 1 – Biodiversity and Ecosystem Services .....

Call - Biodiversity and Ecosystem Services.....

Conditions for the Call.....

Understanding biodiversity decline .....

HORIZON-CL6-2021-BIODIV-01-01: European participation in global biodiversity endeavours aimed at identifying all biodiversity on Earth .....

HORIZON-CL6-2021-BIODIV-01-02: Data and technologies for the identification and monitoring of endangered wildlife and other species groups .....

HORIZON-CL6-2021-BIODIV-01-03: Understanding and valuing coastal biodiversity and ecosystem services .....

HORIZON-CL6-2021-BIODIV-01-04: Assess and predict integrated impact of direct and indirect stressors on coastal and marine biodiversity, ecosystem services .....

Valuing and restoring biodiversity and ecosystem services .....

HORIZON-CL6-2021-BIODIV-01-05: The economics of nature-based solutions: benefit analysis, market development and funding .....

HORIZON-CL6-2021-BIODIV-01-06: Nature-based solutions, prevention of risks and the insurance sector .....

HORIZON-CL6-2021-BIODIV-01-07: Ecosystems and their services for a nature-based policy and decision-making .....

HORIZON-CL6-2021-BIODIV-01-08: Supporting the development of a resilient Trans-European Nature Network .....

HORIZON-CL6-2021-BIODIV-01-09: Assessing and consolidating recent advances on freshwater ecosystem restoration .....

HORIZON-CL6-2021-BIODIV-01-10: Demonstration of measures and methods for coastal and marine ecosystems restoration and resilience in simplified socio-ecological systems .....

HORIZON-CL6-2021-BIODIV-01-11: What else is out there? Exploring the

Horizon Europe - Work Programme 2021-2022  
Food, Bioeconomy Natural Resources, Agriculture and Environment

Destination 1 – Biodiversity and Ecosystem Services

The EU Biodiversity Strategy for 2030 is a cornerstone of the European Union's recovery plan for 2021-2026. It will also prepare the EU to take a leading role in the negotiations on a new global framework to halt biodiversity loss. With its 'no harm' vision, all EU policies will become more biodiversity-friendly, supporting the sustainable use of ecosystems, supporting the recovery in a post-pandemic world, and ensuring that the vision is fully supported in the Strategic Plan of Horizon Europe for 2021-2026. The strategic orientation 'Protecting and restoring ecosystems and biosphere' will ensure that natural resources on land and at sea, and achieving 'adaptation'. Consequently, Destination 1 'Biodiversity and Ecosystem Services' will achieve the following expected impact from Cluster 6: **"Biodiversity recovery, and ecosystems and their services are preserved and restored on land, inland water and at sea through improved knowledge and funding under this destination must therefore contribute to deliver this**

Research and innovation is key to delivering important impacts in food-health-water-climate and to achieving the goal of healthy and resilient societies by 2030. It will also enable transformational change engaging Europe and their global impacts, making decisions more biodiversity-friendly, developing nature-based solutions and holistic approaches to address causes of biodiversity loss, particularly in connection to productive sectors to be integrated in ecosystem-based management. Investments will protect and restore the integrity of terrestrial, aquatic and marine ecosystems, and their capacity to deliver a wide range of ecosystem services. In Horizon Europe, a **long-term strategic research agenda** for biodiversity recovery will be developed.

The sixth mass extinction is taking place: one million species are at risk of degradation of ecosystems severely affects the fabric of life that we know as 'humankind'. None of the globally agreed targets of the Strategic Plan for Biodiversity 2020 has been fully achieved<sup>10</sup>, with the biodiversity crisis even deepening. Addressing biodiversity status, pressures, impacts and responses needs to be based on scientific work in certain ecosystems. Understanding the main drivers through data-driven science, integrated tools, models and scenarios, will support Europe's

<sup>10</sup> 380 EU Biodiversity Strategy for 2030: Bringing nature back into our lives. Nature-based solutions are "inspired and supported by nature, which are effective, environmental, social and economic benefits and help build resilience. They use more diverse, nature and natural features and processes into city planning, locally adapted, resource-efficient and systemic interventions. They halt biodiversity and support the delivery of a range of ecosystem services". European Commission (2019). Summary for policy-makers. European Commission's 5<sup>th</sup> Global Biodiversity Outlook (2020).

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Biological Diversity. All topics will directly contribute to the EU Biodiversity Strategy for 2030 and to the Sustainable Development Goals (SDGs) 13, 14, 15, 17.

Several Missions will also help to achieving biodiversity-related impacts, notably in the areas of "Adaptation to climate change including societal transformation", "Climate-neutral and smart cities", "Ocean, seas and waters" and "Soil health and food".

Expected impact

Proposals for topics under this Destination should set out a credible pathway contributing to Biodiversity and Ecosystem Services, and more specifically to one or several of the following impacts:

- **Biodiversity decline, its main direct drivers and their interrelations are better understood and addressed** through the production, integration and use of open data, knowledge, education and training, innovative technologies, solutions and control measures, in collaboration with European and international initiatives.
- **Biodiversity and natural capital are integrated into public and business decision-making at all levels for the protection and restoration of ecosystems and their services**; science base is provided for planning and increasing protected areas, and sustainably managing ecosystems.
- **Europe builds competitive sustainability and tackles climate change and natural disasters through the deployment of nature-based solutions**, fully reaping their economic, social and environmental benefits for a green recovery across all European regions.
- **The interrelations between biodiversity, health, food, soil, water and climate are better known** and communicated to citizens and policy-makers; in particular, risks associated with microbiomes and biodiversity-friendly prevention/mitigation measures, and opportunities for biodiversity recovery are identified.
- **Practices in agriculture and forestry support biodiversity and the provision of other ecosystem services** based on a) a better understanding of functional biodiversity (above and below ground), b) effective knowledge and innovation systems and c) ready-to-use solutions for land managers, adapted to specific conditions.
- **Access to a wider range of crops and breeds with a broadened genetic base is improved in line with global biodiversity commitments** through increased insight into the characteristics of genetic resources and enhancing capacities for their preservation and use in breeding and in primary production (farming, forestry, fisheries, aquaculture). More (bio)diverse, resilient production systems will have positive knock-on effects on value chains, consumption, healthy diets and the wider, non-managed biodiversity.
- **Approaches for enabling transformative changes in society** for biodiversity and ecosystems recovery are identified, tested and implemented in policy, governance, law

Horizon Europe - Work Programme 2021-2022  
Food, Bioeconomy Natural Resources, Agriculture and Environment

and society; all indirect drivers of biodiversity loss are addressed and 'do not harm' biodiversity policies are mainstreamed across sectors.

Research is interconnected across Europe, supporting and enhancing the integration of national, EU and international environmental policies and conventions.

Actions under this destination will have impacts in the following areas: "Climate change mitigation and adaptation"; "Clean and healthy air, water and soil"; "Sustainable food systems and rural development"; "A resilient EU prepared for emerging threats"

All(s) in this work programme contribute to this destination:

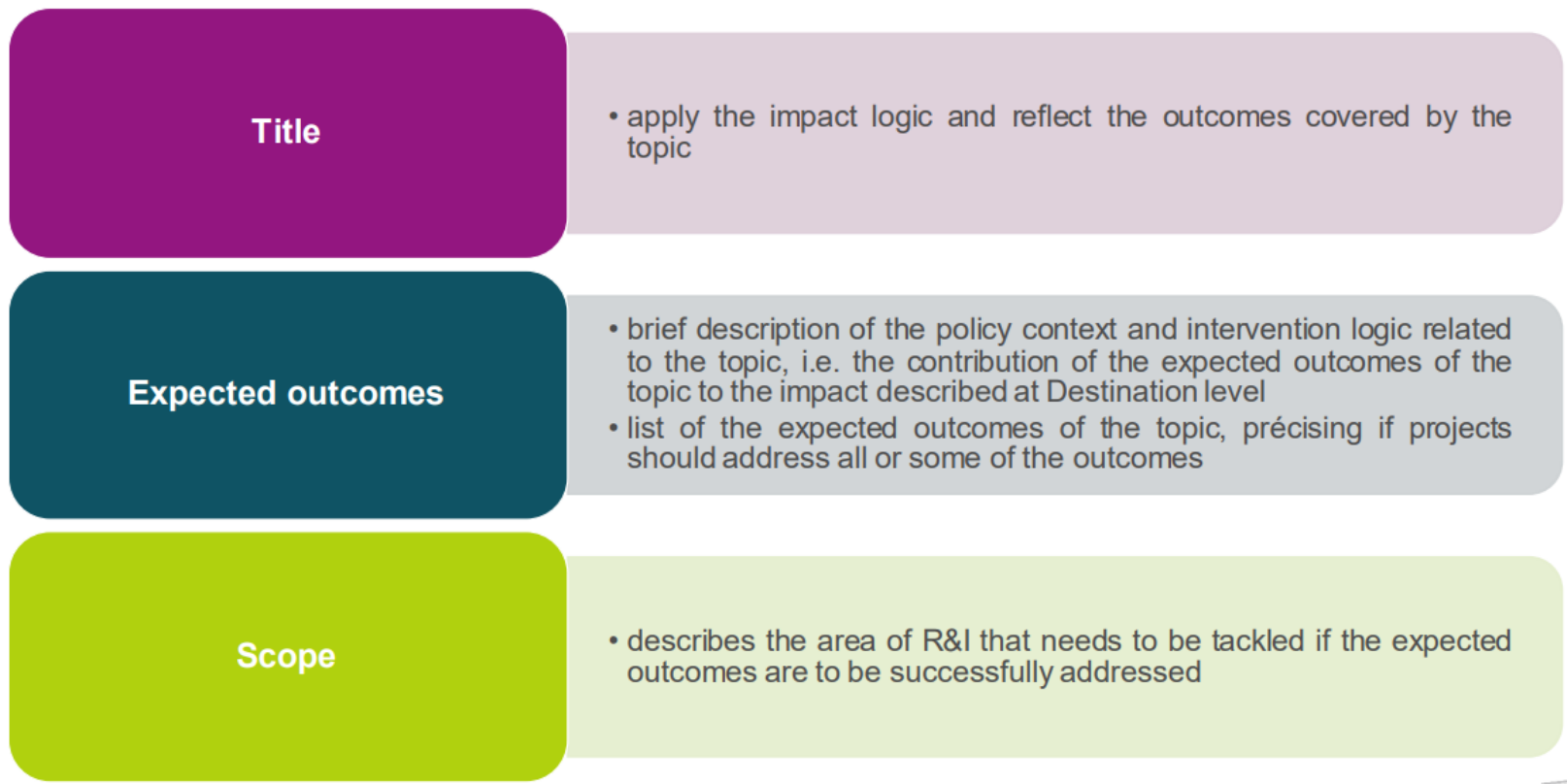
|                | Budgets (EUR million) |        | Deadline(s)   |
|----------------|-----------------------|--------|---|
|                | 2021                  | 2022   |   |
| -2021-         | 218.50                | 20.00  | 01 Sep 2021   |
| -2022-         |                       | 90.00  | 15 Feb 2022   |
| -2022-stage    |                       | 46.00  | 15 Feb 2022 (First Stage)<br>01 Sep 2022 (Second Stage) |
| Overall budget | 218.50                | 156.00 |   |

WP CLX (Structure)

- Introduction
- DestinationX
  - Intro, expected impact
  - Call 2021
  - Call 2022
  - Call 2022 – two stage (dove specificato)



# Horizon Europe: topic structure



|   |  |
|---|--|
| <i>Legal and financial set-up of the Grant Agreements</i> | The rules are described in General Annex G.    |
| <i>Financial and operational capacity and exclusion</i>   | The criteria are described in General Annex C. |
| <i>Procedure</i>  | The procedure is described in General Annex F. |

### Innovating with governance models and supporting policies

Proposals are invited against the following topic(s):

#### HORIZON-CL6-2021-GOVERNANCE-01-01: Mobilising the network of National Contact Points in Cluster 6



|   |   |
|---|---|
| <b>Specific conditions</b>                  |   |
| <i>Expected EU contribution per project</i> | The EU estimates that an EU contribution of around EUR 2.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.  |
| <i>Indicative budget</i>                    | The total indicative budget for the topic is EUR 2.50 million.  |
| <i>Type of Action</i>                       | Coordination and Support Actions  |
| <i>Eligibility conditions</i>               | The conditions are described in General Annex B. The following exceptions apply:<br>Applicants must be Horizon Europe national support structures (e.g. NCP) responsible for Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment' and officially nominated to the Commission, from a Member State or Associated Country or any third country associated to Horizon Europe.<br>Only in case and as long as Horizon Europe structures would not yet be officially nominated, national support structures responsible for Societal Challenges 2 (SC2) and 5 (SC5) would be eligible. |
| <i>Procedure</i>                            | The procedure is described in General Annex F. The following exceptions apply:<br>The granting authority can fund a maximum of one project.   |

**Expected Outcome:** In line with the European Green Deal priorities, the successful proposal will interconnect National Contact Point (NCP) service across Europe and will help develop

innovative governance models enabling sustainability and resilience notably to achieve better informed decision-making processes, societal engagement and innovation.

- An improved and more interconnected National Contact Point (NCP) service across Europe, in the areas covered by Horizon Europe Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment', thereby simplifying access to Cluster 6 Horizon Europe calls, lowering the entry barriers for newcomers, and raising the average quality of proposals submitted;
- A more harmonised level of NCP support services across Europe.
- Widening – promoting participation in actions in the areas covered by Horizon Europe Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment' to new stakeholders, such as, but not limited to, civil society organisations.
- Enhanced integration of all the crosscutting issues throughout Horizon Europe.
- Increased participation of less active member states, associated countries, regions and stakeholders in the actions funded under Horizon Europe Cluster 6 programme to leverage the full R&I potential.
- Connection with NCP Academy activities.
- Increased cooperation of NCPs with the Enterprise Europe Network.

**Scope:** Proposals should aim to facilitate trans-national co-operation between National Contact Points (NCPs) in the areas covered by Horizon Europe Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment', with a view to identifying and sharing good practices and raising the general standard of support to programme applicants, taking into account the diversity of actors that make up the action will provide important feedback on issues and evaluation.

Proposal should aim to facilitate trans-cluster cooperation, with a view to identifying synergies, to make it possible. Coordination and cooperation are key to achieving these networks.

The activities of this topic should build on the knowledge of NCP networks developed under Horizon 2020.

In view of the changes brought about by the action, NCPs will organise transnational events to communicate about new research activities; to draw lessons from previous experiences for cooperation; to help interested stakeholder organisations and structures.

## Topic

- Conditions related to the topic
- Expected outcomes
- Scope





## THE EIGHT HORIZONTAL TOPICS



- Relevant to all programme components
- Identified in Strategic Plan
- Should be addressed appropriately



# An integrated approach

Cross Cutting key specific Issues



Social Sciences and the Humanities (SSH)



Dissemination and Exploitation (D&E)



Key Enabling Technologies (KET)



Social Innovation

|                                    |   |
|------------------------------------|---|
| Social Science & Humanities (SSH)  | <ul style="list-style-type: none"><li>• Integration of SSH in all clusters</li><li>• Key component of R&amp;I</li><li>• Specific topics flagged</li><li>• Assessment of Societal Impact (when necessary)</li></ul>  |
| Dissemination & Exploitation (D&E) | <ul style="list-style-type: none"><li>• Enhance R&amp;I results dissemination, use, value increase</li><li>• Integrate results into EU higher education &amp; training</li><li>• <b>New tools:</b> Results Platform, IP Booster, Synergies</li><li>• Design of project to “<b>beyond its end</b>”</li><li>• Uptake of assets, private investment, IP management</li></ul> |
| Key Enabling Technologies (KET)    | <ul style="list-style-type: none"><li>• Advanced Manufacturing // Advanced Materials // Life-science tech // micro-nano electronics &amp; photonics // AI // Security &amp; connectivity</li><li>• Across Clusters &amp; Pillars</li></ul>  |
| Social Innovation (SI)             | <ul style="list-style-type: none"><li>• Advances in science &amp; Tech / creative use of existing tech</li><li>• Combine new tech capabilities w/ organisational, social practices</li><li>• HE supports SI across all 4 strategic Orientations</li></ul>   |



# Pubblicazioni / scadenze CLUSTER WP23-24

## Tentative

- 🏠 Adozione WP: 6 Dicembre 2022
- 🏠 Pubblicazione WP: 7 Dicembre 2022
- 🏠 Scadenze call: diverse date a partire da marzo 2023
- 🏠 Call 2023: single + two-stage

[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes_en)



# Pre-publication, adoption, publication, call opening

Pre-publication: 28 November 2022

Expected adoption: 6 December 2022

Expected publication: 7 December 2022

Opening of 2023: as early as possible after adoption & publication

Texts of Work Programme 2023-2024 available on the Funding & Tenders Portal and here: [Horizon Europe work programmes \(europa.eu\)](https://europea.eu)



## Horizon Europe work programmes

What work programmes are, what they cover, download available Horizon Europe work programmes.


# DRAFT WP 2023

- ❗ These drafts have not been adopted or endorsed by the European Commission. Any views expressed are the views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.
- ❗ These drafts are made public before the adoption of the work programme to provide potential participants with the currently expected main lines of this work programme. Only the adopted work programme will have legal value.
- ❗ The adoption of the work programmes will be announced on the Horizon Europe website and on the Funding and Tenders Portal.
- ❗ Information and topic descriptions indicated in these drafts may not appear in the final work programme; and likewise, new elements may be introduced at a later stage. Any information disclosed by any other party shall not be construed as having been endorsed by or affiliated to the Commission.

 Horizon Europe Work programme (2023-24) - General introduction (draft)  
English (1.49 MB - PDF) [Download](#) 

 Horizon Europe Work programme (2023-24) - EU Missions (draft)  
English (2.2 MB - PDF) [Download](#) 

 Horizon Europe Work programme (2023-24) - Cluster 1 (draft)  
English (2.64 MB - PDF) [Download](#) 

 Horizon Europe Work programme (2023-24) - Cluster 2 (draft)  
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 Horizon Europe Work programme (2023-24) - Cluster 4 (draft)  
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
 Horizon Europe Work programme (2023-24) - Cluster 5 (draft)  
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 Horizon Europe Work programme (2023-24) - Cluster 6 (draft)  
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 Horizon Europe Work programme (2023-24) - European Innovation  
Ecosystems (draft)  
English (963.81 KB - PDF) [Download](#) 

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 Horizon Europe Work programme (2023-24) - WIDERA (draft)  
English (1.75 MB - PDF) [Download](#) 



## Verso i Work Programmes Horizon Europe 2023-24

- Il Piano Strategico di HE 2022-2024
- Adozione, pubblicazione e budget (tbc)
- Elementi di caratterizzazione dei vari WP.
- Calendario eventi della Commissione europea
- Link utili e supporto di APRE





# I passaggi verso la pubblicazione dei nuovi bandi

- 🏷 **Luglio 2021-giugno 2022:** avvio della scrittura dei WPs durata circa 1anno
- 🏷 **Luglio 2022:** avvio delle consultazioni interservizi della CE.
- 🏷 **Settembre 2022:** revisione delle bozze di Work Programme da parte dei servizi della Commissione
- 🏷 Fine **ottobre-novembre 2022:** consultazione formale con le configurazioni dei Comitati di programma per il parere finale.
- 🏷 **Primi giorni di dicembre 2022:** adozione dei testi
- 🏷 **Primi giorni di dicembre 2022:** apertura dei bandi 2023.
- 🏷 **Fine 2023 (tbc):** Modifica del programma di lavoro per includere il programma di lavoro delle missioni 2024.
- 🏷 Pertanto, **la pubblicazione e l'apertura dei primi bandi** è prevista per **dicembre 2022**, con scadenze di presentazione a partire da **marzo/aprile 2023**

# La pianificazione strategica 2020-2024 e la futura

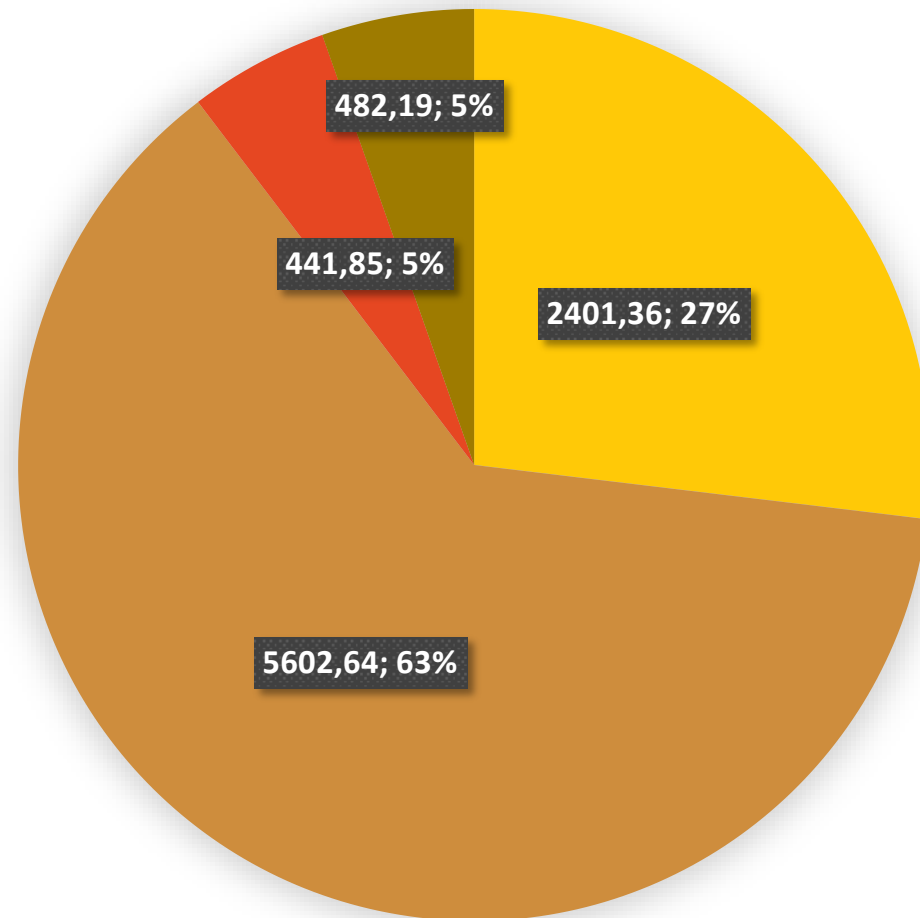
## ▪ Che cos'è il Piano strategico?

Il Piano strategico definisce le priorità politiche di Horizon Europe e gli impatti previsti. È la base per i programmi di lavoro di Horizon Europe e i temi dei bandi. Un obiettivo importante del Piano strategico è quello di promuovere la coerenza tra i programmi di lavoro, le priorità nazionali e dell'UE e di raggiungere la continuità e la coerenza delle misure di finanziamento al di là della durata (bi-)annuale dei programmi di lavoro

## ▪ Il secondo Piano strategico Horizon Europe 2025-2027

Il Piano strategico sarà oggetto della più grande consultazione pubblica mai realizzata tra gli stakeholder della ricerca e dell'innovazione nell'ambito di Horizon Europe. La consultazione, che sarà pubblicata a novembre sul portale [Have Your Say](#), conterrà anche domande sui programmi di ricerca e innovazione passati e attuali (valutazione ex-post di Horizon 2020 e valutazione intermedia di Horizon Europe). La consultazione rimarrà aperta per 12 settimane e a dicembre è previsto un workshop dedicato ai cittadini.

## BUDGET COMPLESSIVO 2023 (m In €)



■ PILLAR I

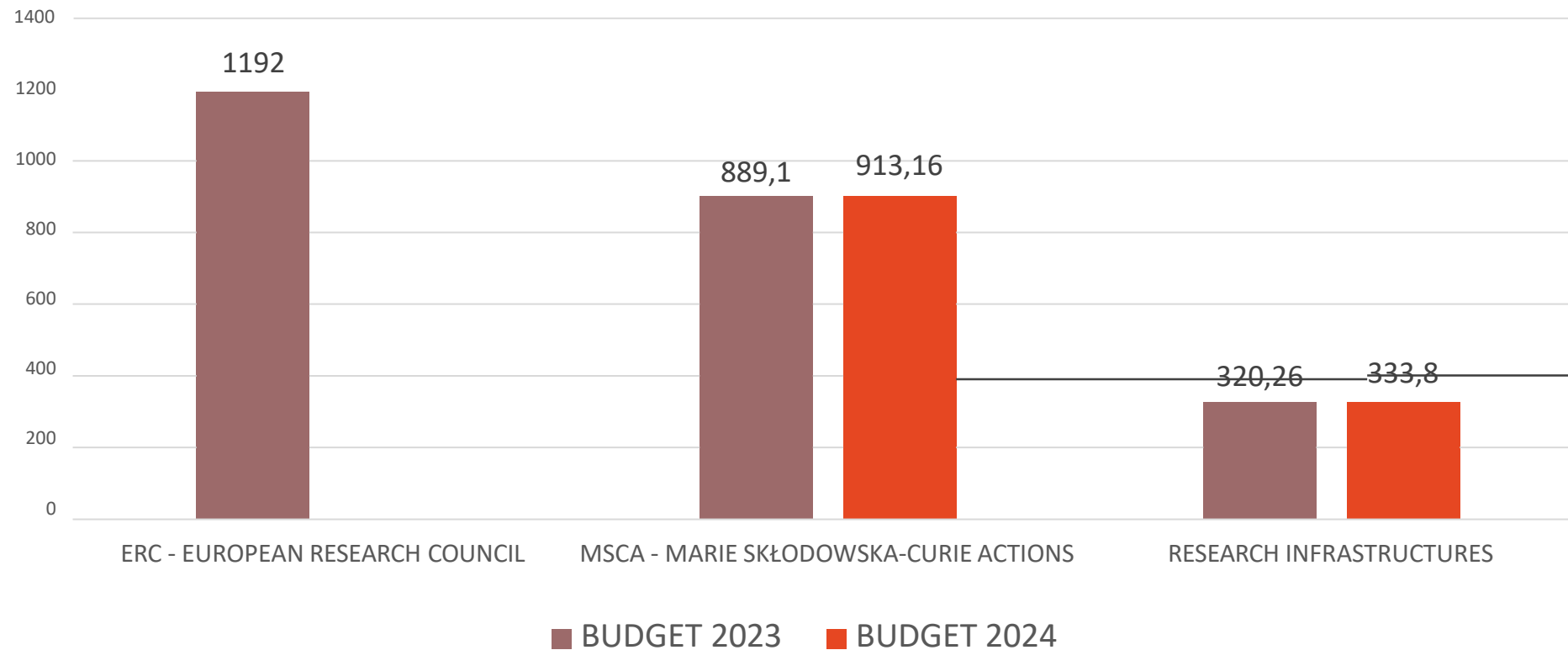
■ PILLAR II

■ WIDERA

■ MISSION

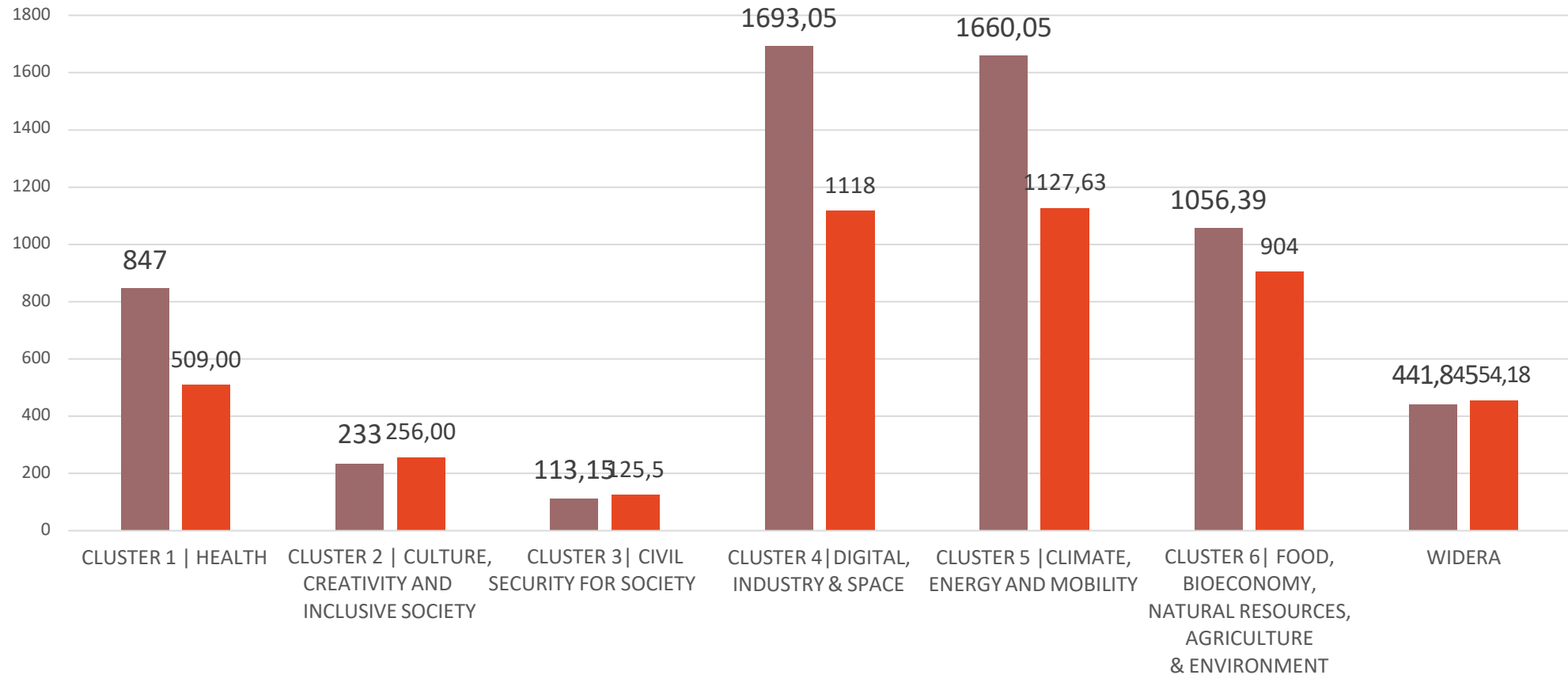
**TOTALE 8.928,04 m In €**

## PILLARI I – BUDGET 2023- 2024 (mIn €)



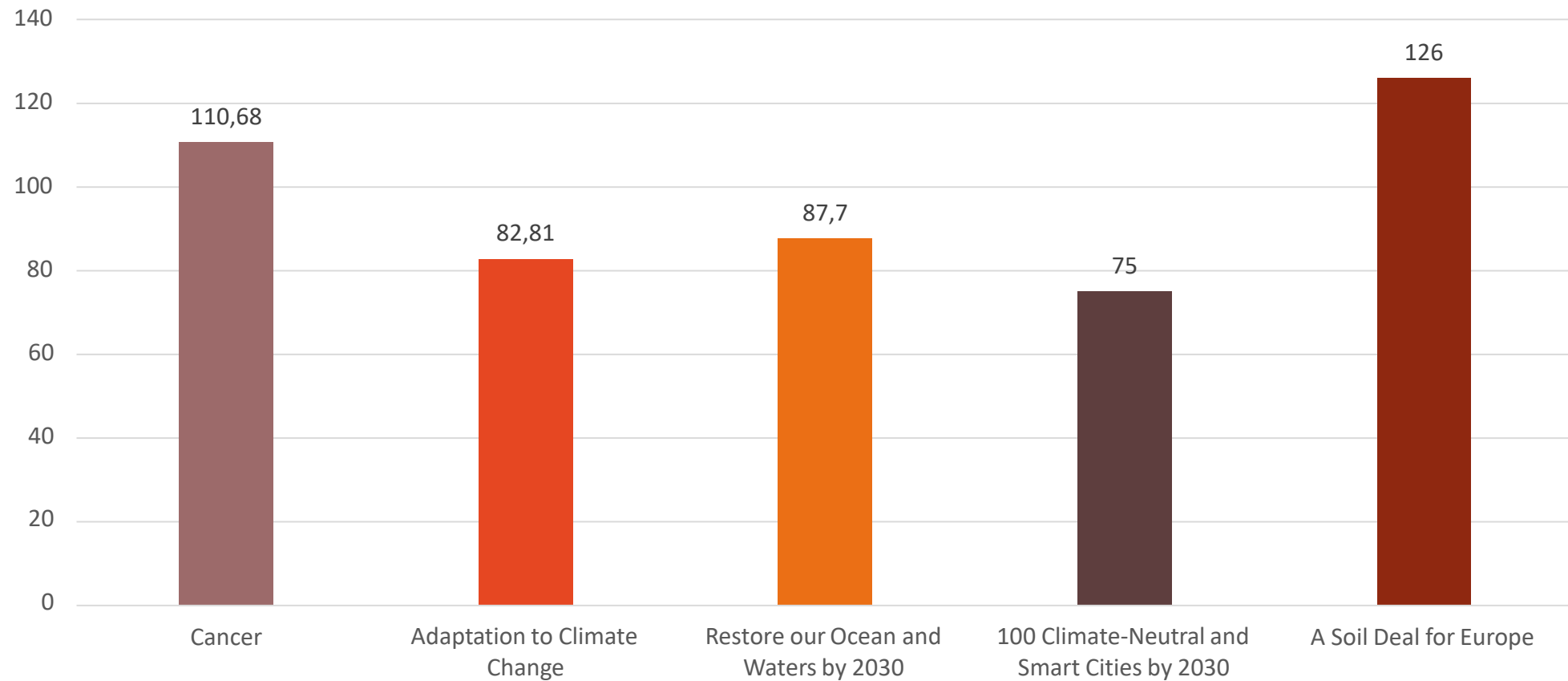


# PILLAR II – BUDGET 2023- 2024 (mIn €)





## 5 MISSIONS – BUDGET 2023 (mIn €)

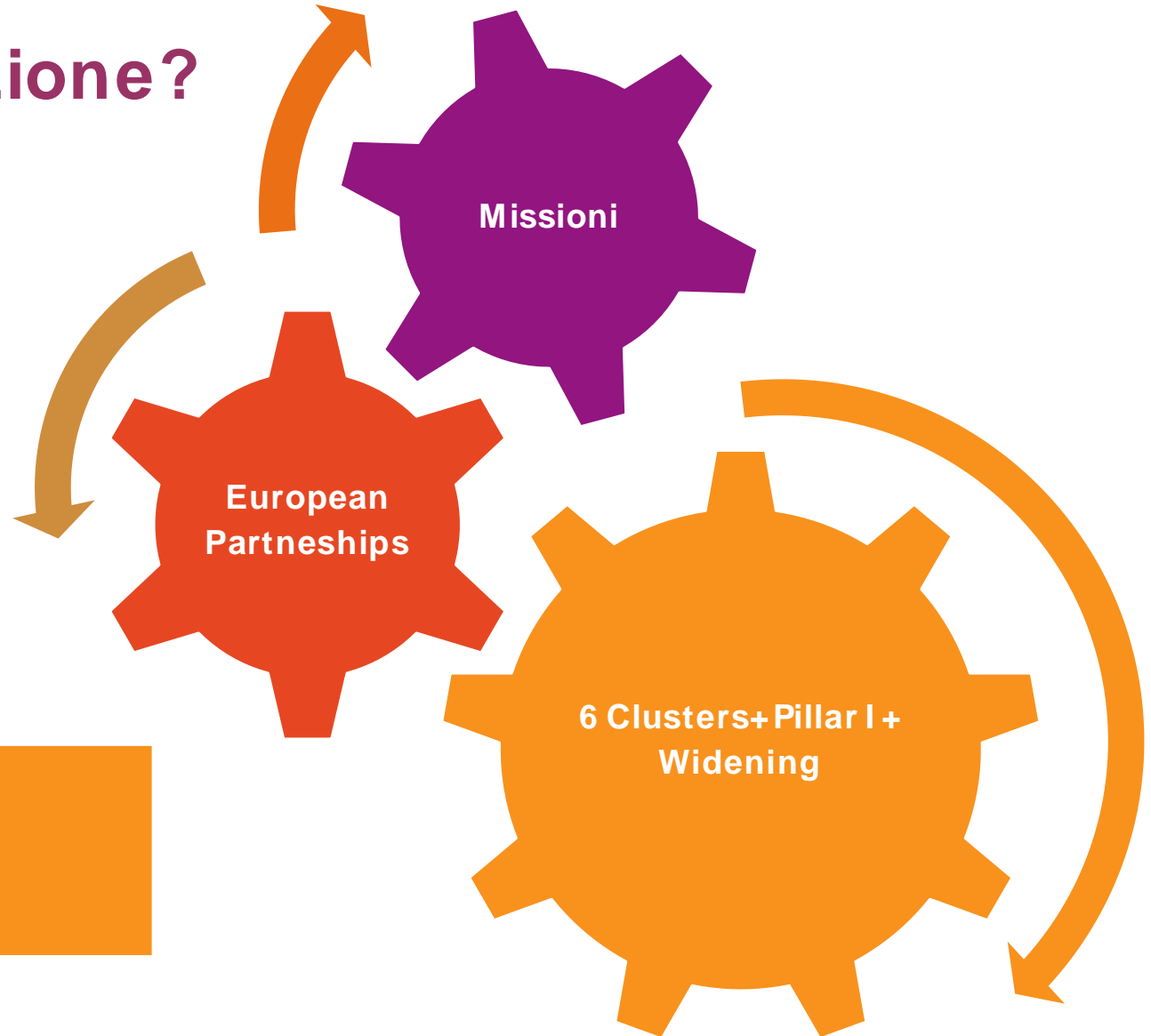


# Quanti WPs in pubblicazione?

**1 WP 2023,  
5 Missioni**

**I Topics 2023  
lanciati dalle EP**

**11 WP 23- 24**







## - 2021-2022

## - HE Main Work Programme 2021-2022

[HE and Euratom Work Programme on Horizontal Expenditure 2021-2022](#) >[1. General introduction v4.0](#) >[2. Marie Skłodowska-Curie Actions v2.0](#) >[3. Research Infrastructures v4.0](#) >[4. Health v4.0](#) >[5. Culture, creativity and inclusive society v3.0](#) >[6. Civil Security for Society v3.0](#) >[7. Digital, Industry and Space v5.0](#) >[8. Climate, Energy and Mobility v4.0](#) >[9. Food, Bioeconomy, Natural Resources, Agriculture and Environment v3.0](#) >[10. European Innovation Ecosystems \(EIE\) v2.0](#) >[11. Widening participation and strengthening the European Research Area v3.0](#) >[12. Missions v3.0](#) >[13. General Annexes v2.0](#) >[Call for prizes - Rules of Contest: HORIZON-EUSPA-2022-MARITIME-PRIZE \(CASSINI Prize for digital space applications\)](#) >[Call for prizes - Rules of Contest: HORIZON-WIDERA-2022-Gender-Prize \(EU Award for \(Academic\) Gender Equality Champions\)](#) >



# 2023 | Condizioni specifiche e criteri di eleggibilità aggiuntivi

New Eu Bauhaus  
(CI 2-6)

Il metodo Lump sum

JRC – Joint Research  
Center (all)

Eligibility for third  
country in CSA  
(ex.CI6)

Topic Partnership co-  
programme  
(CI 4-5)

Blind evaluation

Eligibility for  
International  
organisations with  
headquarters in a  
Member State or  
associated country

FSTP o cascading  
grants



# SCADENZE- PILLARI

| Excellent Science        | 2023                          |            | 2024                        |            |
|--------------------------|-------------------------------|------------|-----------------------------|------------|
|                          | CALL                          | SCADENZE   | CALL                        | SCADENZE   |
| ERC                      | STARTING                      | 25/10/2022 | SI ripetono                 |            |
|                          | SYNERGY                       | 08/11/2022 |                             |            |
|                          | CONSOLIDATOR                  | 02/02/2023 |                             |            |
|                          | ADVANCED                      | 23/05/2023 |                             |            |
| MSCA                     | HORIZON-MSCA-2023-DN-01       | 28/11/2023 | HORIZON-MSCA-2024-DN-01     | 27/11/2024 |
|                          | HORIZON-MSCA-2023-PF-01       | 13/09/2023 | HORIZON-MSCA-2024-PF-01     | 11/09/2024 |
|                          | HORIZON-MSCA-2023-SE-01       | 28/02/2024 | HORIZON-MSCA-2024-SE-01     | 05/03/2025 |
|                          | HORIZON-MSCA-2023-COFUND-01   | 08/02/2024 | HORIZON-MSCA-2024-COFUND-01 | 06/02/2025 |
|                          | HORIZON-MSCA-2023-CITIZENS-01 | 25/10/2023 |                             |            |
| Research Infrastructures | HORIZON-INFRA-2023-DEV-01     | 09/03/2023 | HORIZON-INFRA-2024-TECH-01  | 12/03/2024 |
|                          | HORIZON-INFRA-2023-EOSC-01    |            | HORIZON-INFRA-2024-DEV-01   |            |
|                          | HORIZON-INFRA-2023-SERV-01    |            |                             |            |



# SCADENZE- PILLAR II

| Global Challenges and European Industrial Competitiveness                   | 2023  | 2024   |
|---|---|--|
| <b>CL1 HEALTH</b>   | 13 APRIL 2023: (SINGLE STAGE)<br>19 SEPTEMBER 2023*: DEADLINE FOR 1ST STAGE OF 2-STAGE CALLS OF 2024  | MID-APRIL 2024   |
| <b>CL2 CULTURE, CREATIVITY AND INCLUSIVE SOCIETY</b>                        | 14 MAR 2023: DEMOCRACY,HERITAGE, TRANSFORMATIONS 2023)<br>:21 SEP 2023: A EUROPEAN COLLABORATIVE CLOUD FOR CULTURAL HERITAGE                  | 07 FEB 2024  |
| <b>CL3 CIVIL SECURITY FOR SOCIETY</b>                                       | 23 NOVEMBRE 2023  | NA   |
| <b>CL4 DIGITAL, INDUSTRY AND SPACE*</b>                                     | 7 MAR 2023: DEADLINE FOR FIRST STAGE;<br>29 MARCH 2023: DEADLINE FOR SINGLE STAGE (D3-4-5-6);<br>20 APR 2023 DEADLINE FOR SINGLE STAGE (D1-2) | 7.02.2024 FIRST STAGE – 24.09.2024 SECOND STAGE  |
| <b>CL5 CLIMATE, ENERGY AND MOBILITY*</b>                                    | D1 - 18 APR 2023<br>D2-01 - 20 APR 2023<br>D2-02 - 05 SEP 2023<br>D3-01 - 05 SEP 2023<br>D3-02 - 05 SEP 2023                                  | D1 06 Feb 2024<br>D2 18 Apr 2024 - 05 Sep 2024<br>D3 30 Jan 2024 - 05 Sep 2024<br>D4 18 Apr 2024 - 05 Sep 2024<br>D5 18 Apr 2024<br>D6 05 Sep 2024 |
| <b>CL6 FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT</b> | 23 e 28 Marzo e 12 Aprile   | 22 / 28 Febbraio 2024  |



## **SINGLE STAGE vs TWO-STAGE submission**

Evaluation procedure and ranking Calls may be subject to either a single-stage submission procedure or a two-stage submission procedure. The evaluation procedure could be organised in one (standard) or several steps.

In the first stage of two-stage submission, applicants will be requested to submit only an outline application (which will be evaluated against only two award criteria: 'Excellence' and 'Impact').

Successful applicants will be invited to submit a full application for the second stage (which will be evaluated against the full set of award criteria).



# SCADENZE- PILLAR II





# SCADENZE- WIDERA

| Widening participation and strengthening the European Research Area | 2023   | 2024  |
|---|--|---|
| <b>WIDERA</b>   | HORIZON-WIDERA-2023-ACCESS-01: 12 Apr 2023 (First Stage) -07 Mar 2024 (Second Stage)<br>HORIZON-WIDERA-2023-ACCESS-02: 28 Sep 2023<br>HORIZON-WIDERA-2023-ACCESS-03: 12 Apr 2023<br>HORIZON-WIDERA-2023-ACCESS-04: 28 Sep 2023<br>HORIZON-WIDERA-2023-ACCESS-05: 28 Sep 2023<br>HORIZON-WIDERA-2023-ACCESS-06: 28 Sep 2023; 26 Sep 2024<br>HORIZON-WIDERA-2023-ACCESS-07: 07 Mar 2024<br>HORIZON-WIDERA-2023-ERA-01: 28 Mar 2023 | HORIZON-WIDERA-2023-TALENTS-01: 07 Mar 2024<br>HORIZON-WIDERA-2023-TALENTS-02: 13 Sep 2023<br>HORIZON-WIDERA-2024-TALENTS-02: 11 Sep 2024<br>HORIZON-WIDERA-2024-TALENTS-03: 26 Sep 2024<br>HORIZON-WIDERA-2024-ERA-01: 12 Mar 2024 |





## Calendario EC Infoday and Brokerage events

| CLUSTER | INFODAY    | BROKERAGE EVENT                                     |        |
|---------|------------|---|--------|
| 1       | 19 January | 20 January  | Online |
| 2       | 17 January | 18 January  | Online |
| 3       | tbd        | Tbd   | Tbd    |
| 4       | 12-14 Dec  | 8 dec Space<br>14 Dec Industry<br>15-16 Dec Digital | Online |
| 5       | 15-16 Dec  | 15 Dec (afternoon)                                  | Online |
| 6       | 13-14 Dec  | 19 Dec  | Online |

<https://apre.it/bozze-work-programme-2023-2024-info-days-e-brokerage-events-sui-bandi-2023/>





## Cluster 1 - 'Health

### Aim:

- to promote and protect **human health and well-being**,
- prevent **diseases** and decrease the burden of **diseases** and **disabilities** on people and communities,
- support the **transformation of health care systems**
- foster an innovative, sustainable and globally competitive **European health industry**.

### 'Union policy priority 3

- Healthy citizens in a rapidly changing society
- Healthy and health-promoting living and working environments;
- Effective health services to tackle diseases and reduce the burden of diseases;
- Improved access to innovative, sustainable and high-quality health care
- Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- A sustainable and globally competitive health-related EU industry

### 'Union policy priorities 2:

- innovative, sustainable and competitive health-related industry

CL1 will focus on health-related challenges and drivers:

- delivering **new knowledge** and **capabilities**, improving our **understanding of health and diseases**,
- developing **innovative methodological** and **technological solutions** to better manage health and diseases,
- designing **sustainable approaches** for the **digital transformation** and delivery of integrated and **person-centred health and care services** supported by needs-driven innovation and reliable supply chains in Europe.



## CL1 - Destinations

**Destination #1 “Staying healthy in a rapidly changing society”** Si concentra sulle principali sfide sociali delineate a livello europeo: dieta alimentare e obesità, invecchiamento e cambiamento demografico, salute mentale, empowerment digitale nell’alfabetizzazione sanitaria e prevenzione personalizzata. Per il 2022 richiede anche proposte progettuali per migliorare la disponibilità e l’uso di strumenti di intelligenza artificiale (AI) per prevedere il rischio di insorgenza e progressione delle malattie croniche.

**Destination #2 “Living and working in a health-promoting environment”** Mira a colmare le lacune di conoscenza nella comprensione degli impatti sulla salute e sul benessere dei fattori di rischio ambientali, occupazionali e socioeconomici a più alto impatto sociale, come l’inquinamento atmosferico interno ed esterno, i prodotti chimici, radiazioni non ionizzanti (campi elettromagnetici), urbanizzazione, cambiamenti climatici e altre trasformazioni ambientali, disuguaglianze socioeconomiche e ambienti di lavoro in trasformazione.

**Destination #3 “Tackling diseases and reducing disease burden”** Mira a contribuire alla lotta contro il cancro e ad altre malattie non trasmissibili, ad una migliore diagnosi e cura delle malattie rare, alla risposta e sorveglianza delle minacce per la salute e delle epidemie, alla riduzione del numero di infezioni resistenti agli antimicrobici, al miglioramento dei tassi di vaccinazione.



## CL1 - Destinations

**Destination #4 “Ensuring access to innovative, sustainable and high-quality health care”** Le attività di R&I finanziate si propongono di sostenere i sistemi sanitari nella loro trasformazione per garantire un accesso equo a servizi sostenibili e di alta qualità per tutti i cittadini. Sostiene lo sviluppo di soluzioni scalabili innovative, fattibili, implementabili e finanziariamente solide nelle varie dimensioni dei sistemi sanitari e assistenziali ed intende fornire ai decisori politici prove, metodi, strumenti e tecnologie da adottare nei rispettivi sistemi sanitari e assistenziali.

**Destination #5 “Unlocking the full potential of new tools, technologies and digital solutions for a healthy society”** Promuove lo sviluppo di strumenti, tecnologie e soluzioni digitali per trattamenti, farmaci, dispositivi medici e migliori risultati di salute, prendendo in considerazione sicurezza, efficacia, adeguatezza, accessibilità, valore aggiunto comparativo e sostenibilità fiscale, nonché questioni di etica e di natura giuridica e normativa.

**Destination #6 “Maintaining an innovative, sustainable and globally competitive health-related industry”** Sostiene la produzione di farmaci ponendo particolare attenzione al rispetto degli obiettivi di sostenibilità enunciati dal Green Deal europeo. Intende supportare lo sviluppo di metodologie, linee guida, standard per soluzioni e interventi digitali conformi al regolamento sulla protezione dei dati (GDPR) nella pratica sanitaria, compresa l'interoperabilità, la sicurezza informatica e la riservatezza dei dati.



# CLUSTER 1 | Overview Work Programme 2023 - 24

| Scadenze |                            | Topic      |    | Budget     |             |
|----------|----------------------------|------------|----|------------|-------------|
| '23      | 13 Aprile e 19 Settembre   | '23        | 29 | '23        | 847 mln €   |
| '24      | 19 Sett 2023 e 11 Apr 2024 | '24        | 15 | '24        | 509 mln €   |
|          |                            | '23<br>'24 | 44 | '23<br>'24 | 1.356 mln € |

## Cluster 2 - 'Culture, Creativity and Inclusive Society'

### Aim:

- To enhance democratic governance and citizens participation,
- To Safeguard and promote cultural heritage, To respond to social, economic, technological and cultural transformations.
- expand civic engagement, boosting transparency, accountability, inclusiveness and legitimacy of governance, improving levels of trust and tackling political extremism.
- promote better access and engagement with cultural heritage and improve its protection, enhancement and restoration.

### CI2 will focus on health-related challenges and drivers:

- sustainable growth and job creation through to a EU industrial policy for the cultural and creative industries
- help tackle social, economic and political inequalities, support human capital development and contribute to a comprehensive European strategy for inclusive growth.
- understanding and responding to the impacts of technological advancements and economic interconnectedness with a view to social resilience.
- migration and mobility policies, both internal and external, while aiming to promote integration.

### 'Union policy priority 3:

- Enhanced democracy and governance
- Better approaches to tackling political extremism and polarisation
- Reversing socio-economic and gender inequalities
- Improved understanding of societal - including political, ethical and economic - effects of technological advancements and the impact of drivers of change
- A novel growth model
- Increased use of evidence-based strategies in the management of mobility and migration and the integration of migrants in European society;
- Better valorisation of European cultural heritage



## CL2 - Destinations

**Destination #1 “Innovative Research on Democracy and Governance”** Sostiene il rafforzamento della governance democratica e il miglioramento della fiducia nelle istituzioni democratiche. Intende contribuire a salvaguardare i diritti fondamentali per rafforzare la cittadinanza attiva e inclusiva, e di conseguenza la responsabilità, la trasparenza, l’efficacia e l’affidabilità delle istituzioni e delle politiche basate sullo Stato di diritto. Le attività finanziate puntano a difendere le libertà e lo Stato di diritto e a difendere la democrazia dalle minacce di diverse dimensioni. Mirano inoltre ad espandere la partecipazione politica, il dialogo sociale e l’inclusione sociale, l’impegno civico e l’uguaglianza di genere.

**Destination #2 “Innovative Research on the European Cultural Heritage and the Cultural and Creative Industries”** Punta a migliorare la protezione, la valorizzazione e il restauro del patrimonio culturale, promuovendone un migliore accesso e coinvolgimento. Le attività finanziate sostengono la crescita sostenibile e la creazione di posti di lavoro attraverso le industrie culturali e creative, contribuendo ad integrare le stesse nella politica industriale europea come motori di innovazione e competitività.



## CL2 - Destinations

### **Destination #3 “Innovative Research on Social and Economic Transformations”**

Contribuisce ad affrontare le disuguaglianze sociali, economiche e politiche, a sostenere lo sviluppo del capitale umano, a supporto di una strategia europea globale per la crescita inclusiva. Ciò implica anche la comprensione degli impatti dei progressi tecnologici e dell'interconnessione economica in un'ottica di resilienza sociale.



| DESTINATION  | 7 CALL   | N. topic                        | Budget [mln EUR] | Scadenza    |
|--|--|---------------------------------|------------------|-------------|
| <b>Democracy and Governance</b>  | Standing up for democracy (RIA)                              | 8                               | 75,00            | 14 Mar 2023 |
|  | Past, present and future of democracies                      | 12                              | 95,00            | 07 Feb 2024 |
| <b>European Cultural Heritage and the Cultural and Creative Industries</b> | Research and innovation on cultural heritage and CCIs - 2023 | 8                               | 78,00            | 14 Mar 2023 |
|  | A European Collaborative Cloud for Cultural Heritage - 2023  | 2                               | 35,00            | 21 Sep 2023 |
|  | Research and innovation on cultural heritage and CCIs -2024  | 5                               | 65,00            | 07 Feb 2024 |
| <b>Social and Economic transformations</b>                                 | Inclusiveness in times of change                             | 10                              | 80,00            | 14 Mar 2023 |
|  | A sustainable future for Europe                              | 11                              | 96,00            | 07 Feb 2024 |
|  |  | <b>56</b><br>Circa 150 progetti | <b>544,00</b>    |             |





## Cluster 3 - 'Civil security for Society'

### Aim:

- to protect the EU and its citizens from the threats posed by crime and terrorism (including in the cyber environment) and from the impacts of natural and man-made disasters.

### 'Union policy priority1:

- Improved disaster risk management and societal resilience
- Improved management of EU external borders
- Better protection of public spaces
- Improved security and resilience of infrastructure and vital societal functions
- Improved maritime security
- More effective fight against crime and terrorism
- Increased cybersecurity

### CI3: will focus on health-related challenges and drivers:

- delivering **new knowledge** and **capabilities**, improving our **understanding of health and diseases**,
- developing **innovative methodological** and **technological solutions** to better manage health and diseases,
- designing **sustainable approaches for the digital transformation** and delivery of integrated and **person-centred health and care services** supported by needs-driven innovation and reliable supply chains in Europe.



## CL3 - Destinations

**Destination #1 “Better protect the EU and its citizens against Crime and Terrorism”** Sostiene la risoluzione di problematiche legate al terrorismo e al crimine in tutte le accezioni; supporta soluzioni dirette a tutelare i diritti fondamentali, grazie ad azioni di prevenzione, preparazione e risposta più efficaci, e ad una migliore comprensione degli aspetti umani, sociali e tecnologici alla base della criminalità. Fondamentale è il sostegno allo sviluppo di capacità e tecnologie all'avanguardia a supporto delle forze dell'ordine (Law Enforcement Agencies) quotidianamente impegnate a fronteggiare attacchi criminali e terroristici.

**Destination #2 “Effective management of EU external borders”** Contribuisce alla gestione delle frontiere aeree, marittime e terrestri, supportando il contrasto ad azioni di pirateria, a traffici illeciti di beni o persone e a tutte le forme di crimine che interessano le frontiere esterne dell'Unione.

**Destination #3 “Resilient infrastructure”** Sostiene la protezione delle infrastrutture critiche europee, sia fisiche (e.g. impianti energetici) che digitali (e.g. e-commerce), e tutela la loro resilienza ed autonomia affinché non siano compromesse le funzioni economiche, tecnologiche e sociali ad esse connesse.



## CL3 - Destinations

**Destination #4 “Increased Cybersecurity”** Ha per oggetto la sicurezza digitale, mirando al potenziamento delle capacità in ambito informatico dell’Ue e degli Stati membri; intende assicurare la protezione dei dati e delle reti, nel rispetto della privacy e di altri diritti fondamentali; contribuisce allo sviluppo di servizi, processi e prodotti sicuri, nonché a solide infrastrutture digitali in grado di resistere e contrastare gli attacchi informatici e le minacce ibride.

**Destination #5 “A Disaster-Resilient Society for Europe”** Mira alla riduzione di perdite in termini di vite umane, danni ambientali e danni economici, dovuti a catastrofi naturali o causate dall’uomo, puntando su azioni di prevenzione, migliore preparazione e gestione sistemica del rischio.

**Destination #6 “SSRI Strengthened Security Research and Innovation”** – Promuove la cooperazione intersettoriale ed interdisciplinare per un’attuazione più efficace del ciclo di ricerca ed innovazione e una migliore diffusione di conoscenza a tutti i livelli della società.



## Cluster 4 - 'Digital, Industry and Space'

### Aim:

- To advance key enabling, digital and space technologies, underpinning the transformation of our economy and society,
- To support the digitisation and transformation of European industry and contribute to securing global industrial leadership and autonomy in terms of technologies and resources.

### 'Union policy priority 1 and 3:

- More appealing and creative jobs in Europe
- Increased autonomy in critical raw materials
- Increased industrial leadership in key enabling and digital technologies and uptake of new technologies
- Climate-neutral, circular and clean EU industries
- Increased inclusiveness

- To contribute to growing a low-carbon, circular and clean industry respecting planetary boundaries and to fostering inclusiveness in the form of high-quality jobs and societal engagement in the use of technologies.
- To address the challenges European industry is facing, such as its reliance on imported key technologies and raw materials, the scarcity of resources including energy, as well as skills mismatches and ethical considerations relating to technological progress



## CL4 - Destinations

**Destination #1 “Climate neutral, circular and digitized production”** Supporta la transizione verde e digitale delle industrie manifatturiere, edili e ad alta intensità energetica, comprese le industrie di processo. Contribuisce allo sviluppo di processi produttivi e catene del valore sostenibili, flessibili, reattive e resilienti, abilitate dall’intelligenza artificiale, dalla condivisione dei dati, dalla robotica avanzata e dalla modularità, al fine di garantire efficienza energetica e sostenibilità ambientale.

**Destination #2 “Increased autonomy in key strategic value chains for resilient industry”** Sostiene la modernizzazione e la resilienza dei modelli industriali tradizionali, sviluppando al contempo nuove tecnologie e materiali avanzati, modelli di business e processi basati su circolarità e sostenibilità, e puntando a ridurre le dipendenze dell’Unione dai paesi terzi per le materie prime.

**Destination #3 “World leading data and computing technologies”** Supporta lo sviluppo di capacità di elaborazione dati sicure, efficienti dal punto di vista energetico, a costi contenuti e di elevata qualità, come quelle offerte da infrastrutture e servizi cloud sia nei centri di dati sia ai margini della rete.



## CL4 - Destinations

### **Destination #4 “Digital and emerging technologies for competitiveness and fit for the Green Deal”**

Promuove la sovranità nelle tecnologie abilitanti emergenti rafforzando le capacità europee in fotonica, elettronica e processori di nuova generazione, robotica, intelligenza artificiale, reti e servizi intelligenti, consentendo risposte agili a bisogni urgenti di transizione ecologica e investendo ulteriormente nella scoperta precoce e nell’adozione industriale di nuove tecnologie, quali grafene e tecnologie quantistiche.

**Destination #5 “Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data”** Contribuisce a garantire autonomia nello sviluppo, installazione e utilizzo delle infrastrutture spaziali, nell’applicazione di servizi e nell’utilizzo di dati. L’autonomia nel settore spaziale è garantita anche grazie alla capacità di accedere allo Spazio attraverso il lancio delle infrastrutture e la possibilità di proporre opportunità di dimostrazione e validazione in orbita. Garantisce inoltre autonomia nell’approvvigionamento di tecnologie e attrezzature critiche e promuove la competitività del settore spaziale europeo.

**Destination #6 “A human-centred and ethical development of digital and industrial technologies”** Sostiene uno sviluppo tecnologico etico ed incentrato sui bisogni della persona, mirando a garantire trasparenza e fiducia nelle applicazioni di intelligenza artificiale e nella presenza digitale del singolo, e inclusività ed innovazione sociale a supporto del singolo lavoratore e dell’utente finale, anche attraverso lo sviluppo di tecnologie immersive



# CLUSTER 4 | Overview Work Programme 2023 - 24

## Scadenze

|         |                            |
|---------|----------------------------|
| '2<br>3 | 28 e 29 Marzo+20<br>Aprile |
| '2<br>4 | 7 e 20 Feb + 19<br>Marzo   |

## Topic

|         |     |
|---------|-----|
| '2<br>3 | 88  |
| '2<br>4 | 42  |
|         | 130 |

## Budget

|         |         |
|---------|---------|
| '2<br>3 | 1390,23 |
| '2<br>4 | 927     |
|         | 2317,23 |



## WP23-24 | OVERVIEW call 2023

| Destination | CL4 components | Call  | Deadline  | Budget (mln €) | N° of topics |
|-------------|----------------|---|---|----------------|--------------|
| 1           | Industry       | HORIZON-CL4-2023-TWIN-TRANSITION-01           | 20 Apr 2023   | 335            | 12           |
| 1           | Industry       | HORIZON-CL4-2023-TWIN-TRANSITION-01-TWO-STAGE | 7 Mar 2023 (First Stage)<br>5 Oct 2023 (Second Stage)   | 12             | 1            |
| 2           | Industry       | HORIZON-CL4-2023-RESILIENCE-01-TWO-STAGE      | 07 Mar 2023 (First Stage)<br>05 Oct 2023 (Second Stage) | 124            | 4            |
| 2           | Industry       | HORIZON-CL4-2023-RESILIENCE-01                | 20 Apr 2023   | 213,73         | 12           |
| 3           | Digital        | HORIZON-CL4-2023-DATA-01                      | 29 Mar 2023   | 76             | 4            |
| 4           | Digital        | HORIZON-CL4-2023-DIGITAL-EMERGING-01          | 29 Mar 2023   | 108            | 5            |
| 4           | Digital        | HORIZON-CL4-2023-DIGITAL-EMERGING-01-CNECT    | 29 Mar 2023   | 129            | 9            |
| 5           | Space          | HORIZON-CL4-2023-SPACE-01                     | 29 Mar 2023   | 137,5          | 14           |
| 6           | Digital        | HORIZON-CL4-2023-HUMAN-01                     | 29 Mar 2023   | 53             | 12           |
| 6           | Digital        | HORIZON-CL4-2023-HUMAN-01-CNECT               | 29 Mar 2023   | 202            | 15           |





## WP23-24 | OVERVIEW call 2024

| Destinati on | CL4 components | Call  | Deadline   | Budget (mln €) | N° of topics |
|--------------|----------------|---|--|----------------|--------------|
| 1            | Industry       | HORIZON-CL4-2024-TWIN-TRANSITION-01           | 7 Feb 2024   | 251            | 9            |
| 1            | Industry       | HORIZON-CL4-2024-TWIN-TRANSITION-01-TWO-STAGE | 7 Feb 2024 (First Stage)<br>24 Set 2024 (Second Stage) | 37             | 2            |
| 2            | Industry       | HORIZON-CL4-2024-RESILIENCE-01-TWO-STAGE      | 7 Feb 2024 (First Stage)<br>24 Set 2024 (Second Stage) | 62             | 2            |
| 2            | Industry       | HORIZON-CL4-2024-RESILIENCE-01                | 7 Feb 2024   | 160,20         | 7            |
| 3            | Digital        | HORIZON-CL4-2024-DATA-01                      | 19 Mar 2024  | 85             | 3            |
| 4            | Digital        | HORIZON-CL4-2024-DIGITAL-EMERGING-01          | 19 Mar 2024  | 136,5          | 5            |
| 4            | Digital        | HORIZON-CL4-2024-DIGITAL-EMERGING-01-CNECT    | 19 Mar 2024  | 88             | 6            |
| 5            | Space          | HORIZON-CL4-2024-SPACE-01                     | 20 Feb 2024  | 46,30          | 4            |
| 6            | Digital        | HORIZON-CL4-2024-HUMAN-01                     | 19 Mar 2024  | 61             | 4            |



# 2023 | Condizioni specifiche/criteri di eleggibilità aggiuntivi

**Blind evaluation**  
(two-stage)

4 topics in destination 6 with FSTP

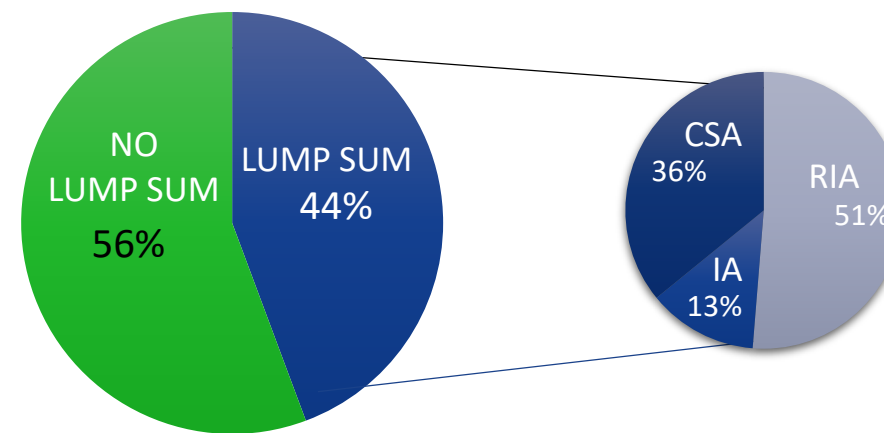
## ART 22.5

- Limited participation in 6 out of 16 topics in destination 5
- Limited participation in 3 out of 14 topics in destination 4

## COLLABORATIONS (17 topics)

- International Cooperation: 10 topics
- Collaboration with JRC: 3 topics
- Collaboration with EIT: 4 topics

## Lump Sum





## Cluster 5 - 'Climate, Energy and Mobility'

### Aim:

- to fight climate change while improving the competitiveness of the energy and transport industries as well as the quality of the services that these sectors bring to society.
- establishing a better understanding of the causes, evolution, risks, impacts and opportunities of climate change,
- making energy and mobility systems more climate- and environment-friendly, smarter, safer, and more resilient, inclusive, competitive and efficient.

**CI5** will focus on health-related challenges and drivers:

- Actions of will contribute to the technological, economic and societal transformations required to achieve climate neutrality and to ensure a socially fair transition, as outlined in the Commission's long-term strategy (adopted in November 2018).

### 'Union policy priority2:

- contribute to developing low-carbon and competitive transport solutions across all modes

### 'Union policy priority4:

- Advanced climate science and solutions;
- Novel competitive cross-sectoral solutions for decarbonisation
- A novel energy system
- New demand side solutions to decarbonise the energy and transportsystems
- Reduction of greenhouse gas emissions;
- Increased adaptation of production systems
- Reinforced bio-economy



## CL5 - Destinations

**Destination #1 “Climate sciences and responses”** Intende promuovere il miglioramento della conoscenza sul sistema Terra e la capacità di prevedere e proiettare i suoi cambiamenti tenendo in considerazione diversi fattori naturali e socio-economici. Vuole inoltre sostenere una stima più accurata degli impatti dei cambiamenti climatici, e la progettazione e la valutazione di soluzioni e percorsi per la mitigazione e l’adattamento ai cambiamenti climatici e la relativa trasformazione sociale.

**Destination #2 “Cross-sectoral solutions for the climate transition”** Copre aree tematiche che sono trasversali per natura e possono fornire soluzioni chiave per applicazioni relative al clima, all’energia e alla mobilità: le batterie, l’idrogeno, le comunità e le città, le tecnologie innovative nelle fasi iniziali e il coinvolgimento dei cittadini.

**Destination #3 “Sustainable, secure and competitive energy supply”** Include attività mirate a un approvvigionamento energetico sostenibile, sicuro e competitivo, in particolare nei seguenti settori: energie rinnovabili; sistema energetico, reti e accumulo; la cattura, l’utilizzo e lo stoccaggio del carbonio (CCUS - Carbon Capture, Utilization and Storage).



## CL5 - Destinations

**Destination #4 “Efficient, sustainable and inclusive energy use”** Finanzia attività dal lato della domanda di energia, concentrandosi in particolare su un uso più efficiente dell’energia per gli edifici e l’industria. Sostiene l’uso di tecnologie digitali che consentiranno agli edifici e alle strutture industriali di diventare elementi interattivi nel sistema energetico ottimizzando il consumo, la generazione distribuita e lo stoccaggio di energia.

**Destination #5 “Clean and competitive solutions for all transport modes”** Sostiene attività finalizzate al miglioramento della competitività e degli impatti climatici e ambientali delle diverse tipologie di trasporto. L’intensificazione delle attività di ricerca e innovazione nel settore dei trasporti è reso necessario dal previsto aumento della domanda di trasporto e dalla conseguente insufficiente riduzione delle emissioni di gas serra rispetto agli obiettivi dell’accordo di Parigi.

**Destination #6 “Safe Resilient Transport and Smart Mobility services for passengers and goods”** Sostiene lo sviluppo di sistemi di mobilità intelligenti, sicuri, integrati, inclusivi, resilienti e climaticamente neutrali grazie a tecnologie e servizi centrati sull’utente, anche di tipo digitale e satellitare. Punta a ricavare significativi vantaggi socio-economici ed ambientali riducendo gli incidenti causati da errori umani, diminuendo la congestione del traffico, riducendo il consumo di energia e le emissioni dei veicoli, aumentando l’efficienza e la produttività delle operazioni di trasporto merci.



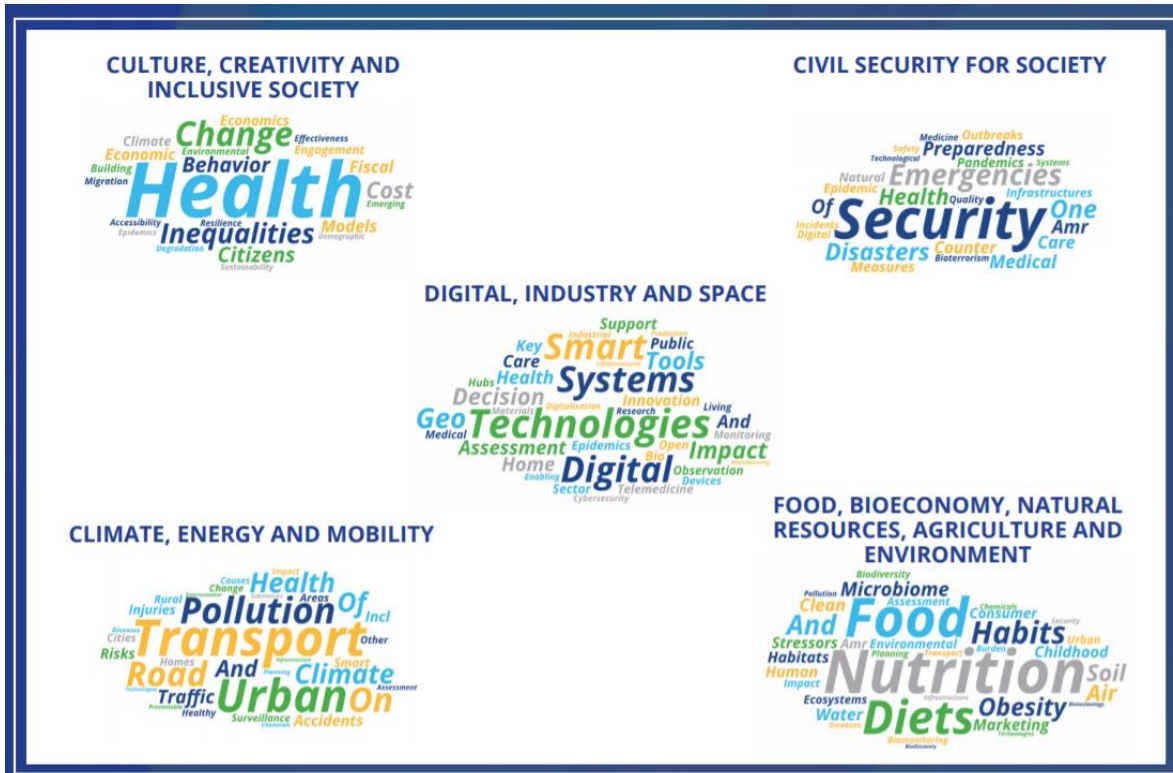
| <b>DESTINATION</b>   | <b>Call ID 2023</b>           | <b>Opening date</b> | <b>Closing date</b> |
|--|-------------------------------|---------------------|---------------------|
| <b>D1 Climate sciences and responses for the transformation towards climate neutrality</b> | <b>HORIZON-CL5-2023-D1-01</b> | <b>02/12/22</b>     | <b>18/04/23</b>     |
| <b>D2 Cross-sectoral solutions for the climate transition</b>                              | <b>HORIZON-CL5-2023-D2-01</b> | <b>02/12/22</b>     | <b>20/04/23</b>     |
|  | <b>HORIZON-CL5-2023-D2-02</b> | <b>04/05/23</b>     | <b>05/09/23</b>     |
| <b>D3 Sustainable, secure and competitive energy supply</b>                                | <b>HORIZON-CL5-2023-D3-01</b> | <b>02/12/22</b>     | <b>30/03/23</b>     |
|  | <b>HORIZON-CL5-2023-D3-02</b> | <b>04/05/23</b>     | <b>05/09/23</b>     |
|  | <b>HORIZON-CL5-2023-D3-03</b> | <b>04/05/23</b>     | <b>10/10/23</b>     |
| <b>D4 Efficient, sustainable and inclusive energy use</b>                                  | <b>HORIZON-CL5-2023-D4-01</b> | <b>02/12/22</b>     | <b>20/04/23</b>     |
|  | <b>HORIZON-CL5-2023-D4-02</b> | <b>04/05/23</b>     | <b>05/09/23</b>     |
| <b>D5 Clean and competitive solutions for all transport modes</b>                          | <b>HORIZON-CL5-2023-D5-01</b> | <b>02/12/22</b>     | <b>20/04/23</b>     |
| <b>D6 Safe, Resilient Transport and Smart Mobility services for passengers and goods</b>   | <b>HORIZON-CL5-2023-D6-01</b> | <b>04/05/23</b>     | <b>05/09/23</b>     |



# CROSS CLUSTER COMPLEMENTARITIES

## CLUSTER 1 - HEALTH

## CLUSTER 2 - SOCIETY



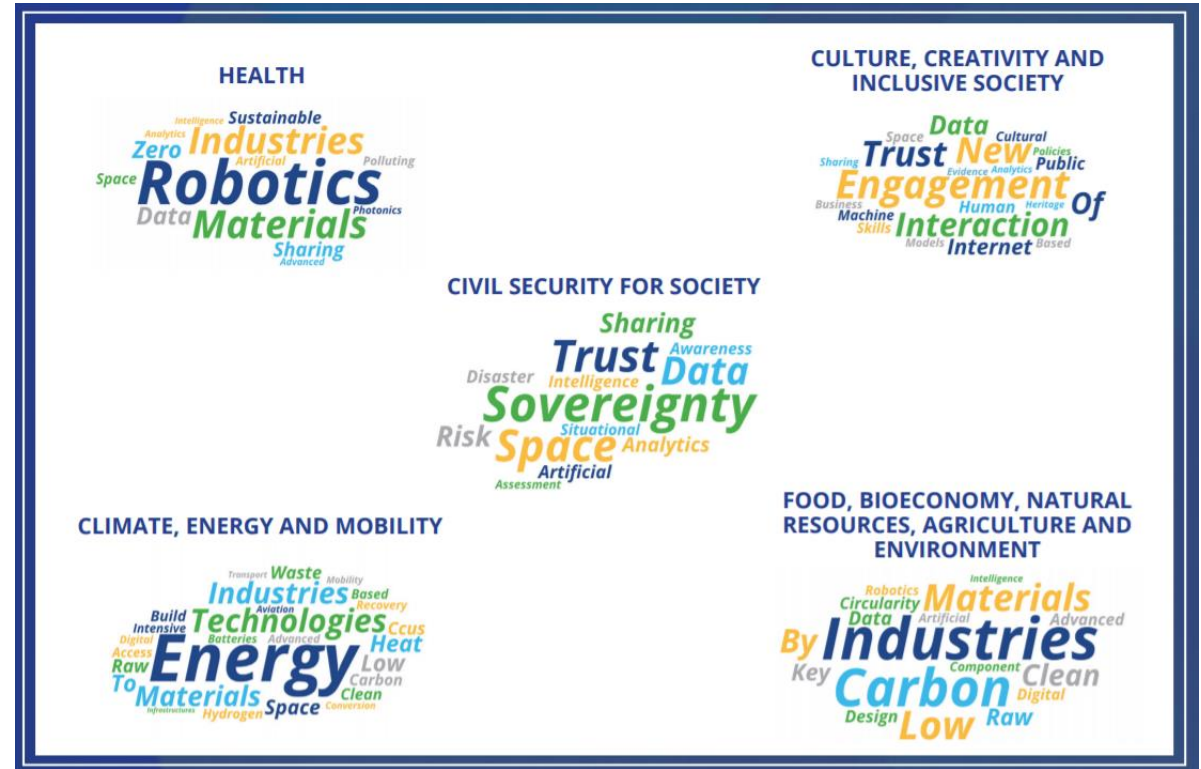
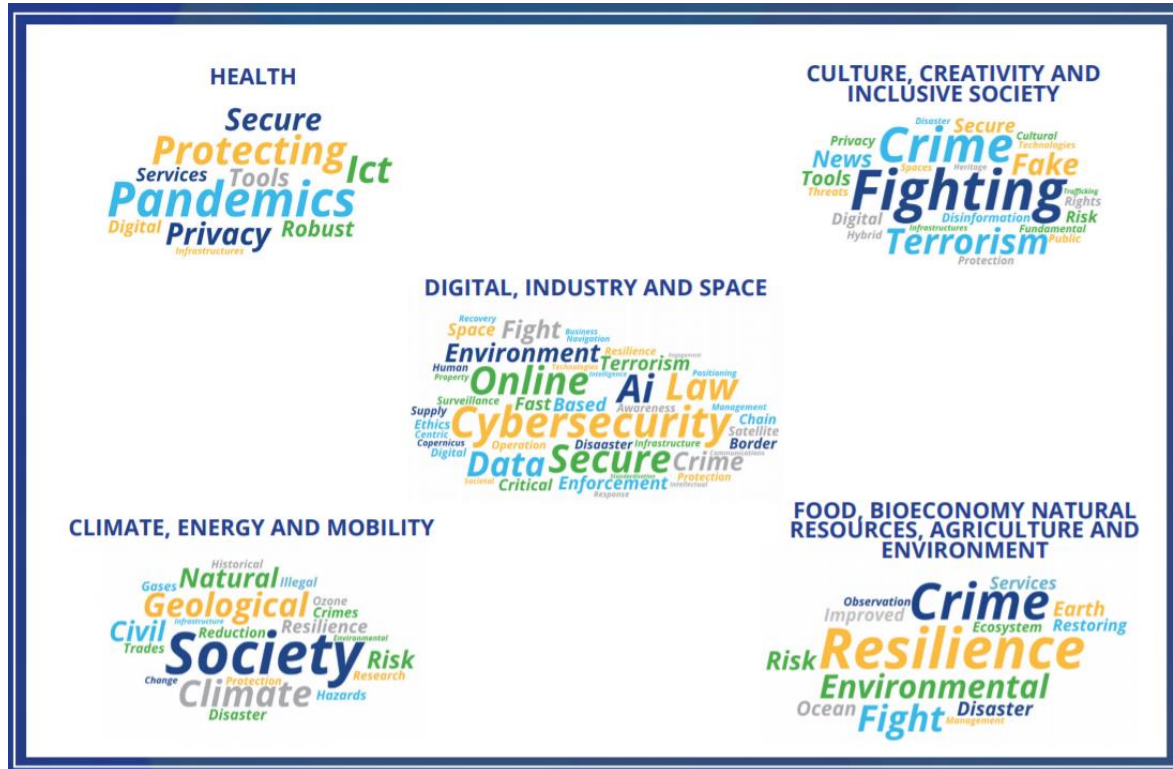




# CROSS CLUSTER COMPLEMENTARITIES

## CLUSTER 3 - SECURITY

## CLUSTER 4 – DIGITAL, INDUSTRY, SPACE





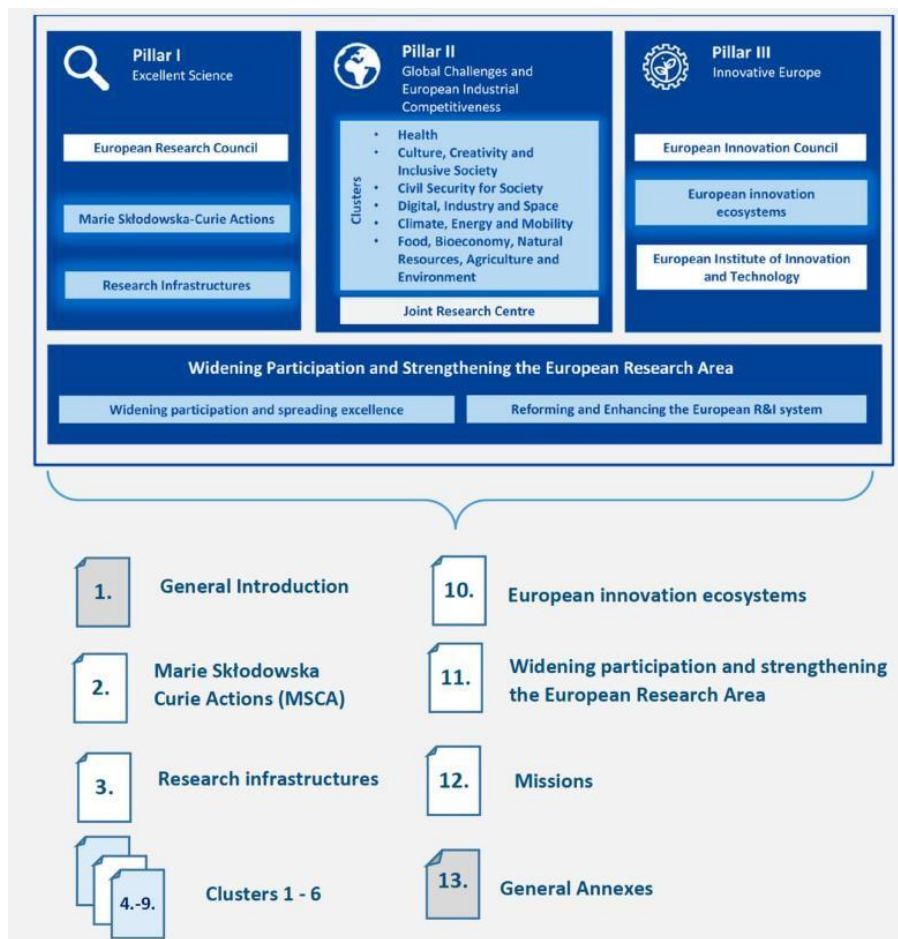


# Horizon Europe Work Programmes

## How an HE Work Programme is structured

### Work Programme 2021-22

- General Intro
- MSCA
- RI
- 6 Clusters
- EIC
- WIDENING



### Documents :

- Strategic Plan 2021-24
- Work Programme 21-22
- Proposal Template
- Model Grant Agreement (MGA)



# Get ready for Horizon Europe Calls

## How to prepare for HE



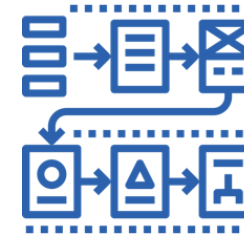
### Study the Policies

- Strategic Plan 2021-24
- Strategic Plan Analysis
- General Intro of WP 2021-22



### Identify your call

- Scan the WP to find a relevant call to your interests
- Study carefully the call text
- Study General Annex of WP



### Start building

- Study the new Proposal Template
- Prepare your concept
- Build your consortium
- Legal Documents (MGA, CA)



APRE

Agenzia per la Promozione  
della Ricerca Europea

# EUROPEAN PARTNERSHIPS



*«La sfida della pandemia di coronavirus ha reso più urgenti i nostri sforzi di lunga data per utilizzare meglio la ricerca e l'innovazione al fine di affrontare le emergenze sanitarie, i cambiamenti climatici e la trasformazione digitale. I partenariati europei sono la nostra opportunità di cooperare per rispondere alle profonde trasformazioni economiche e sociali e plasmarle a vantaggio di tutti i cittadini dell'UE».*

**Mariya Gabriel**, commissaria per l'Innovazione, la ricerca, la cultura, l'istruzione e i giovani



## COSA SONO?

I partenariati europei sono iniziative in cui l'Unione europea, le autorità nazionali e/o il settore privato si impegnano congiuntamente a sostenere lo sviluppo e l'attuazione di un programma di attività di ricerca e innovazione. I partner possono rappresentare l'industria, le università, le organizzazioni di ricerca, gli organismi con una missione di servizio pubblico a livello locale, regionale, nazionale o internazionale o le organizzazioni della società civile, comprese le fondazioni e le ONG.

**UN PROGRAMMA  
NEL PROGRAMMA HE**

INFOGRAFICA  
FACTSHEET  
SITO

*\* alcune figure sono prese dal rapporto:  
Performance of European Partnerships. Biennial  
Monitoring Report 2022 On Partnerships In Horizon  
Europe <https://ec.europa.eu/assets/rtd/bmr/2022/>*





## SONO UNA NOVITÀ?

- Le partnerships **non sono una novità** di Horizon Europe.
- Le prime sono state introdotte nel 2002 come parte della European Research Area per evitare la frammentazione degli sforzi di ricerca tra enti e paesi.
- La maggior parte dei partenariati si basa su iniziative di lunga data esistenti nell'ambito di Horizon 2020, Settimo programma quadro, e sul lavoro di una o più piattaforme tecnologiche europee.
- La novità in HE è la **razionalizzazione del panorama** del partenariato europeo per migliorarne **l'apertura e la trasparenza** e collegarli alle future priorità politiche dell'UE e alle missioni.
- Con questo nuovo approccio, si vuol porre l'attenzione nel garantire un più forte **impatto** delle stesse e coinvolgere una gamma più ampia di parti interessate in tutta l'UE.



# New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

## Key Features

- **Strategic orientation**
- **Systemic approach**
- **Simple architecture and toolbox**
- **Common set of criteria for the life-cycle**

### CO-PROGRAMMED

Basati su protocolli d'intesa / accordi contrattuali; attuati in modo indipendente dai partner e dalla Commissione via Horizon Europe

### CO-FUNDED

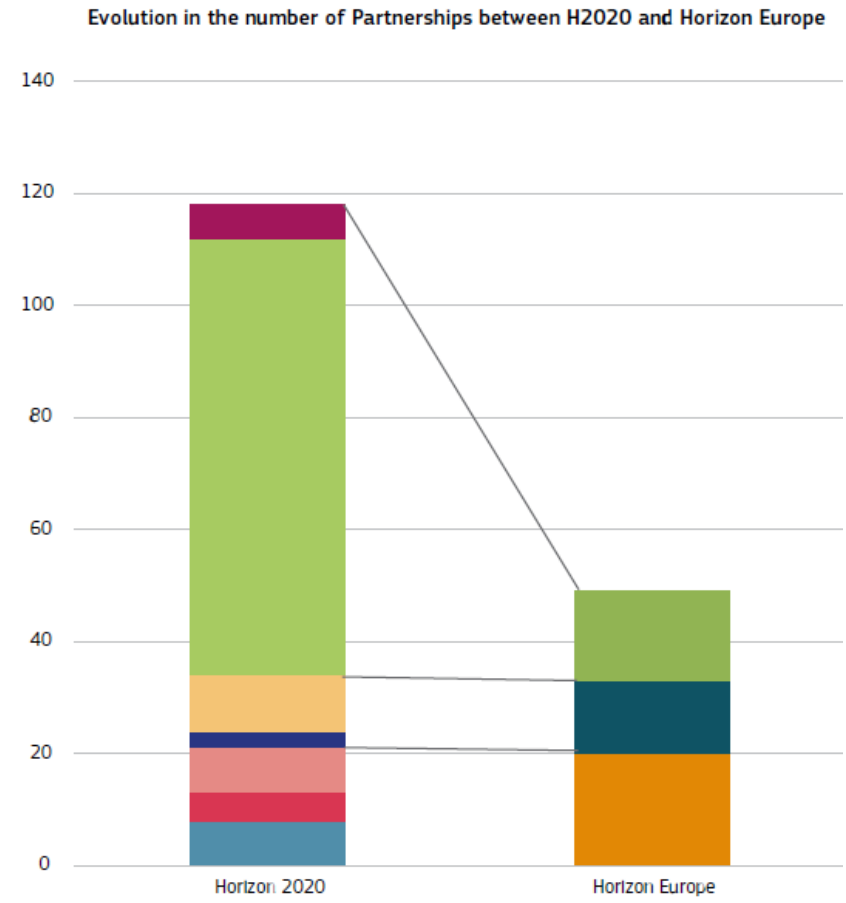
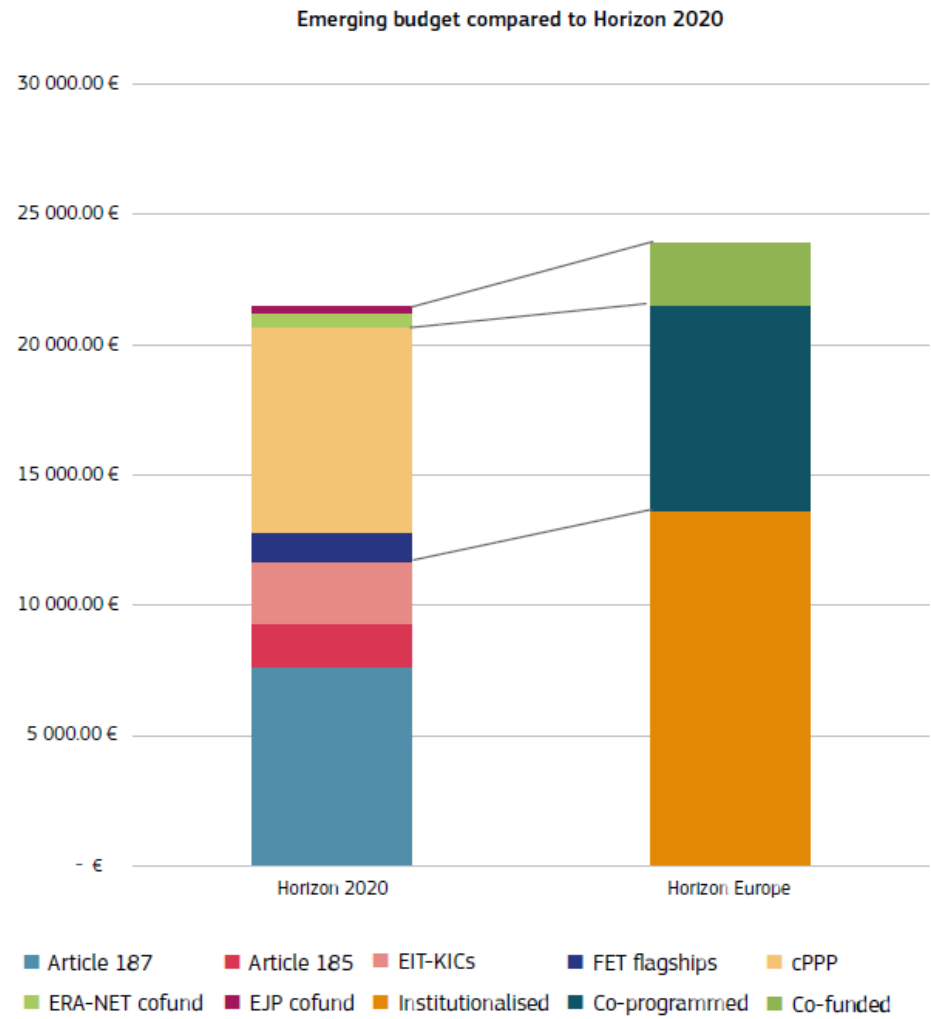
Basati su un programma congiunto concordato dai partner; impegno dei partner con contributi finanziari e in natura e contributo finanziario da Horizon Europe

### INSTITUTIONALISED

Based on long-term dimension  
Basati su una visione a lungo termine e sulla necessità di un'elevata integrazione; partenariati basati su Art.185 /187 del TFUE e sul regolamento EIT



**FIGURE 6. Partnership portfolio in H2020 and HE**



**49** partenariati previsti in HORIZON EUROPE (2021-24)

- 16 partenariati co-finanziati
- 12 partenariati co-programmati
- 10 partenariati istituzionalizzati
- 1 non definito (Pandemic) → co-programmed



**49**  
European Partnerships under the 1<sup>st</sup> Strategic Plan

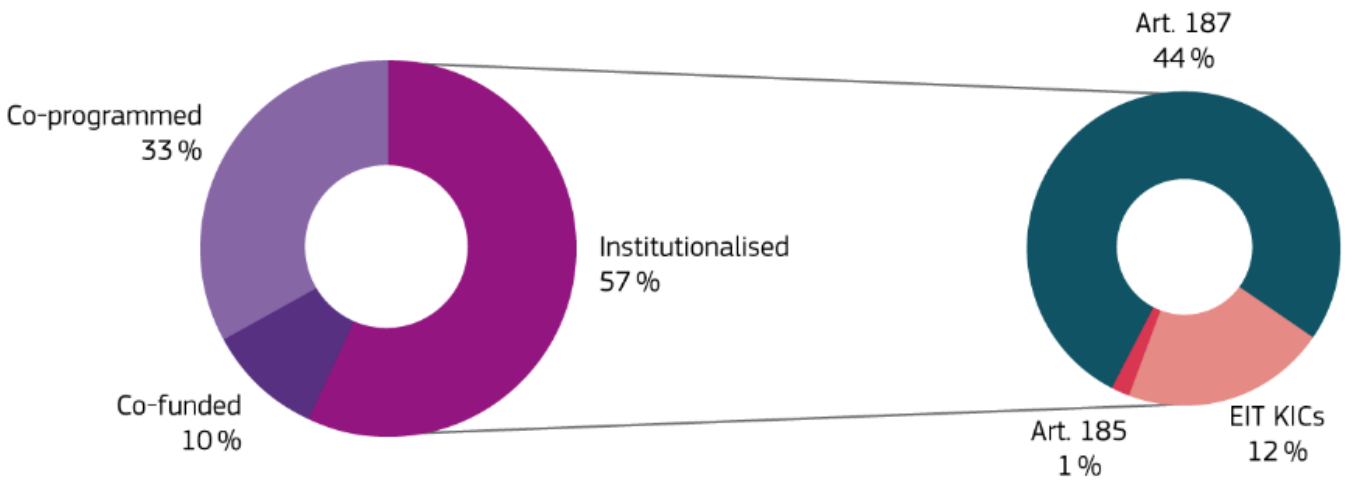
**€31.4bn**  
estimated total commitment from partners other than the Union

**37.9%**  
of Horizon Europe Pillar II budget

**25%**  
of total Horizon Europe budget

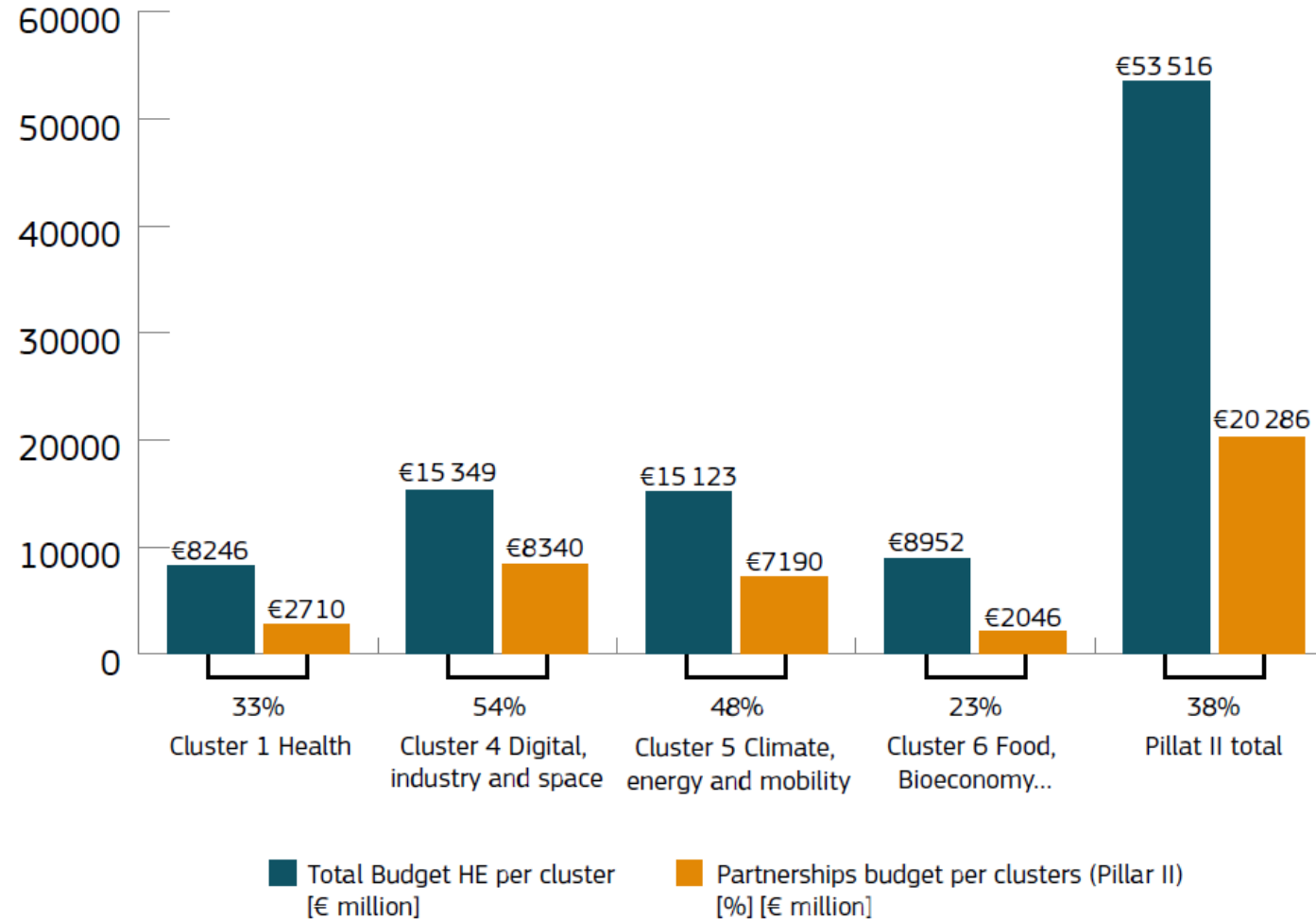
**€23.9bn**  
estimated commitment from Horizon Europe

Horizon Europe budget split per type of partnership



Source: European Commission

**FIGURE 3. European Partnerships' budgets in Horizon Europe cluster budgets**





**Horizon Europe Strategic Plan:** Identificazione delle Partnership co-programmed and co-funded European partnerships

**Proposta EC per le iniziative Art 185/7**

Consultazione con gli stati membri:

[European Partnerships under Horizon Europe: results of the structured consultation of Member States \(link\)](#)

**I partenariati elencati nello Strategic Plan saranno a valere nel quadriennio 2021-24.**

Green transition  
Digital transition  
Recovery & resilience

# Horizon Europe 2021-2027

Strategic Plan 2021 - 2024

Strategic Plan 2025-2027

Work Programme  
2021-2022

Work Programme  
2023-2024

Project

Project

Project

Project

Project

Project



**67%**

of Horizon Europe partnership collective resources are planned to be allocated to R&I contributing to the Green Deal objectives, a 38 % increase compared to H2020

**36%**

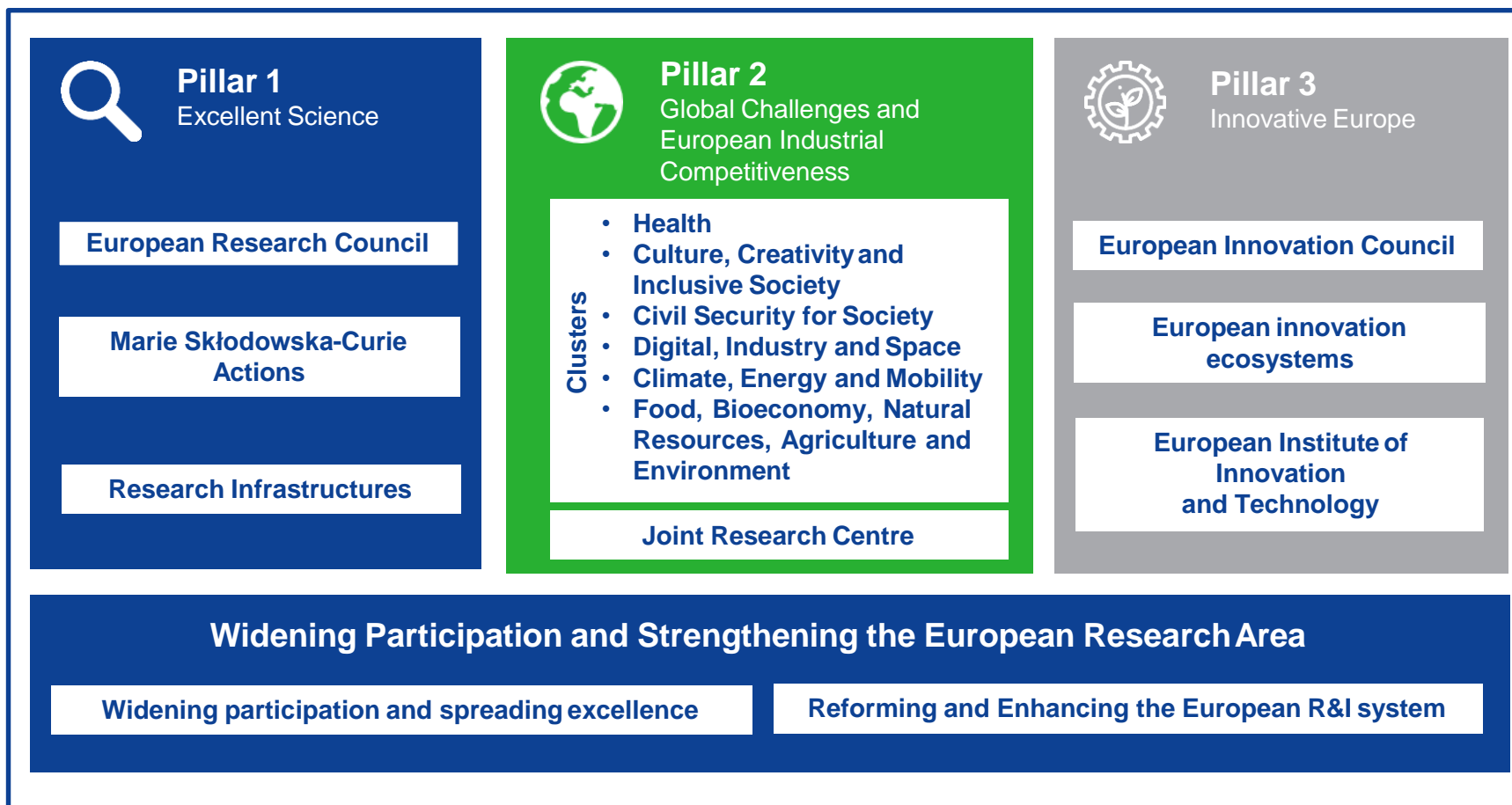
of Horizon Europe partnership collective resources are planned to be allocated to R&I contributing to the resilience objectives, a 74 % increase compared to H2020

**33%**

of Horizon Europe partnership collective resources are planned to be allocated to R&I contributing to the Digital objectives, a 107 % increase compared to H2020



# Horizon Europe: dove sono le EP nella struttura di HEU?



- EIT
- Innovative SMEs

**CROSS PILLAR II-III**  
European Open Science Cloud (EOSC)

# Overview of 49 European Partnerships

## HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

| CLUSTER 1: Health   | CLUSTER 4: Digital, Industry & Space | CLUSTER 5: Climate, Energy & Mobility   | CLUSTER 6: Food, Bioeconomy, Agriculture, ...          |
|---|--------------------------------------|---|--|
| Innovative Health Initiative                                | Key Digital Technologies             | Clean Hydrogen                          | Circular Bio-based Europe                              |
| Global Health Partnership                                   | Smart Networks & Services            | Clean Aviation                          | Rescuing Biodiversity to Safeguard Life on Earth       |
| Transformation of health systems                            | High Performance Computing           | Single European Sky ATM Research 3      | Climate Neutral, Sustainable & Productive Blue Economy |
| Chemicals risk assessment                                   | European Metrology (Art. 185)        | Europe's Rail                           | Water4All  |
| ERA for Health  | AI-Data-Robotics                     | Connected and Automated Mobility (CCAM) | Animal Health & Welfare*                               |
| Rare diseases*  | Photonics                            | Batteries                               | Accelerating Farming Systems Transitions*              |
| One-Health Anti Microbial Resistance*                       | Made in Europe                       | Zero-emission waterborne transport      | Agriculture of Data*                                   |
| Personalised Medicine*                                      | Clean steel – low-carbon steelmaking | Zero-emission road transport            | Safe & Sustainable Food System*                        |
| Pandemic Preparedness*<br><i>Co-funded or co-programmed</i> | Processes4Planet                     | Built4People                            |  |
|   | Global competitive space systems**   | Clean Energy Transition                 |  |
|   |                                      | Driving Urban Transitions               |  |

- Institutionalised Partnerships (Art 185/7)
- Institutionalised Partnerships / EIT KICs
- Co-Programmed
- Co-Funded

\* Calls with opening dates in 2023-24  
 \*\* Calls with opening dates not before 2022

## PILLAR III - Innovative Europe

| EIT (KNOWLEDGE & INNOVATION COMMUNITIES) | SUPPORT TO INNOVATION ECOSYSTEMS |
|--|----------------------------------|
| InnoEnergy                               | Innovative SMEs                  |
| Climate                                  |                                  |
| Digital                                  |                                  |
| Food                                     |                                  |
| Health                                   |                                  |
| Raw Materials                            |                                  |
| Manufacturing                            |                                  |
| Urban Mobility                           |                                  |
| Cultural and Creative Industries         |                                  |

## CROSS-PILLARS II & III

European Open Science Cloud



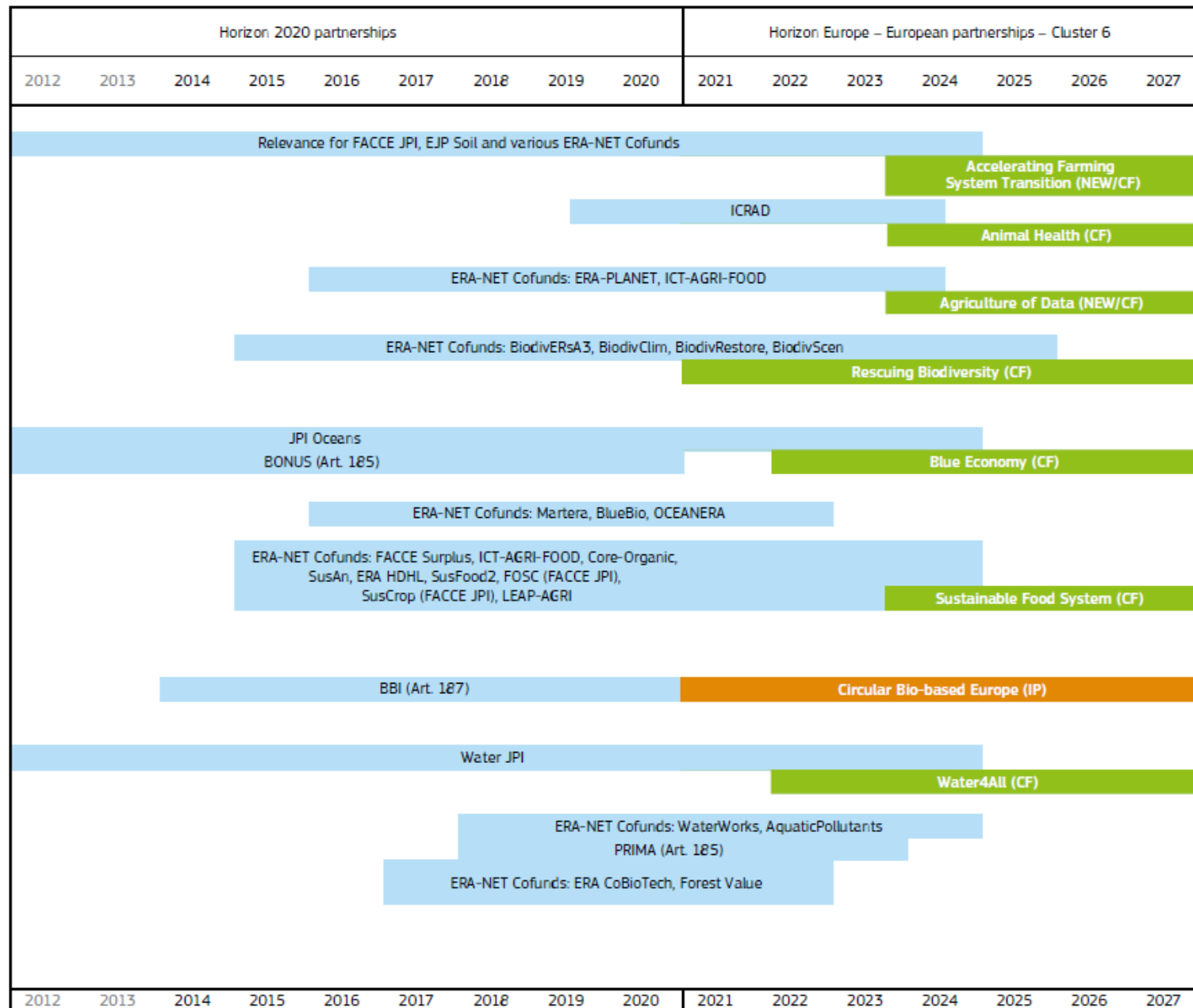






## L'evoluzione delle Partnership del CL6: da H2020 a HE

*In blu i precedenti ERANET e JPI presenti nella passata programmazione, alcuni ancora attivi*





## EU PARTNERSHIP | ELEMENTI FONDAMENTALI

- **Orientamento strategico:** contribuire in modo significativo al raggiungimento delle priorità politiche dell'UE (ad es. Green deal, digitalizzazione) e delle strategie correlate (ad es. strategia industriale, biodiversità)
- **Insieme comune di criteri** lungo il loro ciclo di vita, definiti nel regolamento Horizon Europe Articolo 8 & Annex III (selezione, monitoraggio, interruzione, etc.)
- **Condizioni chiave** per il lancio di una partnership:
  - Esistenza di un'Agenda/Roadmap strategica per la ricerca e l'innovazione (SRIA) per dimostrare la visione strategica comune dei partner
  - Impegno ex ante dei partner a lungo termine per mobilitare risorse e investimenti
- **Attuazione tramite programmi di lavoro annuali:** traduzione della Roadmap/SRIA in priorità e attività annuali, con inviti aperti a presentare proposte implementati da partenariati (eccezione: alcuni partenariati con organizzazioni governative (di ricerca) al loro centro)
- **Approccio sistemico:** attività che vadano oltre i soli progetti di R&I (promozione delle attività, creare legami con altri partenariati/fondi UE, etc.)

Le differenze principali tra i 49 partenariati europei di Horizon, saranno nella forma giuridica e nell'attuazione:

- *dai più semplici (Co-programmed)*
- *ai più complessi (Institutionalised)*



## Partenariati Europei Co-finanziati

- **Azioni simili in H2020:** : European Joint Programme and ERA-NET Cofund
- **Forma legale:** Grant Agreement (programme co-fund action) firmato tra il consorzio beneficiario e la Commissione (gestito d un Agenzia Esecutiva)
- **Implementazione:** Gli SM/SA elaborano un programma comune da attuare sotto la loro responsabilità. Esso riunisce i finanziamenti/risorse nazionali con il cofinanziamento dell'Unione.
- Tasso di finanziamento al 30% (fino al 50% in casi specific)
- Calls ed evaluazioni sono organizzate al livello centrale, mentre I beneficiari dei progetti selezionati vengono finanziati al livello nazionale (sulla base di regole selezionate dai partners)
- **E importante definire ex-ante:**
  - Tipo di partner necessario per formare il partenariato (consorzio)
  - Le parti interessate che definiscono le priorità → **ruolo dei ministeri!**
  - Stakeholder e gruppi mirati dalle attività del partenariato



## Partnership Co-finanziate nel 2021-22

### Partecipazione italiana (M€ per 7 anni)

Impegno MUR:  
**811 M€**,  
 di cui 372,5 M€  
 in cash  
 e 438,5 in kind

| Partnership  | cash         | in kind      | totale     |
|--|--------------|--------------|------------|
| EU-Africa Global Health Partnership                    | 10,5         | 6,5          | 17         |
| European partnership for Chemical risk assessment      | 0            | 25           | 25         |
| ERA for Health (Pre-clinical/clinical health research) | 40           | 24           | 64         |
| Transforming Health and Care Systems                   | 40           | 33           | 73         |
| High Performance Computing                             | 0            | 175          | 175        |
| Key Digital Technologies                               | 73           | 0            | 73         |
| European Metrology                                     | 49           | 0            | 49         |
| Clean Energy Transition                                | 50           | 30           | 80         |
| Driving Urban Transitions to a sustainable future      | 17           | 25           | 42         |
| Rescuing biodiversity to safeguard life on Earth       | 17           | 25           | 42         |
| Blue Oceans  | 17           | 20           | 37         |
| Water Security for the Planet                          | 17           | 25           | 42         |
| Innovative SMEs  | 35           | 0            | 35         |
| European Science Cloud (EOSC)                          | 7            | 50           | 57         |
| <b>Totale</b>  | <b>372,5</b> | <b>438,5</b> | <b>811</b> |



## Partenariati Europei Istituzionalizzati

- **Base legale:** Articolo 185 e Articolo 187 del TFEU
  - Richiedono la preparazione e l'adozione di una proposta legale della Commissione (incl. ex-ante impact assessment)
  - Una Decisione del Parlamento Europeo e del Consiglio (Art 185) / Regolamento del Consiglio (Art 187, EIT)
- **L'implementazione di questi partenariati e assegnata ad organi dell'Unione creati ad hoc** (Joint Undertakings, EIT KIC)
- Applicano le regole per la partecipazione di Horizon Europe
- Horizon Europe stabilisce requisiti elevati per questo tipo di partenariato, ad es:
  - *Attuati soltanto nel caso in cui le altre forme di partenariato non conseguirebbero gli obiettivi o non genererebbero gli impatti necessari previsti e se giustificato da una prospettiva a lungo termine e da un grado elevato di integrazione*
  - Gestione centralizzata dei contributi finanziari (salvo in casi debitamente giustificati)
  - Art. 185: Partecipazione obbligatoria di almeno 40% dei Stati Membri e Associati
  - Impone un contributo finanziario dai partners dell'Unione



| Title and type of partnership  | Private commitments (€ million) | Total MS/AC commitments (€ million) | Horizon Europe commitments (€ million) | Estimated total per partnership (€ million) |
|--|---------------------------------|-------------------------------------|--|---|
| <b>Institutionalised European Partnerships based on Articles 185 and 187 TFEU*</b> |                                 |                                     |  |   |
| Global Health EDCTP3   | - €                             | 455 €                               | 800 €                                  | <b>1.255 €</b>                              |
| Innovative Health Initiative (IHI)   | 1.500 €                         | N.A                                 | 1.200 €                                | <b>2.700 €</b>                              |
| Europe's Rail  | 880 €                           | N.A                                 | 600 €                                  | <b>1.480 €</b>                              |
| Single European Sky ATM Research 3 (SESAR 3)                                       | 1.085 €                         | N.A                                 | 600 €                                  | <b>1.685 €</b>                              |
| Clean Aviation   | 3.000 €                         | N.A                                 | 1.700 €                                | <b>4.700 €</b>                              |
| Clean Hydrogen   | 1.000 €                         | N.A                                 | 1.000 €                                | <b>2.000 €</b>                              |
| Circular bio-based Europe  | 1.000 €                         | N.A                                 | 1.000 €                                | <b>2.000 €</b>                              |
| Smart Networks and Services  | 1.000 €                         | N.A                                 | 900 €                                  | <b>1.900 €</b>                              |
| Key Digital Technologies (KDT)   | 3.517 €                         | 1.152 €                             | 1.800 €                                | <b>6.469 €</b>                              |
| EuroHPC  | - €                             | 1.448 €                             | 900 €                                  | <b>2.348 €</b>                              |
| Metrology  | N.A                             | 364 €                               | 300 €                                  | <b>664 €</b>                                |



## Co - programmed

- Divisione del lavoro

## Co- Funded

- Programma integrato con attuazione distribuita

## Institutionalised

- Programma integrato con implementazione centralizzata

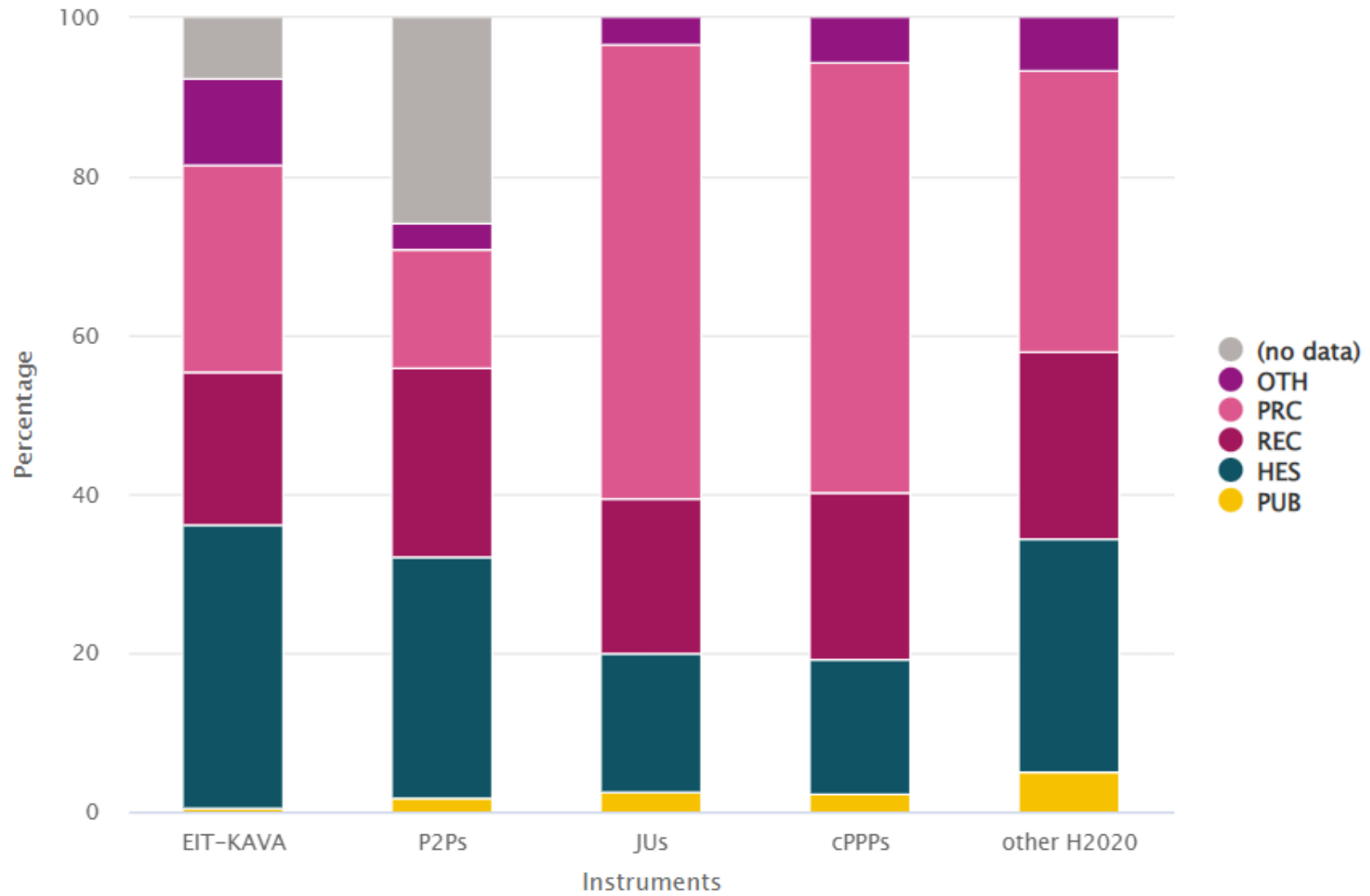
## COME ESSERE PARTE ATTIVA DELLE EP?

La partecipazione ai partenariati è possibile:

- ▣ aderendo come partner → *controparte EC*
- ▣ candidandosi agli inviti aperti pubblicati nell'ambito dei partenariati → *membro del consorzio come partner o coordinatore*
- ▣ partecipando ad attività di consultazione e consulenza dei partenariati → *membro dell'associazione/JU di interesse*



Types of project beneficiaries in projects supported by EIT KICs, JUs, and cPPPs



Highcharts.com

# MISSIONI

Soil health and food

Cancer



Climate-neutral and smart cities

Healthy oceans, seas, coastal and inland waters

Adaptation to climate change, including societal transformation



Le Mission includono un portafoglio di azioni - progetti di ricerca, misure di policy o iniziative legislative - dirette a raggiungere, entro un arco di tempo prestabilito, un obiettivo audace, misurabile e rilevante per la società

# Le missioni sono state lanciate a fine settembre 2021



European Commission - Press release



## Commission launches EU missions to tackle major challenges

Brussels, 29 September 2021

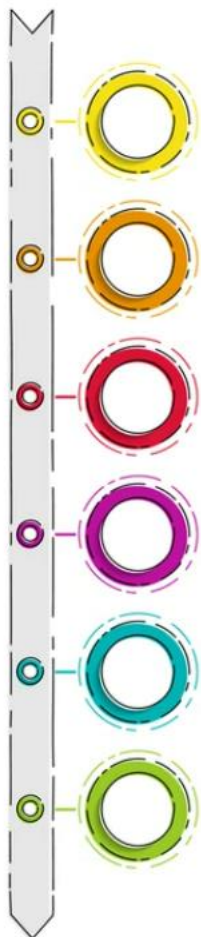
The Commission launched today five new [EU missions](#), a new and innovative way to work together and improve the lives of people in Europe and beyond. EU missions aim to tackle big challenges in health, climate and the environment, and to achieve ambitious and inspiring goals in these areas.

A novelty of [Horizon Europe](#) and also an original concept in EU policy, bringing together several Commission services under the authority of nine College members, missions will support research to deliver on the Commission's main priorities and find responses to some of the greatest challenges we are facing today: fighting cancer, adapting to climate change, protecting the ocean, seas and waters, living in greener cities and ensuring healthy soil and food. They are a new tool that includes a set of actions, such as research and innovation projects, policy measures and legislative initiatives, to achieve concrete goals with large societal impact and within a specified timeline. Five missions will aim to deliver solutions to key global challenges by 2030:

1. **Adaptation to Climate Change:** support at least 150 European regions and communities to become climate resilient by 2030;
2. **Cancer:** working with Europe's Beating Cancer Plan to improve the lives of more than 3 million people by 2030 through prevention, cure and solutions to live longer and better;
3. Restore our **Ocean and Waters** by 2030;
4. 100 **Climate-Neutral and Smart Cities** by 2030;
5. **A Soil Deal for Europe:** 100 living labs and lighthouses to lead the transition towards healthy soils by 2030.



## Cos'è successo nell'ultimo anno



- 📌 Proposte dei Mission board (settembre 2020, R&I days)
- 📌 Eventi nazionali e internazionali, coinvolgimento dei cittadini
- 📌 Da novembre 2020, fase preparatoria necessaria ad elaborare un **piano di implementazione** dettagliato per ciascuna missione (obiettivi, logica di intervento, azioni chiave da sostenere, strategia di investimento, indicatori di performance, ecc.)
- 📌 Pubblicazione del Programma di lavoro (giugno 2021) – versione molto molto parziale
- 📌 Lancio delle missioni con iniziativa politica della Commissione (settembre 2021)
- 📌 Pubblicazioni dei 5 piani di implementazione (settembre 2021)
- 📌 Primo aggiornamento del Programma di lavoro 2021-22 e pubblicazione delle prime azioni di R&I dedicate alle missioni (dicembre 2021)



# Perché le missioni?

## Lezioni apprese da Horizon 2020



Sostenere le innovazioni pionieristiche



Moltiplicare l'impatto attraverso un approccio orientato alle missioni e il coinvolgimento dei cittadini



Intensificare la cooperazione internazionale



Rafforzare l'apertura



Razionalizzare il panorama dei finanziamenti



Incoraggiare la partecipazione



## Novità principali di Horizon Europe

Consiglio europeo per l'innovazione

Missioni di R&I

Possibilità di associazione estese

Politica della scienza aperta

Nuovo approccio ai partenariati

Diffondere l'eccellenza





## Il modello

🏠 *We choose **to go to the Moon**. We choose to go to the Moon...We choose to go to the Moon **in this decade** and do the other things, not because they are easy, but because they are hard; because that goal will serve to **organize and measure the best of our energies and skills**, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one **we intend to win**, and the others, too.*



JFK, Address at Rice University on the Nation's Space Effort, 12/9/1962





# La base teorica



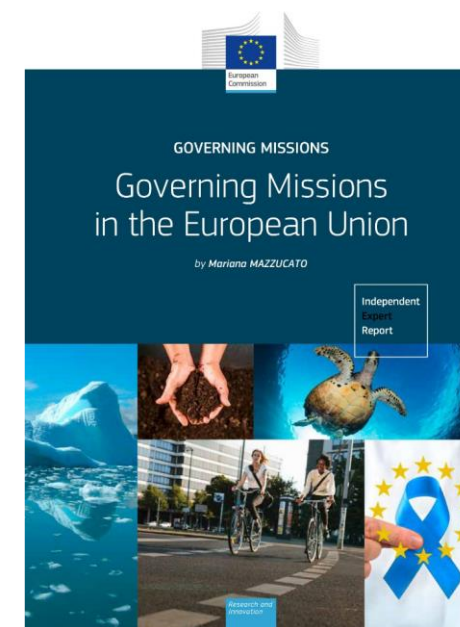
2017



2018



2019





# «A direction for change»

71 The ambition to achieve a **particular type of economic growth** is an admission that the underlying rate of technical change bringing about productivity growth has **not only a rate but also a direction**. Not all smart growth is inclusive, nor sustainable... it requires a **new justification of government intervention** that goes beyond the usual one of the state as “repair shop”

ESIR Memorandum



**Towards a Mission-Oriented Research and Innovation Policy in the European Union**

An ESIR Memorandum



Mission-oriented policies can be defined as **systemic public policies** that draw on frontier knowledge to attain **specific goals** or “**big science deployed to meet big problems**”. Missions provide a solution, an opportunity, and an approach to address the numerous challenges that people face in their daily lives.

Mariana Mazzucato



## Le Missioni in Horizon Europe

### Missioni di R&I

Impatto = maggiore efficacia degli investimenti in R&S nel medio-lungo termine

Visibilità = migliore correlazione tra la R&I europea, la società e le esigenze dei cittadini

Una missione è un portafoglio di azioni **interdisciplinari** volte a conseguire entro un **periodo prestabilito** un **obiettivo audace, stimolante** e misurabile, che abbiano un **impatto sulla società** e sull'elaborazione delle politiche e siano rilevanti per una parte significativa della **popolazione** europea e un ampio spettro di cittadini europei.

Horizon Europe definisce le caratteristiche della missione e gli elementi di *governance*.  
Le missioni specifiche saranno **programmate nell'ambito del pilastro II** "Sfide globali e competitività industriale europea" (attingendo ai contributi di altri pilastri)



# I cinque settori

Adaptation to climate change,  
including societal transformation

Healthy oceans,  
seas, coastal and inland  
waters



## 5 Mission areas



Cancer

Climate-neutral  
and smart cities



Soil health  
and food

## Missioni in Horizon Europe – altre caratteristiche



🏷️ Ispirazione agli Obiettivi di Sviluppo Sostenibile



🏷️ Inserimento in un quadro di policy europeo più ampio (*Green Deal, Industrial Strategy, Beating Cancer Plan, Biodiversity strategy...*)



🏷️ Influenzare le politiche nazionali degli Stati membri e dei paesi terzi (dimensione internazionale)



🏷️ Sinergie con altri strumenti di Horizon Europe e ulteriori finanziamenti da altri programmi europei, nazionali e regionali (e.g. Recovery fund)



🏷️ **Budget dedicato in HE** - Massimo il 10% del bilancio del pilastro II fino al 2023 (possibile aumento dal 2024 se valutazione positiva)



## 5 EU Missions

### What a EU mission is NOT

Missions are an entirely new approach based on **portfolios of actions** working towards broadly defined goals, not be confused with existing methods and instruments.

Missions are not the same as:

- R&I Programmes**
- R&I Partnerships**
- Focus Areas** from Horizon 2020
- Single projects or topics
- Horizon Europe **Clusters**

### Implementing Missions

#### Missions may involve:

- Launch **specific calls** in Horizon Europe and other programmes
- Identify specific actions to change/ improve **policy context** critical for missions success
- Make use of the appropriate **partnerships**
- Mobilise **structural funds**
- Establish the appropriate **links with national programmes**
- Combine efforts with **third country**

There is no fixed budget for each mission. Article 7 of the draft HE Regulation stipulates that during the first three years of the programme, a **maximum of 10%** of the **annual budget of Pillar II** shall be programmed through specific calls for implementing the missions.

## Le cinque missioni... dalle proposte dei *board*



🏠 **Adaptation to Climate Change:** support at least 150 European regions and communities to become climate resilient by 2030



🏠 **Cancer:** working with Europe's Beating Cancer Plan to improve the lives of more than 3 million people by 2030 through prevention, cure and solutions to live longer and better



🏠 Restore our **Ocean and Waters** by 2030



🏠 100 **Climate-Neutral and Smart Cities** by 2030



🏠 **A Soil Deal for Europe:** 100 living labs and lighthouses to lead the transition towards healthy soils by 2030





# Cosa c'è dentro un piano di implementazione



(September 2021)

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# Adaptation to Climate Change: support at least 150 European regions and communities to become climate resilient by 2030.

## The importance of climate adaptation

Climate adaptation is the process of adjustment to actual or expected climate and its effects. The mission will support this process by connecting citizens with science and public policy.

## Why this mission area was chosen

A mission in this area will help maximise the impact of the EU's support to research and innovation and demonstrate its relevance for society and citizens.

Its focus will be on solutions and preparedness for the impact of climate change to protect lives and assets. It will include behavioural changes and social aspects by addressing new communities beyond usual stakeholders, which help lead to a societal transformation.





## Cancer: working with Europe's Beating Cancer Plan to improve the lives of more than 3 million people by 2030 through prevention, cure and solutions to live longer and better

Cancer affects everyone regardless of age, gender or social status and represents a tremendous burden for patients, families, and societies at large.

If no further action is taken, the number of people newly diagnosed with cancer every year in Europe will increase from the current 3.5 million to more than 4.3 million by 2035.

A mission in this area will help set **common goals** aiming to **reverse these frightening trends** in cancer.

By joining efforts across Europe, the Mission together with **Europe's Beating Cancer Plan** will prevent cancer cases, allow for earlier diagnosis, reduce suffering and improve cancer patients' quality of life during and after cancer treatment.





# Restore our Ocean and Waters by 2030

Man-made, climate-driven changes are putting our ocean and waters and consequently our societies at a serious risk.

The mission's new, systemic approach will address the ocean and waters as one and play a key role in achieving climate neutrality and restoring nature.

The mission will help achieve the EU objectives of protecting **30% of the EU's sea area** as well as **restoring marine eco-systems** and 25.000 km of **free flowing rivers**, prevent and eliminate pollution by **reducing plastic litter at sea**, nutrient losses and use of chemical pesticides by 50% and make the blue economy climate-neutral and circular with net-zero maritime emissions.





# 100 Climate-Neutral and Smart Cities by 2030

Cities play a pivotal role in achieving **climate neutrality by 2050**, the goal of the European Green Deal. They take up only 4% of the EU's land area, but they are **home to 75% of EU citizens**. Furthermore, cities consume over 65% of the world's energy and account for more than 70% of global CO2 emissions.

European cities can substantially contribute to the Green Deal target of reducing emissions by 55% by 2030.

## **Aims of the mission**

The Cities Mission will involve local authorities, citizens, businesses, investors as well as regional and national authorities to

- 1 Deliver 100 climate-neutral and smart cities by 2030**
- 2. Ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050**





# A Soil Deal for Europe: 100 living labs and lighthouses to lead the transition towards healthy soils by 2030

**Soils are the basis of 95%** of our food and other essential ecosystem services such as clean water, biodiversity and climate regulation. However, 60-70% of soils in the EU are considered to be “unhealthy”, making us more vulnerable to food insecurity and extreme weather events.

The mission will engage with people and create effective partnerships across sectors and territories to protect and restore soils in Europe and beyond.

The mission aims at **leading the transition towards healthy soils** by

- funding an ambitious research and innovation programme with a strong social science component
- putting in place an effective network of **100 living laboratories and lighthouses** to co-create knowledge, test solutions and demonstrate their value in real-life conditions

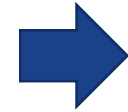
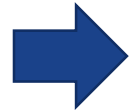




# La governance europea



*5 Mission Board + 5 Assemblies di esperti*



## STATI MEMBRI



*Comitato di Programma di Horizon Europe - Configurazione Strategica*



*Coinvolgimento dei cittadini*



*5 Mission Manager*



*5 sottogruppi / working group del Comitato di Programma*





# Cosa fanno i Mission Manager

In February 2021, mission managers were appointed in the European Commission to lead EU Missions and be their public face.

The mission managers are working closely with the deputy mission managers, most of whom are based in Directorate General for Research and Innovation: John Bell (Missions Climate and Oceans), Rosalinde Van der Vlies (Mission Cities), Peter Wehrheim (Mission Soil), and John F. Ryan (Mission Cancer) from Directorate General for Health and Food Safety.



**Clara de la Torre**

Deputy Director-General at Directorate General for Climate Action (DG CLIMA)

Mission manager for the Adaptation to Climate Change mission



**Joanna Drake**

Deputy Director-General at Directorate-General for Research and Innovation (DG RTD)

Mission manager for the Cancer mission



**Christos Economou**

Acting Director at Directorate-General for Maritime Affairs Fisheries (DG MARE)

Mission manager for the Restore our Ocean and Waters mission



**Matthew Baldwin**

Deputy Director-General at Directorate-General for Mobility and Transport (DG MOVE)

Mission manager for the Climate-Neutral and Smart Cities mission



**Nathalie Sauze-Vandevyver**

Director at Directorate General for Agriculture and Rural Development (DG AGRI)

Mission manager for the Soil Deal for Europe mission

# I vecchi e i nuovi Mission board

- 7 In 2019, five Mission Boards were formed to help specify, design and start the implementation of Missions for Horizon Europe and their mandate ends at the end of 2021. Their formation was the result of an open call for expressions of interest.
- 7 Each Mission Board consists of up to 15 experts coming from fields like innovation, business, science, farming, civil society, communications and media. The new Mission Boards will play a vital role in advising on the implementation of the Missions, building on the work of the first phase Mission Boards.
- 7 Each mission area was also supported by the Missions' design phase by an assembly that gathered a larger number of high-level experts. The assemblies provided an additional pool of ideas, knowledge and expertise that will be actively called upon to contribute to the success of the missions.

## Connie Hedegaard

Adaptation to Climate Change including Societal Transformation



Served as European Commissioner for Climate Action from 2010 to 2014, during which time she led the negotiations towards the adoption of the EU 2030 Climate and Energy Framework and represented the EU in the international climate negotiations.

[Read the biography](#)

## Walter Ricciardi

Cancer



In October 2019 Professor Ricciardi replaced the originally named chair, Professor Harald zur Hausen.

[Read the biography](#)

## Pascal Lamy

Healthy Oceans, Seas, Coastal and inland Waters

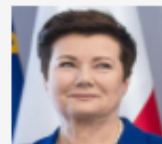


Former European Commissioner for Trade and Director General of the World Trade Organisation from 2005-2013.

[Read the biography](#)

## Hanna Gronkiewicz-Waltz

Climate-Neutral and Smart Cities



Former chair of the Central Bank of Poland, also served as Mayor of Warsaw.

[Read the biography](#)

## Cees Veerman

Soil health and Food



Dutch Minister of Agriculture from 2002 to 2007 and was also President of the EU Council of Agriculture Ministers.

[Read the biography](#)





NEWS | 5 January 2022 | Brussels, Belgium | Research and Innovation

## Commission is looking for top experts to advise on EU Missions

The European Commission launched today a [call for experts](#) to join the five Mission Boards, with the role of advising on the implementation of the [EU Missions](#). The five Mission Boards will have up to 15 independent top experts for each Mission.

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth, said:

*“This call for new Mission Boards members is the opportunity to take on new skills and bring together top experts to support the Missions. They will help inspire citizens and advise on the implementation plans. Together we will make our Missions a success.”*

The main tasks of the new Mission Boards will be to promote the EU Missions by raising awareness of the citizens and advice on the actions of the Mission’s implementation plan. The Mission Boards resulting from this call for application will build on the work of the first phase Mission Boards (in charge until December 2021).

The Mission Boards advise on the full implementation of the five EU Missions working on:



# I rappresentanti e gli esperti nazionali (Comitologia HE)

|                   |                |                 |
|-------------------|----------------|-----------------|
| Raffaele Liberali | Rappresentante | HEU - Strategic |
| Fabio Donato      | Esperto        | HEU - Strategic |
| Vania Virgili     | Esperto        | HEU - Strategic |
| Fabio Fava        | Esperto        | all Missions    |



*Comitato di Programma di Horizon Europe - Configurazione Strategica*

|                          |                  |  |
|--------------------------|------------------|--|
| Mysiak Jaroslav          | Membro del Board | mission: ADAPTATION TO CLIMATE CHANGE INC  |
| Walter Ricciardi         | Chair del Board  | mission: CANCER                            |
| Annalisa Boni            | Membro del Board | mission: CLIMATE-NEUTRAL AND SMART CITIES  |
| Maria Cristina Pedicchio | Membro del Board | mission: HEALTHY OCEANS, SEAS, COASTAL AND |
| Catia Bastioli           | Membro del Board | mission: SOIL AND HEALTH FOOD              |



*5 Mission Board + 5 Assemblee di esperti*

|                      |                        |  |
|----------------------|------------------------|--|
| Alessandro Amato     | Esperto ad hoc meeting | mission: ADAPTATION TO CLIMATE CHANGE INC  |
| Antonio Navarra      | Esperto ad hoc meeting | mission: ADAPTATION TO CLIMATE CHANGE INC  |
| Giovanni Apolone     | Esperto ad hoc meeting | mission: CANCER                            |
| Stefania Boccia      | Esperto ad hoc meeting | mission: CANCER                            |
| Carlo Alberto Nucci  | Esperto ad hoc meeting | mission: CLIMATE-NEUTRAL AND SMART CITIES  |
| Gelsomina Pappalardo | Esperto ad hoc meeting | mission: CLIMATE-NEUTRAL AND SMART CITIES  |
| Franco Regoli        | Esperto ad hoc meeting | mission: HEALTHY OCEANS, SEAS, COASTAL AND |
| Gianluca Sarà        | Esperto ad hoc meeting | mission: HEALTHY OCEANS, SEAS, COASTAL AND |
| Angelo Riccaboni     | Esperto ad hoc meeting | mission: SOIL AND HEALTH FOOD              |
| Pier Paolo Roggero   | Esperto ad hoc meeting | mission: SOIL AND HEALTH FOOD              |



*5 sottogruppi / working group del Comitato di Programma*



# II Work Programme 2021-22



EN

Horizon Europe

Work Programme 2021-2022

12. Missions

(European Commission Decision C(2021)9128 of 15 December)

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-12-missions\\_horizon-2021-2022\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-12-missions_horizon-2021-2022_en.pdf)

Missions

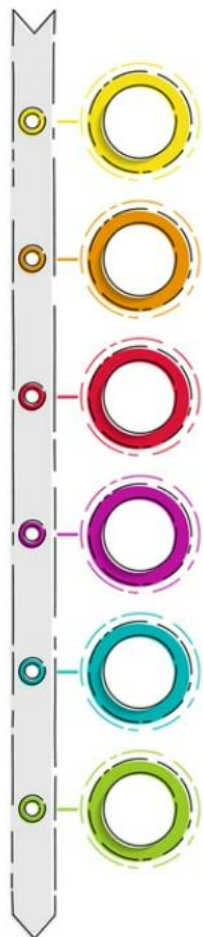
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- ▣ Scadenze della prima tornata di bandi a marzo / aprile 2022
- ▣ Secondo aggiornamento del Programma di lavoro 2021-22 (11 maggio 2022)
- ▣ Scadenze della seconda tornata di bandi (settembre/ottobre 2022)
- ▣ Pubblicazione del Programma di lavoro 2023-24 (novembre 2022), i.e. bandi delle Missions con date di apertura e di scadenza nel 2023 e nel 2024 (autunno 2022)



## II WP 2023-24

**Scadenze:**

*Aprile – Settembre 2023*

*Horizon Europe - Work Programme 2023-2024  
Missions*

EN

**Horizon Europe**

**Work Programme 2023-2024**

*12. Missions*

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# EU Mission | WP 23 (29 topic)



## Clima Draft WP 23

Opening Jan23- Deadline: **20 Sep 2023**

# topic: **3**

Budget: **82,81** mln €

## Cancer Draft WP 23

Opening Jan23-Deadline: **12 aprile 2023**

# topic: **4**

Budget: **110, 68** mln €



## EU Mission | WP 23 (29 topic)



### Ocean and Waters Draft WP 23

Opening Jan23–Deadline: **20 Sep 2023**

# topic: **11**

Budget: **87,7** mln €



### Cities Draft WP 23

Deadline: **27 aprile e 6 Sep 2023**

# topic: **2**

Budget: **75,00** mln €



# EU Mission | WP 23 (29 topic)



Soil Draft WP 23

Opening: Jan23-Deadline: **20 Sep 2023**

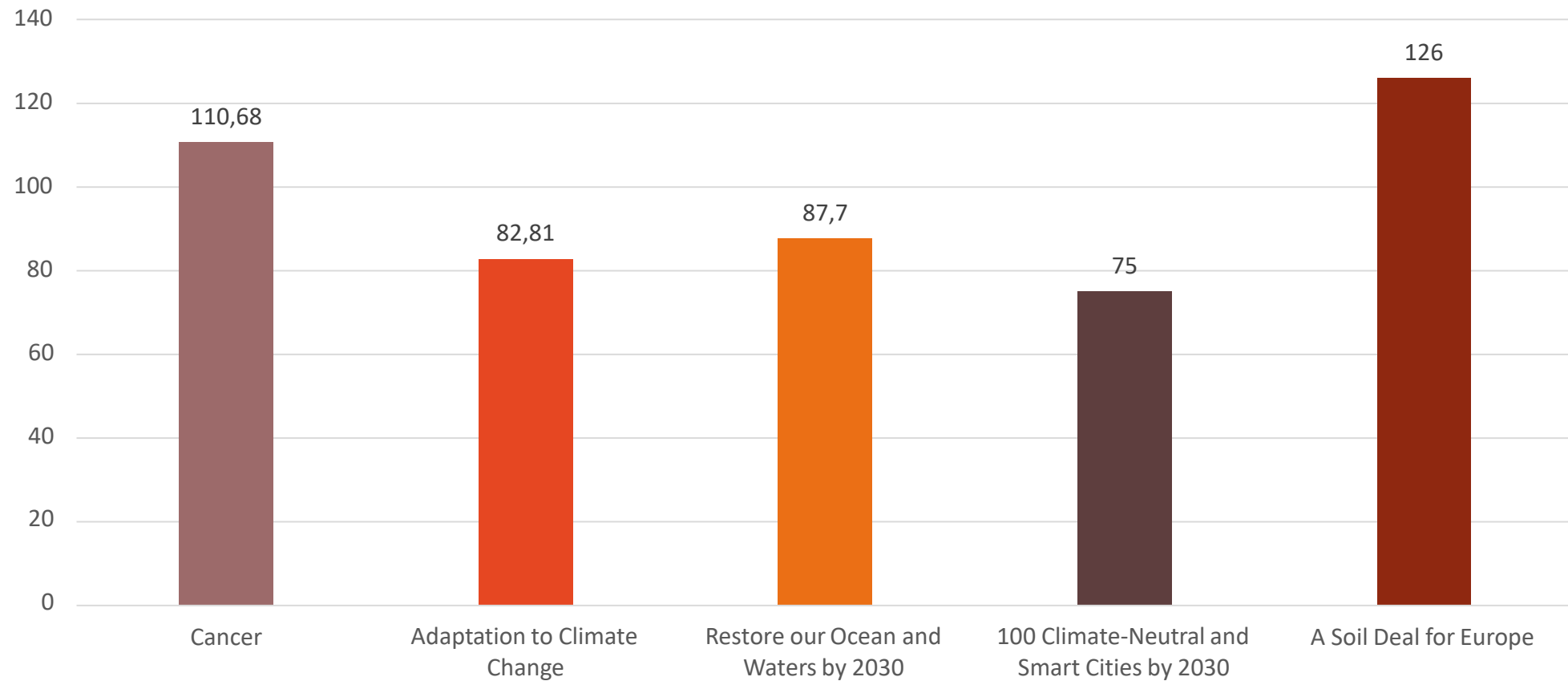
# topic: **9**

Budget: **126** mln €





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# WP2023- 2024 – Preliminary information

| Topics   | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>5</sup> | Indicative number of projects expected to be funded |
|--|----------------|-----------------------|---|---|
|  |                | 2023                  |   |   |
| Opening: 10 Jan 2023<br>Deadline(s): 20 Sep 2023 |                |                       |   |   |
| HORIZON-MISS-2023-CLIMA-01-01                    | IA             | 30.00 <sup>6</sup>    | 8.00 to 10.00   | 3   |
| HORIZON-MISS-2023-CLIMA-01-02                    | IA             | 34.81 <sup>7</sup>    | 8.00 to 11.00   | 3   |
| HORIZON-MISS-2023-CLIMA-01-03                    | IA             | 18.00 <sup>8</sup>    | 4.50 to 6.00  | 3   |
| Overall indicative budget                        |                | 82.81                 |   |   |



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**Call - Research and Innovation actions supporting the implementation of the Mission on Cancer**

***HORIZON-MISS-2023-CANCER-01***

**Conditions for the Call**

Indicative budget(s)<sup>30</sup>

| Topics   | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>31</sup> | Indicative number of projects expected to be funded |
|--|----------------|-----------------------|--|---|
|  |                | 2023                  |  |   |
| Opening: 12 Jan 2023<br>Deadline(s): 12 Apr 2023 |                |                       |  |   |
| HORIZON-MISS-2023-CANCER-01-01                   | RIA            | 36.68 <sup>32</sup>   | 7.00 to 12.00  | 4   |
| HORIZON-MISS-2023-CANCER-01-02                   | RIA            | 25.00 <sup>33</sup>   | 4.00 to 6.00   | 5   |
| HORIZON-MISS-2023-CANCER-01-03                   | RIA            | 43.00 <sup>34</sup>   | 6.00 to 8.00   | 7   |
| HORIZON-MISS-2023-CANCER-01-04                   | IA             | 6.00 <sup>35</sup>    | Around 6.00  | 1   |
| Overall indicative budget                        |                | 110.68                |  |   |



|  |           |
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*HORIZON-MISS-2023-CIT-01*

**Conditions for the Call**

Indicative budget(s)<sup>129</sup>

| Topics   | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>130</sup> | Indicative number of projects expected to be funded |
|--|----------------|-----------------------|---|---|
|  |                | 2023                  |   |   |
| Opening: 10 Jan 2023<br>Deadline(s): 27 Apr 2023 |                |                       |   |   |
| HORIZON-MISS-2023-CIT-01-01                      | IA             | 50.00 <sup>131</sup>  | Around 25.00  | 2   |
| HORIZON-MISS-2023-CIT-01-02                      | IA             | 20.00 <sup>132</sup>  | 6.00 to 7.00  | 3   |
| Overall indicative budget                        |                | 70.00                 |   |   |





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| Topics | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>83</sup> | Indicative number of projects expected to be funded |
|--------|----------------|-----------------------|--|---|
|        |                | 2023                  |  |   |

Opening: 17 Jan 2023  
Deadline(s): 20 Sep 2023

|                               |    |                     |             |   |
|-------------------------------|----|---------------------|-------------|---|
| HORIZON-MISS-2023-OCEAN-01-01 | IA | 8.80 <sup>84</sup>  | Around 8.80 | 1 |
| HORIZON-MISS-2023-OCEAN-01-02 | IA | 17.00 <sup>85</sup> | Around 8.50 | 2 |
| HORIZON-MISS-2023-OCEAN-01-03 | IA | 16.00 <sup>86</sup> | Around 8.00 | 2 |
| HORIZON-MISS-2023-OCEAN-01-04 | IA | 12.00 <sup>87</sup> | Around 4.00 | 3 |

|                               |     |                     |             |   |
|-------------------------------|-----|---------------------|-------------|---|
| HORIZON-MISS-2023-OCEAN-01-05 | IA  | 12.00 <sup>88</sup> | Around 4.00 | 3 |
| HORIZON-MISS-2023-OCEAN-01-06 | RIA | 4.50 <sup>89</sup>  | Around 2.25 | 2 |
| HORIZON-MISS-2023-OCEAN-01-07 | RIA | 1.40 <sup>90</sup>  | Around 1.40 | 1 |
| HORIZON-MISS-2023-OCEAN-01-08 | RIA | 10.00 <sup>91</sup> | Around 3.30 | 3 |
| HORIZON-MISS-2023-OCEAN-01-09 | CSA | 2.00 <sup>92</sup>  | Around 2.00 | 1 |
| HORIZON-MISS-2023-OCEAN-01-10 | CSA | 2.00 <sup>93</sup>  | Around 2.00 | 1 |
| HORIZON-MISS-2023-OCEAN-01-11 | CSA | 2.00 <sup>94</sup>  | Around 2.00 | 1 |
| Overall indicative budget     |     | 87.70               |             |   |



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| Topics   | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>172</sup> | Indicative number of projects expected to be funded |
|--|----------------|-----------------------|---|---|
|  |                | 2023                  |   |   |
| Opening: 17 Jan 2023<br>Deadline(s): 20 Sep 2023 |                |                       |   |   |
| HORIZON-MISS-2023-SOIL-01-01                     | RIA            | 12.00 <sup>173</sup>  | Around 6.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-02                     | RIA            | 14.00 <sup>174</sup>  | Around 7.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-03                     | IA             | 12.00 <sup>175</sup>  | Around 6.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-04                     | IA             | 14.00 <sup>176</sup>  | Around 7.00   | 2   |

|                              |     |                      |              |   |
|------------------------------|-----|----------------------|--------------|---|
| HORIZON-MISS-2023-SOIL-01-05 | IA  | 13.00 <sup>177</sup> | Around 6.50  | 2 |
| HORIZON-MISS-2023-SOIL-01-06 | RIA | 7.00 <sup>178</sup>  | Around 7.00  | 1 |
| HORIZON-MISS-2023-SOIL-01-07 | CSA | 6.00 <sup>179</sup>  | Around 6.00  | 1 |
| HORIZON-MISS-2023-SOIL-01-08 | RIA | 36.00 <sup>180</sup> | Around 12.00 | 3 |
| HORIZON-MISS-2023-SOIL-01-09 | RIA | 12.00 <sup>181</sup> | Around 12.00 | 1 |
| Overall indicative budget    |     | 126.00               |              |   |



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# REGOLE DI PARTECIPAZIONE



## Regole di partecipazione

**REGOLAMENTO (UE) 2021/695 DEL  
PARLAMENTO EUROPEO E DEL CONSIGLIO  
che istituisce il programma quadro di ricerca e  
innovazione Orizzonte Europa e ne stabilisce le  
norme di partecipazione e diffusione, e che abroga  
i regolamenti (UE) n. 1290/2013 e (UE)  
n. 1291/2013**







## Regole di partecipazione

### Art. 22, comma 1 – Regolamento Horizon Europe

*“Qualsiasi soggetto giuridico, indipendentemente dal luogo in cui è stabilito e compresi i soggetti giuridici dei paesi terzi non associati o delle organizzazioni internazionali, può partecipare alle azioni nell'ambito del programma, purché siano soddisfatte le condizioni stabilite nel presente regolamento unitamente a eventuali condizioni stabilite nel programma di lavoro o nell'invito a presentare proposte..”*

**Soggetto giuridico:**  
persone fisiche,  
persone giuridiche,  
entità senza  
personalità giuridica.



indipendentemente dal luogo  
di stabilimento.





## Regole di partecipazione

Art. 22, comma 2, Regolamento Horizon Europe

*“Tranne in casi debitamente giustificati in cui il programma di lavoro preveda diversamente, i soggetti giuridici che fanno parte di un consorzio sono ammissibili alla partecipazione ad azioni nell'ambito del programma purché il **consorzio** comprenda:*

- a) **almeno un soggetto giuridico indipendente stabilito in uno Stato membro; e;***
- b) **almeno altri due soggetti giuridici indipendenti, ciascuno stabilito in diversi Stati membri o paesi associati.”***

Condizioni minime:



Costituzione di un consorzio composto da almeno 3 soggetti indipendenti stabiliti in 3 diversi Stati membri o associati. Almeno uno stabilito in uno Stato membro



## International Cooperation

### International Cooperation

Tackling the global challenges of society together; access to the best talent, skills and resources in the world; greater demand and supply of innovative solutions

### Opening of the Association towards:

- Third countries with excellent scientific, technological and innovative capabilities
- Taking into account the objective of promoting economic growth in Europe through innovation
- General openness to international participation
- Intensification of targeted actions (flagship initiatives, joint calls, etc.)



## Regole di partecipazione

### Art. 22, comma 5, Regolamento Horizon Europe

*«Per le azioni collegate alle risorse strategiche, agli interessi, all'autonomia o alla sicurezza dell'Unione, il programma di lavoro può prevedere che la partecipazione sia limitata ai soggetti giuridici stabiliti solo negli Stati membri o ai soggetti giuridici stabiliti in paesi associati o altri paesi terzi specificati in aggiunta agli Stati membri. Ogni limitazione della partecipazione dei soggetti giuridici stabiliti in paesi associati che sono membri del SEE deve essere conforme ai termini e alle condizioni dell'accordo sullo Spazio economico europeo.*

*Per motivi debitamente giustificati ed eccezionali, al fine di garantire la tutela degli interessi strategici dell'Unione e dei suoi Stati membri, il programma di lavoro può anche escludere da singoli inviti a presentare proposte la partecipazione di soggetti giuridici stabiliti nell'Unione o in paesi associati direttamente o indirettamente controllati da paesi terzi non associati o da soggetti giuridici di paesi terzi non associati, o subordinare la loro partecipazione alle condizioni stabilite nel programma di lavoro.*



## Articolo 16 Paesi terzi associati al programma

1. Il programma è aperto all'associazione dei seguenti paesi terzi (paesi associati):
  - a) i membri dell'Associazione europea di libero scambio che sono membri del **SEE**, conformemente alle condizioni stabilite nell'accordo sullo Spazio economico europeo;
  - b) i **paesi in via di adesione**, i **paesi candidati e potenziali candidati**, conformemente ai principi e alle condizioni generali per la partecipazione di tali paesi ai programmi dell'Unione stabiliti nei rispettivi accordi quadro e nelle rispettive decisioni dei consigli di associazione o in accordi analoghi e alle condizioni specifiche stabilite negli accordi tra l'Unione e tali paesi;
  - c) i **paesi interessati dalla politica europea di vicinato**, conformemente ai principi e alle condizioni generali per la partecipazione di tali paesi ai programmi dell'Unione stabiliti nei rispettivi accordi quadro e nelle rispettive decisioni dei consigli di associazione o in accordi analoghi e alle condizioni specifiche stabilite negli accordi tra l'Unione e tali paesi;



## Articolo 16 Paesi terzi associati al programma



d) i paesi terzi e i territori che soddisfano tutti i seguenti criteri:

- i) possesso di una buona capacità in campo scientifico, tecnologico e di innovazione;
- ii) impegno a favore di un'economia di mercato aperta regolamentata, compreso un trattamento equo e giusto dei diritti di proprietà intellettuale, e il rispetto dei diritti umani, con il sostegno di istituzioni democratiche;
- iii) promozione attiva di politiche intese a migliorare il benessere economico e sociale dei cittadini.

## Associazione dei paesi terzi

- Impegno politico della CE ad assicurare un maggiore coinvolgimento degli Stati membri nella negoziazione degli accordi di associazione
- General Annexes WP *“At the date of the publication of the work programme, there are no countries associated to Horizon Europe. Considering the Union’s interest to retain, in principle, relations with the countries associated to Horizon 2020, most third countries associated to Horizon 2020 are expected to be associated to Horizon Europe with an intention to secure uninterrupted continuity between Horizon 2020 and Horizon Europe. In addition, other third countries can also become associated to Horizon Europe during the programme. **For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.**”*



1. Albania
2. Armenia
3. Bosnia and Herzegovina
4. Faroe Islands
5. Georgia
6. Iceland
7. Israel
8. Kosovo<sup>8</sup>
9. Moldova
10. Montenegro
11. Morocco
12. North Macedonia
13. Norway
14. Serbia
15. Tunisia
16. Turkey
17. Ukraine
18. United Kingdom<sup>9</sup>

### COUNTRIES ASSOCIATED TO HORIZON EUROPE:

Albania, Armenia, Bosnia and Herzegovina, Georgia, Iceland, Israel, Kosovo, Moldova, Montenegro, North Macedonia, Norway, Serbia, Tunisia, Turkey .

(Luglio 2022)



## UK e HE

- ↗ *The UK is still officially a country seeking association to Horizon Europe (see [List of Participating Countries in Horizon Europe](#)). As such, **UK organisations seeking to participate in Horizon Europe projects should be included as potential beneficiaries in all proposals** – NOT associate partners (see [General Annexes](#) page 7).*
- ↗
- ↗ *After proposal evaluation by the European Commission, if the UK has not become an associate country by the time of grant agreement signature, the status of UK participants in proposals should be changed from beneficiary to associate partner and the UK government will then fund the UK organisations through UKRI (see [Horizon Europe Guarantee Guidance](#)). If UK organisations have not been included in proposals as potential beneficiaries, they will be unable to access this guaranteed funding, so it is very important to get this correct at the proposal stage. This guarantee currently applies to all Horizon Europe calls with a submission date before December 31st 2022 but this is under review and may be extended if necessary.*
- ↗
- ↗ *If the UK **does not** associate to Horizon Europe then the UK government has committed to fund UK organisations' participation as a Third Country for all eligible UK entities participating in any such consortia signing grant agreements before 31 March 2025 (see [Policy Paper](#) published 20 July). At the moment, this does not apply as the UK is still seeking association to the programme.*





## Regole di finanziamento

**REGOLAMENTO (UE) 2021/695 DEL  
PARLAMENTO EUROPEO E DEL CONSIGLIO  
che istituisce il programma quadro di ricerca e  
innovazione Orizzonte Europa e ne stabilisce le  
norme di partecipazione e diffusione, e che abroga  
i regolamenti (UE) n. 1290/2013 e (UE)  
n. 1291/2013**








## Regole di finanziamento

### ☞ Soggetti eleggibili al finanziamento – art. 23

- Stabiliti in uno Stato membro o Paese associato -  
> **Regola generale**
- Paesi a basso o medio reddito 
- Altri soggetti non stabiliti in uno Stato membro o paese associato possono essere finanziati se:
  - (a) E' previsto nel Work Programme;
  - (b) La Commissione ritiene che la partecipazione dell'ente è essenziale per l'implementazione dell'azione (*per particolari competenze o expertise, accesso alle infrastrutture di ricerca, accesso a particolari dati, accesso a particolari ambienti geografici*)

Afghanistan, Algeria, Angola, Argentina, Azerbaijan; Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi; Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Colombia, Comoros, Congo (Democratic Republic), Congo (Republic), Costa Rica, Côte d'Ivoire, Cuba ;Djibouti, Dominica, Dominican Republic ; Ecuador, Egypt (Arab Republic), El Salvador, Equatorial Guinea, Eritrea, Eswatini, Ethiopia; Fiji; Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana; Haiti, Honduras; Indonesia, Iran (Islamic Republic), Iraq; Jamaica, Jordan; Kazakhstan, Kenya, Kiribati, Korea (Democratic People's Republic), Kyrgyz Republic; Lao (People's Democratic Republic), Lebanon, Lesotho, Liberia, Libya; Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia (Federated States), Mongolia, Mozambique, Myanmar; Namibia, Nepal, Nicaragua, Niger, Nigeria; Pakistan, Palestine, Papua New Guinea, Panama, Paraguay, Peru, Philippines Rwanda; Samoa, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Syrian Arab Republic; Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Turkmenistan, Tuvalu; Uganda, Uzbekistan; Vanuatu, Venezuela (Bolivarian Republic), Vietnam; Yemen Republic; Zambia, Zimbabwe.



## Activities eligible for funding – Type of actions

Research and innovation action (RIA)

Activities to establish new knowledge or to explore the feasibility of a new or improved technology, product, process, service or solution.

Innovation action (IA)

Activities to produce plans and arrangements or designs for new, altered or improved products, processes or services.

Coordination and support actions (CSA)

Activities that contribute to the objectives of Horizon Europe. This excludes R&I activities, except for 'Widening participation and spreading excellence'

Programme co-fund actions (CoFund)

A programme of activities established or implemented by legal entities managing or funding R&I programmes, other than EU funding bodies.

Innovation and market deployment actions (IMDA)

Activities that embed an innovation action and other activities necessary to deploy an innovation on the market. (EIC)

Training and mobility actions (TMA)

Activities that aim to improve the skills, knowledge and career prospects of researchers, based on mobility between countries and, if relevant, between sectors or disciplines. (MSCA)

Pre-commercial procurement actions/ (PCP)

Activities that aim to help a buyers' group to strengthen the public procurement of research, development, validation and, possibly, the first deployment of new solutions

Public procurement of innovative solutions actions (PPI)

Activities that aim to strengthen the ability of a buyers' group to deploy innovative solutions early

## The most common eligible activities

↗ Research and innovation actions (RIA)

↗ Innovation actions (IA)

↗ Coordination and support actions (CSA)

➔ The type of action is specified in the call condition



# Finanziamento

## 📌 Funding rates

|                |  | Types of action            |   |  |
|----------------|--|----------------------------|---|--|
|                |  | IA<br>(Innovation Actions) | RIA<br>(Research and Innovation<br>Actions) | CSA<br>(Coordination and support<br>actions) |
| Profit         |  | 70 %                       | 100 %                                       | 100 %  |
| Non for profit |  | 100 %                      | 100 %                                       | 100 %  |



# Funding rates in Horizon Europe

## Funding rates

| Type of Action                                    | Funding rate   |
|---|--|
| Research and innovation action                    | 100%   |
| Innovation action                                 | 70% (except for non-profit legal entities, where a rate of up to 100% applies) |
| Coordination and support action                   | 100%   |
| Programme co-fund action                          | Between 30% and 70%  |
| Innovation and market deployment                  | 70% (except for non-profit legal entities, where a rate of up to 100% applies) |
| Training and mobility action                      | 100%   |
| Pre-commercial procurement action                 | 100%   |
| Public procurement of innovative solutions action | 50%  |



## Activities eligible for funding

**Eligible activities are the ones described in the call conditions**

Activities must **focus exclusively on civil applications** and **must not**:

- aim at human cloning for reproductive purposes;
- intend to modify the genetic heritage of human beings which could make such changes heritable (except for research relating to cancer treatment of the gonads, which may be financed);
- intend to create human embryos solely for the purpose of research, or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer;
- lead to the destruction of human embryos.



## Nuova condizione di eleggibilità in Horizon Europe

General Annexes Main WP 2021/2022 - lett. B «Eligibility»

*“To be eligible, legal entities from Member States and Associated Countries that are public bodies, research organisations or higher education establishments (including private research organisations and higher education establishments) must have a **gender equality plan**, covering the following minimum process-related requirements”*



# Gender Equality Plan

- ▣ Nuovo requisito
- ▣ ...a chi è indirizzato?

Ogni ente pubblico, ente di ricerca (pubblico o privato) o istituto di istruzione superiore

- ▣ In cosa consiste?

Documento pubblico.



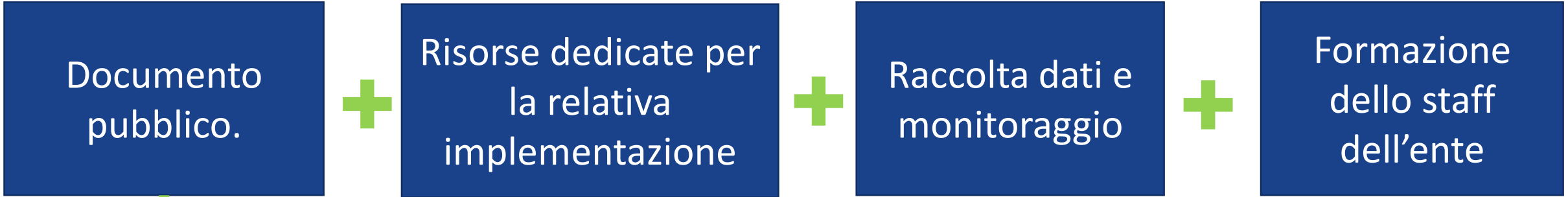
Sarà necessaria un'autodichiarazione al momento della sottomissione della proposta





# Gender Equality Plan

Requisiti obbligatori relativi al processo...



Sarà necessaria un'autodichiarazione al momento della sottomissione della proposta



# Gender Equality Plan

▣ Aree tematiche da tenere in considerazione (raccomandate)...

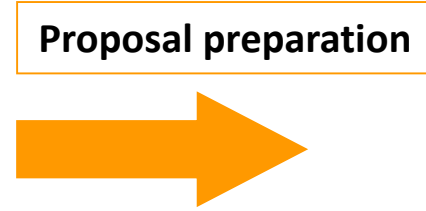
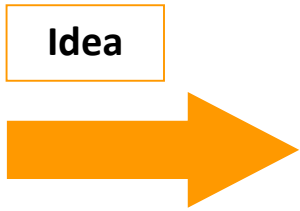
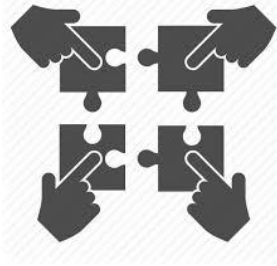
Work-life balance and organisational culture

Gender balance in leadership and decision-making

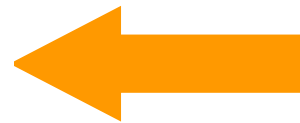
Gender equality in recruitment and career progression

Integration of the gender dimension into research and teaching content

Measures against gender-based violence, including sexual harassment



Evaluation & Selection



Activities

Payment and Starting Date

Signature of the Consortium Agreement

Signature of the Grant Agreement

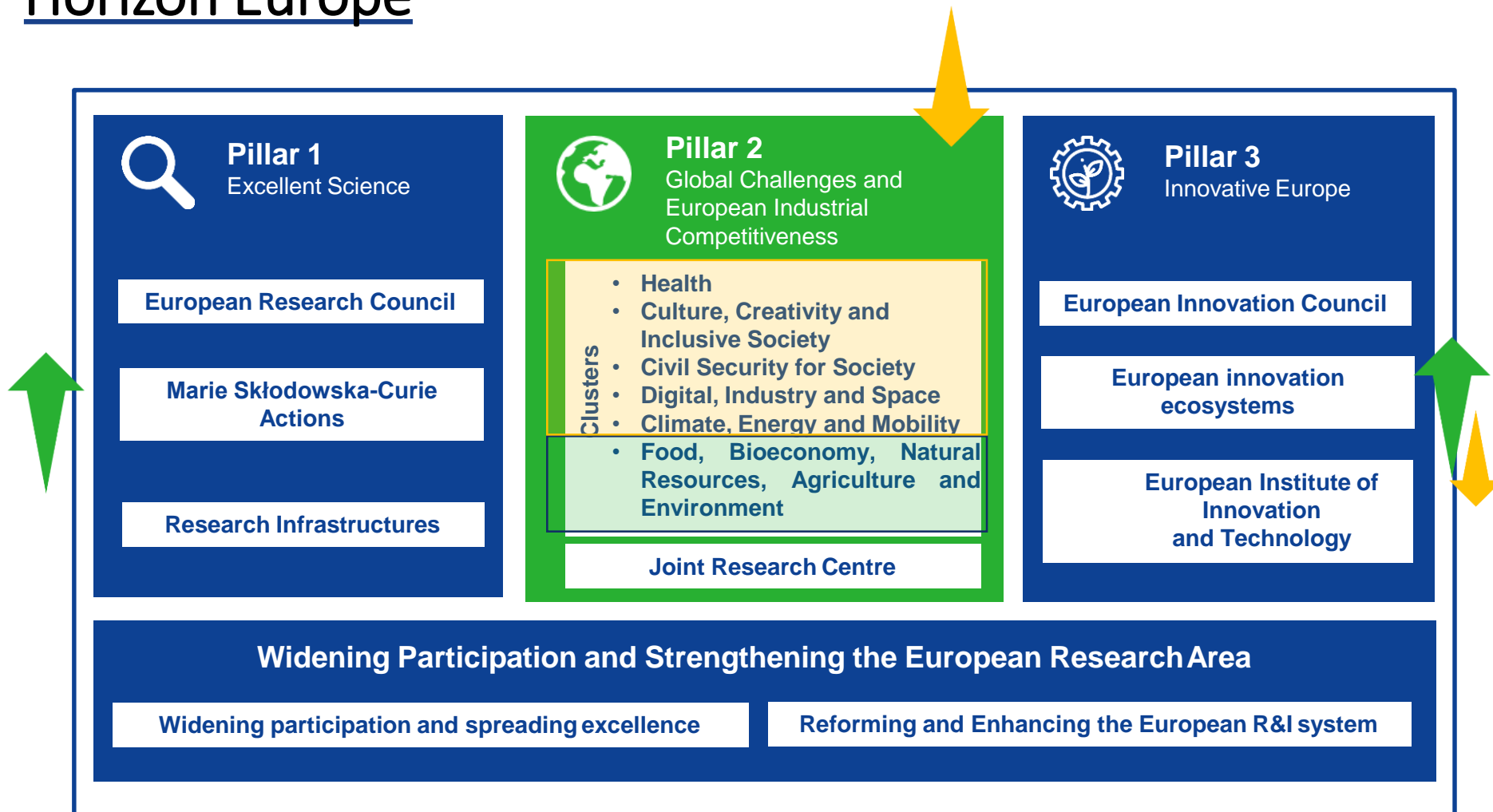


## CLUSTER 6

# "FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT"

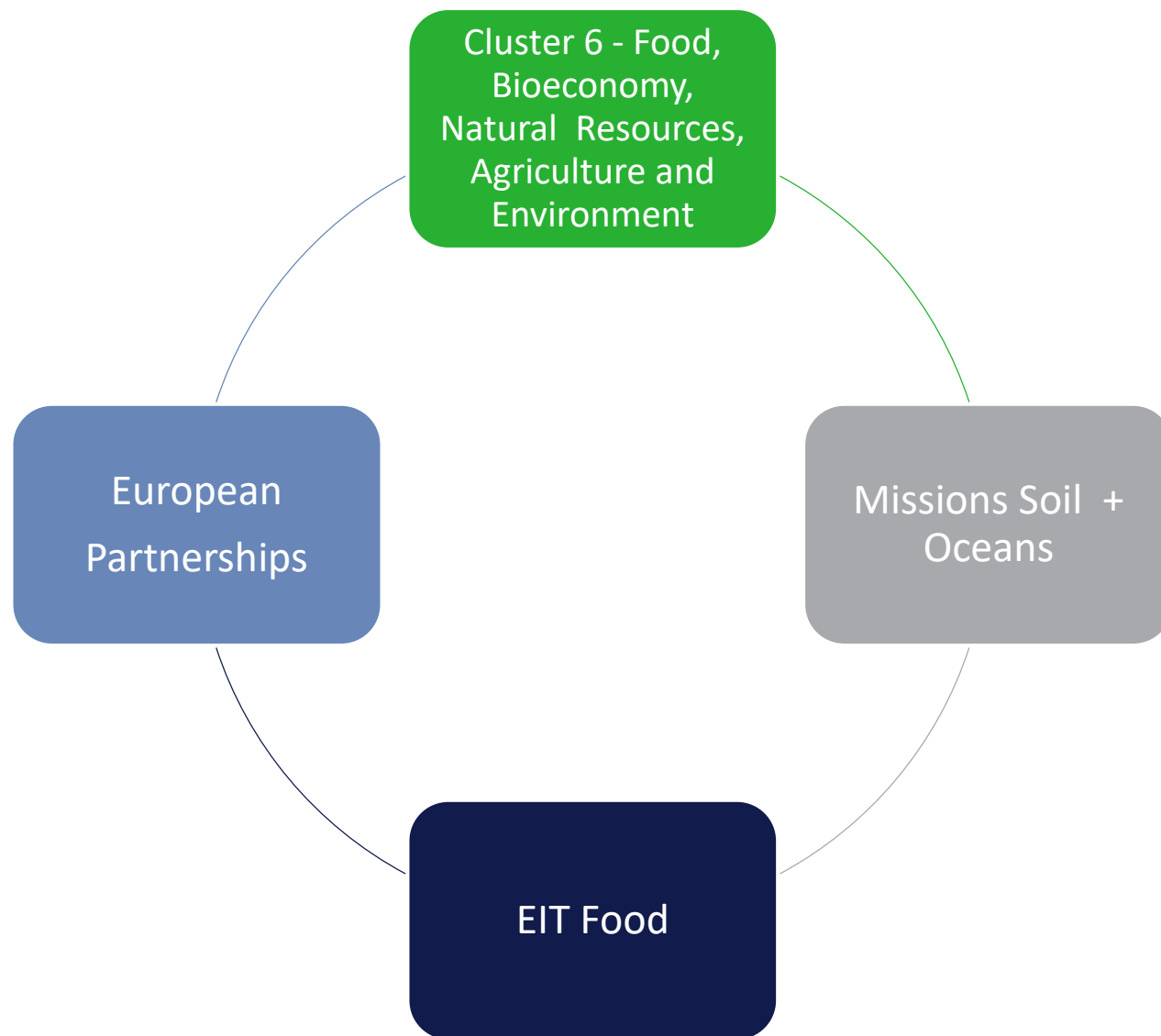


# Horizon Europe



## Programmi nei programmi:

- Missions
- European Partnerships
- KIC FOOD



**RICERCA  
COLLABORATIVA**



# CL6: Food, bioeconomy, natural resources, agriculture and environment

- aims at reducing **environmental degradation**, halting and reversing the decline of **biodiversity** on land, inland waters and sea and better managing **natural resources** through social and economic changes in both urban and rural areas.
- will ensure **food and nutrition security** for all through knowledge, innovation and digitalisation in agriculture, fisheries, aquaculture and food systems and accelerate the transition to a **circular economy** and sustainable bioeconomy, including forestry.
- R&I activities under CL6 will contribute to the objectives of the [European Green Deal](#) related to the [Biodiversity Strategy to 2030](#), the [Farm to Fork strategy](#), the [European Climate Pact](#) and initiatives under [sustainable industry](#) and [eliminating pollution](#), as well as the [long-term vision for rural areas](#), and the Sustainable Development Goals.

| Intervention Areas                               |
|--|
| Environmental Observation                        |
| Biodiversity and natural resources               |
| Agriculture, Forestry and rural areas            |
| Seas, oceans and inland waters                   |
| Food systems                                     |
| Biobased innovation systems in the EU Bioeconomy |
| Circular systems                                 |



# Il contesto politico

## Obiettivi di sviluppo sostenibile



### GREEN DEAL EUROPEO

Adoperarsi per divenire il primo continente a impatto climatico zero.



### UN'EUROPA PRONTA PER L'ERA DIGITALE

La strategia digitale dell'UE doterà le persone di competenze inerenti a una nuova generazione di tecnologie.



### UN'ECONOMIA AL SERVIZIO DELLE PERSONE

L'UE deve creare un ambiente più attraente per gli investimenti e una crescita che offra lavori di qualità, in particolare per i giovani e le piccole imprese.

## ALTRE POLITICHE EUROPEE

*Politica agricola comune, Politica comune della pesca, Politica marittima integrata, Politica artica, Legislazione alimentare generale, Strategia per la bioeconomia, Strategia forestale, Strategia Crescita Blu, Strategia per la sostenibilità della Chimica, Strategia sulla plastica, Strategia europea in materia di dati, Food 2030 e altre iniziative legislative per la protezione della biodiversità, del suolo, dell'acqua, dell'aria e delle risorse marine.*



# From policy priorities to concrete action





# From expected impacts to destinations...

## Strategic Plan

## Work Programme

**Impact 1** Climate neutrality and adaptation to climate change

• Destination: Land, oceans and water for climate action



• Destination: Biodiversity and ecosystem services



**Impact 3** Sustainable and circular management of natural resources; tackling pollution; bioeconomy

• Destination: Circular economy and bioeconomy sectors  
• Destination: Clean environment and zero pollution



**Impact 4** Food and nutrition security for all from sustainable food systems from farm to fork

• Destination: Fair, healthy and environmentally-friendly food systems from primary production to consumption



**Impact 5** Balanced development of rural, coastal and urban areas

• Destination: Resilient, inclusive, healthy and green rural, coastal and urban communities



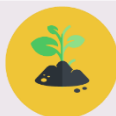


**Impact 6** Innovative governance models enabling sustainability, environmental observation

• Destination: Innovative governance, environmental observations and digital solutions in support of the Green Deal





# Cluster 6 Budget over 7 years

|  |                       |
|--|-----------------------|
| <b>Overall budget</b>  | <b>€8.952 billion</b> |
| Operational budget   | €8.4 billion          |
| 10% for missions   | - €0.9 billion        |
| CBE partnership   | - €1 billion          |
| Available budget for the Work Programmes   | €6,5 billion          |

## Programmi nei programmi:

Missions

European Partnerships

*Disclaimer: Information included in this presentation is provisional and has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.*



## CL6 - Destinations

**Destination #1 “Biodiversity and Ecosystem Services”** Sostiene la ripresa e il ripristino degli ecosistemi attraverso una gestione sostenibile del suolo, delle acque interne e del mare, che ne protegga l’integrità e favorisca l’integrazione tra settori.

**Destination #2 “Fair, healthy and environmentally-friendly food systems from primary production to consumption”** Contribuisce a guidare e accelerare la transizione verso sistemi alimentari sostenibili, sicuri, sani e inclusivi, dal produttore al consumatore, e a garantire la sicurezza alimentare.

**Destination #3 “Circular economy and bioeconomy sectors”** Sostiene soluzioni circolari, guidate dalla neutralità climatica e dalla bioeconomia per generare soluzioni, integrate, sicure a livello territoriale e in settori diversi.

**Destination #4 “Clean environment and zero pollution”** Arresta e previene l’inquinamento, sostenendo azioni di R&I su acque interne e marine, suolo, aria, comprese le emissioni di azoto e fosforo, sulle prestazioni ambientali e sulla sostenibilità dei processi nei sistemi a base biologica



## CL6 - Destinations

**Destination #5 “Land, oceans and water for climate action”** Studia l’impatto del cambiamento climatico sugli ambienti terrestri e marini, sulle risorse naturali, l’agricoltura e i sistemi agroalimentari, identificando azioni di mitigazioni e percorsi di adattabilità.

**Destination #6 “Resilient, inclusive, healthy and green rural, coastal and urban communities”** Mette al centro i luoghi, dalle aree rurali e a quelle costiere, e le persone per raggiungere un’Europa più sostenibile e resiliente, anche nella reazione alla recente pandemia, nell’utilizzo, protezione e gestione delle risorse naturali.

**Destination #7 “Innovative governance, environmental observations and digital solutions in support of the Green Deal”** Assicura che il processo di transizione verde passi per un’innovazione nei modelli di governance, un’informazione e conoscenza disponibile e accessibile, un utilizzo diffuso delle osservazioni ambientali e delle soluzioni digitali.





# Destination FARM2FORK

Proposals for topics under this destination should set out credible pathways to **fair, healthy, safe, climate- and environment-friendly, resilient food systems from primary production to consumption, ensuring food and nutrition security for all within planetary boundaries in the EU and globally.** More specifically, proposals should contribute to one or more of the following impacts:

## Impact 1

sustainable, productive, climate-neutral and resilient **farming systems** providing consumers with affordable, safe, traceable healthy and sustainable food, while minimising pressure on ecosystems, restoring and enhancing biodiversity, improving public health and generating fair economic returns for farmers

## Impact 2

sustainable **fisheries and aquaculture** increasing aquatic biomass production, diversification and consumption of seafood products for fair, healthy, climate-resilient and environment-friendly food systems with low impact on aquatic ecosystems and high animal welfare; and

## Impact 3

sustainable, healthy and inclusive **food systems** delivering co-benefits for climate mitigation and adaptation, environmental sustainability and circularity, sustainable healthy nutrition, safe food consumption, food poverty reduction, the inclusion of marginalised people, the empowerment of communities, and flourishing businesses





**WP2021-22**  
(scaduto)

**WP 23-24**  
(pre-pubblicato)  
Lancio Dic 2022  
Scadenze: Marzo 2023

[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes_en)

EN

Annex 9

Horizon Europe  
Work Programme 2023-2024

9. Food, Bioeconomy, Natural Resources, Agriculture and  
Environment

**IMPORTANT NOTICE**

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.

This draft is made public before the adoption of the work programme to provide potential participants with the currently expected main lines of this work programme. Only the adopted work programme will have legal value.

The adoption of the work programme will be announced on the Horizon Europe website and on the Funding and Tenders Portal.

Information and topic descriptions indicated in this draft may not appear in the final work programme; and likewise, new elements may be introduced at a later stage. Any information disclosed by any other party shall not be construed as having been endorsed by or affiliated to the Commission.

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## Pre-publication, adoption, publication, call opening

Pre-publication: 28 November 2022

Expected adoption: 6 December 2022

Expected publication: 7 December 2022

Opening of 2023: as early as possible after adoption & publication

Texts of Work Programme 2023-2024 available on the Funding & Tenders Portal and here: [Horizon Europe work programmes \(europa.eu\)](https://europe.europa.eu/horizon-europe-work-programmes)



<https://horizoneurope.apre.it/bandi-2023-al-via-gli-infoday-e-i-brokerage-event/>

Infoday 14-15 dicembre 2022

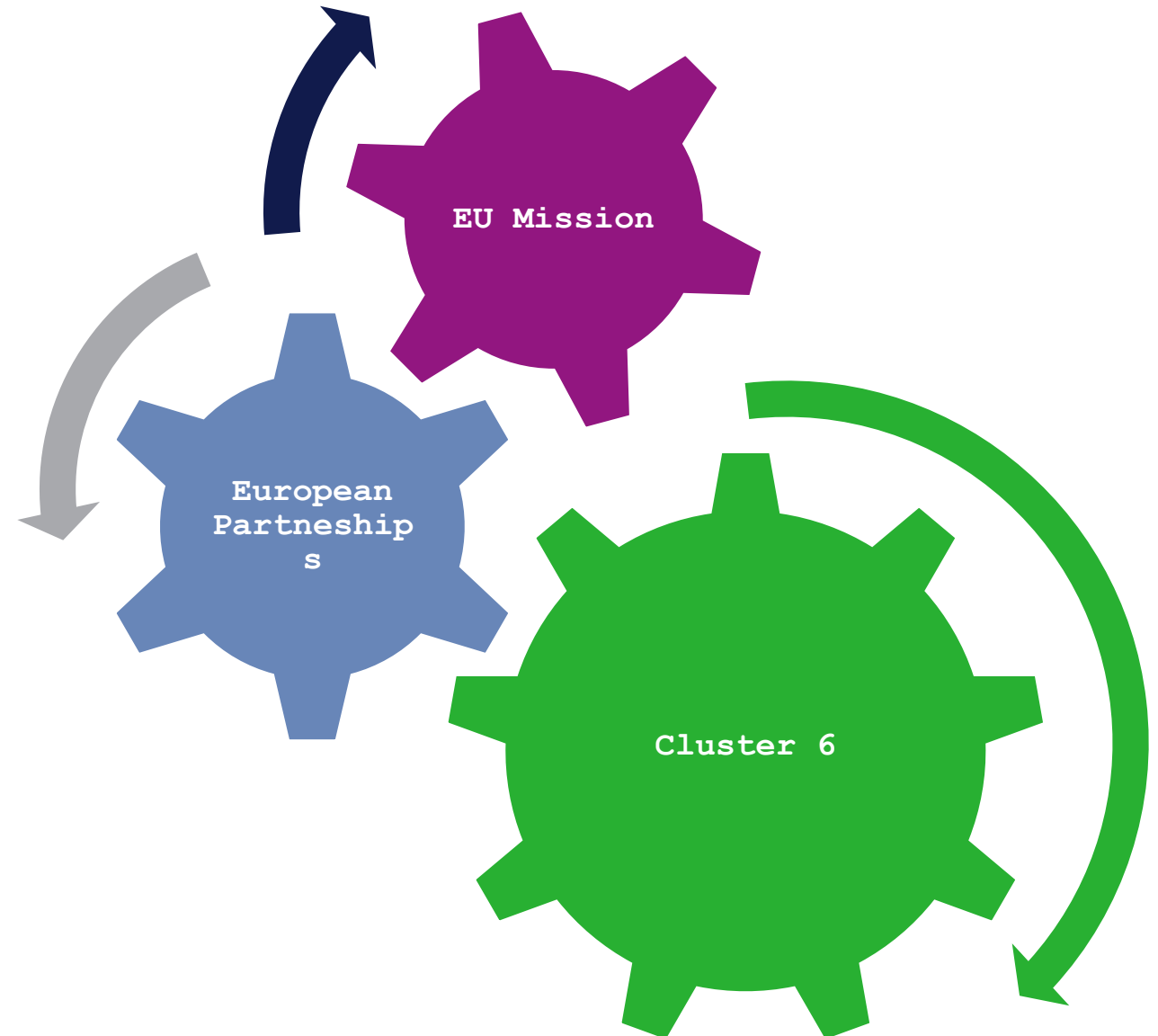
Brokerage event: 19 dicembre 2022



WP 2023-24  
Mission

Biodiversa +  
Water4all  
*tbc*

CBE WP 2023  
*tbc*





# CLUSTER 6 | Overview Work Programme 2023 - 24

Versione WP:  
**Novembre 2022**

Ultimo Comitato  
di Programma:  
**27 ottobre 2022**

Adozione:  
**6 dicembre**

Pubblicazione:  
**7 dicembre**

## Scadenze

'2  
3 23 e 28 Marzo e 12  
Aprile

'2  
4 22 / 28 Febbraio

## Topic

'2  
3 100

'2  
4 76

'23  
'24 176

## Budget

'2  
3 1056,39  
(di cui 897 sui bandi 2023)

'2  
4 903  
(di cui 734 sui bandi 2024)

'23  
'24 1.959,39 mln €



## WP 23-24 | Overview bandi 2023

| DESTINATION   | CALL                                       | DEADLINES  |
|---|--|--|
| 1. BIODIVERSITY AND ECOSYSTEM SERVICES  | HORIZON-CL6-2023- <b>BIODIV</b> -01        | DEADLINE: 28 MAR 2023  |
| 2. FAIR, HEALTHY AND ENVIRONMENTALLY-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION       | HORIZON-CL6-2023- <b>FARM2FORK</b> -01     | DEADLINE: 12 APR 2023  |
| 3. CIRCULAR ECONOMY AND BIOECONOMY SECTORS  | HORIZON-CL6-2023- <b>CIRCBIO</b> -01       | DEADLINE(S): 28 MAR 2023   |
|   | HORIZON-CL6-2023- <b>CIRCBIO</b> -02       | DEADLINE(S): 28 MAR 2023 (FIRST STAGE), 26 SEP 2023 (SECOND STAGE) |
| 4. CLEAN ENVIRONMENT AND ZERO POLLUTION   | HORIZON-CL6-2023- <b>ZEROPOLLUTION</b> -01 | DEADLINE: 28 MAR 2023  |
|   | HORIZON-CL6-2023- <b>ZEROPOLLUTION</b> -02 | DEADLINE(S): 28 MAR 2023 (FIRST STAGE), 26 SEP 2023 (SECOND STAGE) |
| 5. LAND, OCEAN AND WATER FOR CLIMATE ACTION   | HORIZON-CL6-2023- <b>CLIMATE</b> -01       | DEADLINE: 12 APR 2023  |
| 6. RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES                         | HORIZON-CL6-2023- <b>COMMUNITIES</b> -01   | DEADLINE: 12 APR 2023  |
| 7. INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL | HORIZON-CL6-2023- <b>GOVERNANCE</b> -01    | DEADLINE: 23 MAR 2023  |



# WP 23-24 | Overview bandi 2024

Opening: 17 Oct

| DESTINATION   | CALL                                       | DEADLINES  |
|---|--|--|
| 1. BIODIVERSITY AND ECOSYSTEM SERVICES  | HORIZON-CL6-2024- <b>BIODIV</b> -01        | Deadline: 22 Feb 2024  |
|   | HORIZON-CL6-2024- <b>BIODIV</b> -02        | Deadline(s): 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage) |
| 2. FAIR, HEALTHY AND ENVIRONMENTALLY-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION       | HORIZON-CL6-2024- <b>FARM2FORK</b> -01     | Deadline: 22 Feb 2024  |
|   | HORIZON-CL6-2024- <b>FARM2FORK</b> -02     | Deadline(s): 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage) |
| 3. CIRCULAR ECONOMY AND BIOECONOMY SECTORS  | HORIZON-CL6-2024- <b>CIRCBIO</b> -01       | Deadline: 22 Feb 2024  |
|   | HORIZON-CL6-2024- <b>CIRCBIO</b> -02       | Deadline(s): 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage) |
| 4. CLEAN ENVIRONMENT AND ZERO POLLUTION   | HORIZON-CL6-2024- <b>ZEROPOLLUTION</b> -01 | Deadline: 22 Feb 2024  |
|   | HORIZON-CL6-2024- <b>ZEROPOLLUTION</b> -02 | Deadline(s): 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage) |
| 5. LAND, OCEAN AND WATER FOR CLIMATE ACTION   | HORIZON-CL6-2024- <b>CLIMATE</b> -01       | Deadline: 22 Feb 2024  |
| 6. RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES                         | HORIZON-CL6-2024- <b>COMMUNITIES</b> -01   | Deadline: 22 Feb 2024  |
|   | HORIZON-CL6-2024- <b>COMMUNITIES</b> -02   | Deadline(s): 22 Feb 2024 (First Stage), 17 Sep 2024 (Second Stage) |
| 7. INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL | HORIZON-CL6-2024- <b>GOVERNANCE</b> -01    | Deadline: 28 Feb 2024  |

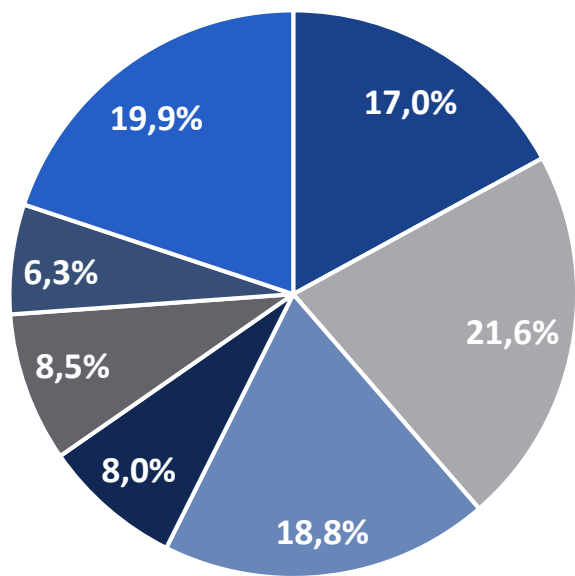


## WP 23-24 | Destination

| DESTINATION   | Topic      |            | Budget     |              |
|---|------------|------------|------------|--------------|
|   | 2023       | 2024       | 2023       | 2024         |
| 1. BIODIVERSITY AND ECOSYSTEM SERVICES  | 18         | 12         | 184,00 €   | 142          |
| 2. FAIR, HEALTHY AND ENVIRONMENTALLY-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION       | 20         | 18         | 196,50 €   | 256,50       |
| 3. CIRCULAR ECONOMY AND BIOECONOMY SECTORS  | 17         | 16         | 178,50 €   | 147,5        |
| 4. CLEAN ENVIRONMENT AND ZERO POLLUTION   | 9          | 5          | 79,50 €    | 61           |
| 5. LAND, OCEAN AND WATER FOR CLIMATE ACTION   | 8          | 7          | 90,00 €    | 93           |
| 6. RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES                         | 6          | 5          | 38,50 €    | 37           |
| 7. INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL | 22         | 13         | 130,00 €   | 157,5        |
|   | <b>100</b> | <b>76</b>  | <b>897</b> | <b>894,5</b> |
| <b>2023-2024</b>  |            | <b>176</b> |            | <b>1631</b>  |

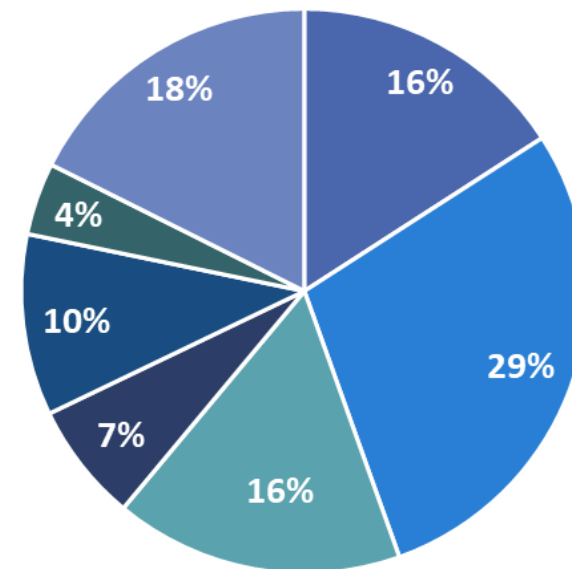
# WP 23-24 | Incidenza per destination

# Topic per Destination



- Destinantion 1
- Destinantion 2
- Destinantion 3
- Destinantion 4
- Destinantion 5
- Destinantion 6
- Destinantion 7

€ Contributo Eu per destination





## 2023 | Condizioni specifiche/criteri di eleggibilità aggiuntivi

MAA - Multi actor approach  
(37 topic)

Lump sum  
(25 Topic)

JRC  
(24 topic)

Eligibility for third country in CSA  
(3 Topic)

Two stages - blind evaluation  
(2 bandi)

Eligibility for International organisations with headquarters in a Member State or associated country (6 Topic)

FSTP  
(1 topic)



## 2023 | Condizioni specifiche/criteri di eleggibilità aggiuntivi

**MAA - Multi actor approach**  
**(37 topic)**

Lump sum  
(25 Topic)

**JRC**  
**(24 topic)**

Eligibility for third country in CSA  
(3 Topic)

**Two stages – blind evaluation**  
**(2 bandi)**

Eligibility for International organisations with headquarters in a Member State or associated country  
(6 Topic)

FSTP  
(1 topic)





## TWO stages – Blind evaluation (2023, solo CIRCBIO e ZEROPOLLUTION)



### Blind evaluation (in 1<sup>st</sup> stage)

- There is no evidence that the current proposal evaluation system is systematically biased.
- There are understandable concerns that evaluation experts may be swayed – perhaps unconsciously – in favour of proposals from well-known organisations in countries with better performing R&I systems.
- ‘Blind’ evaluation is a way to remove any real or perceived effect of such reputational bias.
- Experts evaluate without knowing the identity of participants.
- The work programme will include an additional admissibility criterion: applicants can not be disclosed in the narrative part of the proposal.



## JRC – Joint Research Center

JRC Mission: *As the science and knowledge service of the Commission our mission is to support EU policies with independent evidence throughout the whole policy cycle.*



**Policy neutral:** has no policy agenda of its own

More than **50** large scale research facilities  
More than **110** online databases  
**15** Knowledge & Competence Centres

About **2 800** staff, nearly **70 %** of whom are **scientific/technical staff**

**83 %** of core research staff with PhDs

Over **1 100** scientific publications per year

# JRC – Knowledge Centres





## JRC e Cluster 6

For topics in this cluster, **the consortia should consider their possible contribution to Joint Research Centre (JRC) relevant platforms for capitalising the knowledge developed in their projects, and to become more policy relevant, contributing in terms of data, indicators and knowledge.** With reference to, for instance:

1. **Life cycle assessment (LCA)** and its relevant application to value chain assessment, refer to the European Platform on **Life cycle assessment** (EPLCA, <https://eplca.jrc.ec.europa.eu/>) and make reference to the Environmental footprint method when applying LCA (<https://ec.europa.eu/environment/eussd/smgp/index.htm>)
2. **Raw materials**, refer to the Raw materials information system (RMIS, <https://rmis.jrc.ec.europa.eu/>)
3. **Soil** and soil related issues, refer to the European Soil Observatory (ESO, <https://ec.europa.eu/jrc/en/eu-soil-observatory>)
4. **Natural capital** accounting, refer to the INCA platform (<https://ec.europa.eu/eurostat/ecosystem-accounts>)
5. **Biodiversity**, refer to the EC Knowledge Centre for Biodiversity, ([https://knowledge4policy.ec.europa.eu/biodiversity\\_en](https://knowledge4policy.ec.europa.eu/biodiversity_en)).
6. **Food systems and food security**, refer to the EC Knowledge Centre for Global Food and Nutrition Security ([https://knowledge4policy.ec.europa.eu/global-food-nutrition-security\\_en](https://knowledge4policy.ec.europa.eu/global-food-nutrition-security_en)).
7. **Bioeconomy**, refer to the EC Knowledge Centre for Bioeconomy ([https://knowledge4policy.ec.europa.eu/bioeconomy\\_en](https://knowledge4policy.ec.europa.eu/bioeconomy_en)).
8. **EU and AU cooperation**, refer to the Africa Knowledge Platform (<https://africa-knowledge-platform.ec.europa.eu/>)
9. **Earth and environmental observations**, refer to the EC Knowledge Centre on Earth Observation ([https://knowledge4policy.ec.europa.eu/earthobservation\\_en](https://knowledge4policy.ec.europa.eu/earthobservation_en)).



## JRC in HE – *General Annex*

- Where provided for in the specific call conditions, applicants may include in their proposals the possible contribution of the JRC but the JRC will not participate in the preparation and submission of the proposal.
- Applicants will indicate the contribution that the JRC could bring to the project based on the scope of the topic text
- After the evaluation process, the JRC and the consortium selected for funding may come to an agreement on the specific terms of the participation of the JRC.
- If an agreement is found, the JRC would accede to the grant agreement as beneficiary requesting zero funding and would accede to the consortium as a member



## JRC in HE – *Involvement in actions*

### JRC as Beneficiary [menzione nel topic]

- Requesting no contribution
- Signing the CA

### JRC as a Non Beneficiary [NO menzione nel topic]

- light form of collaboration (e.g. agreement, membership in the scientific advisory board, etc.)





## 2023 | Cooperazione Internazionale

- Cooperazione con **Africa** (3 topic – Headings in Farm2Fork e condizioni particolari di eleggibilità)
- **Cina** (1 topic)

| DESTINATION   | 2023      |
|---|-----------|
| 1.ECOSYSTEM SERVICES  | 8         |
| 2. FAIR, HEALTHY AND ENVIRONMENTALLY-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION       | 9         |
| 3. CIRCULAR ECONOMY AND BIOECONOMY SECTORS  | 4         |
| 4. CLEAN ENVIRONMENT AND ZERO POLLUTION   | 3         |
| 5. LAND, OCEAN AND WATER FOR CLIMATE ACTION   | 3         |
| 6. RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES                         | 1         |
| 7. INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL | 5         |
|   | <b>33</b> |



# EU – Africa cooperation

## Four policy priorities for EU-AU cooperation in Research & Innovation



Public Health



Green Transition



Innovation and  
Technology



Capacities for Science  
(Science for Policy Making, Open Science,  
Human Capital Development, Gender Equality)







# AU-EU Research and Innovation priorities → Innovation partnership

## 2. Green Transition

R&I areas:



#HorizonEU

9



The main tools for implementing the Green Transition priority are 2 long-term, jointly funded research and innovation partnerships under the HLPD.

- Food and Nutrition Security and Sustainable Agriculture (FNSSA) under the green transition priority
- Climate Change and Sustainable Energy (CCSE) under the green transition priority

WP 2021-22 → Green Transition (215 MEUR)



## Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

- ▣ The partnership aims to boost the impact of AU-EU joint research at local level by addressing the entire value-chain, strengthening capacity-building (human, research infrastructures and institutional) and focusing on demonstration projects and pilot actions to bring research and innovation results to users. It also aims to improve access to sustainably produced, nutritious and safe food, enhance income growth and promote rural development, contributing to Agenda 2030
- ▣ The partnership has channeled a joint investment of €381 million on 4 priorities:

•sustainable intensification of agriculture

agriculture and food systems for nutrition

expansion and improvement of agricultural trade and markets

cross-cutting topics



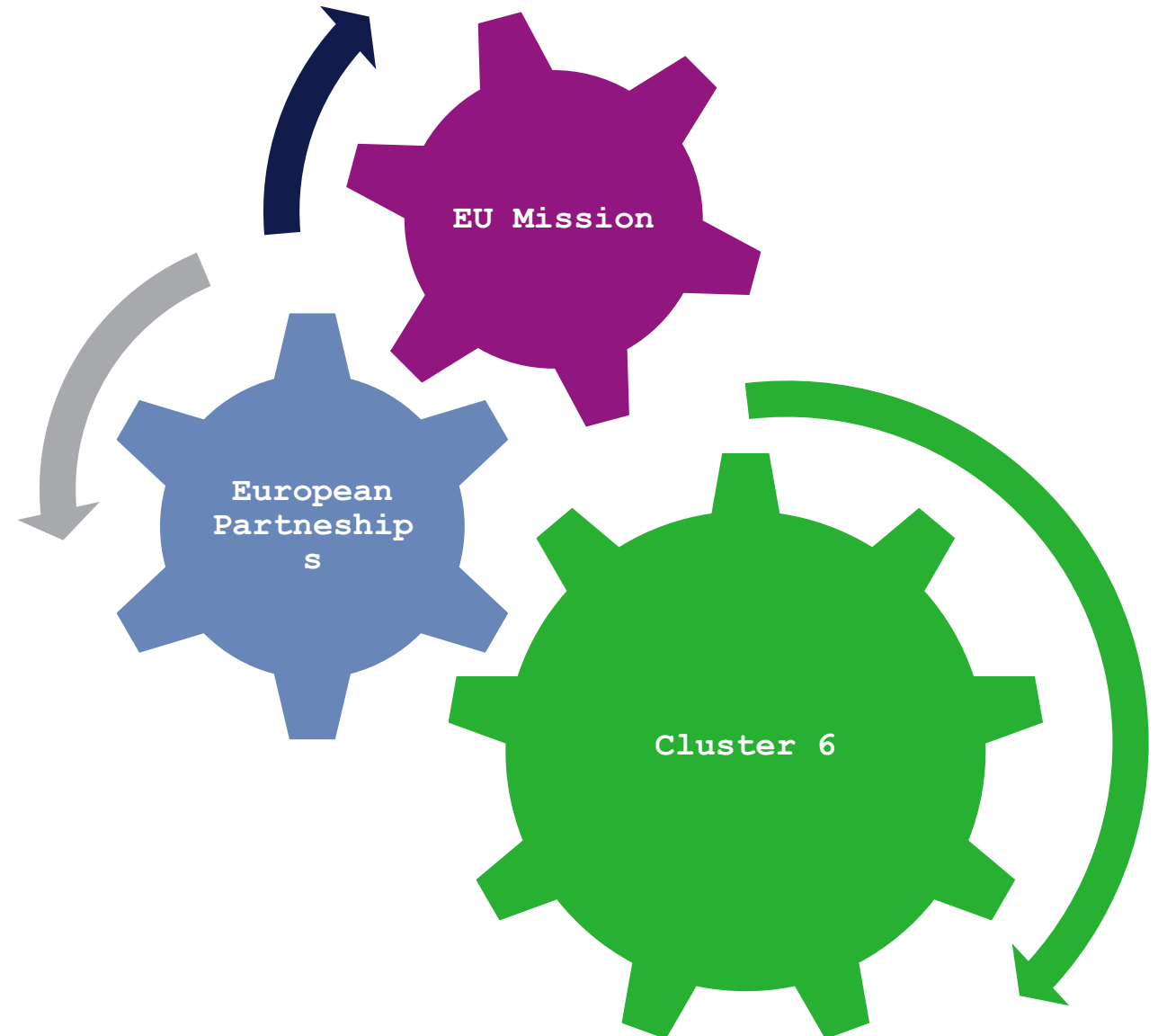
## LINK EU/ AU-EU strategy nel testo dei topic

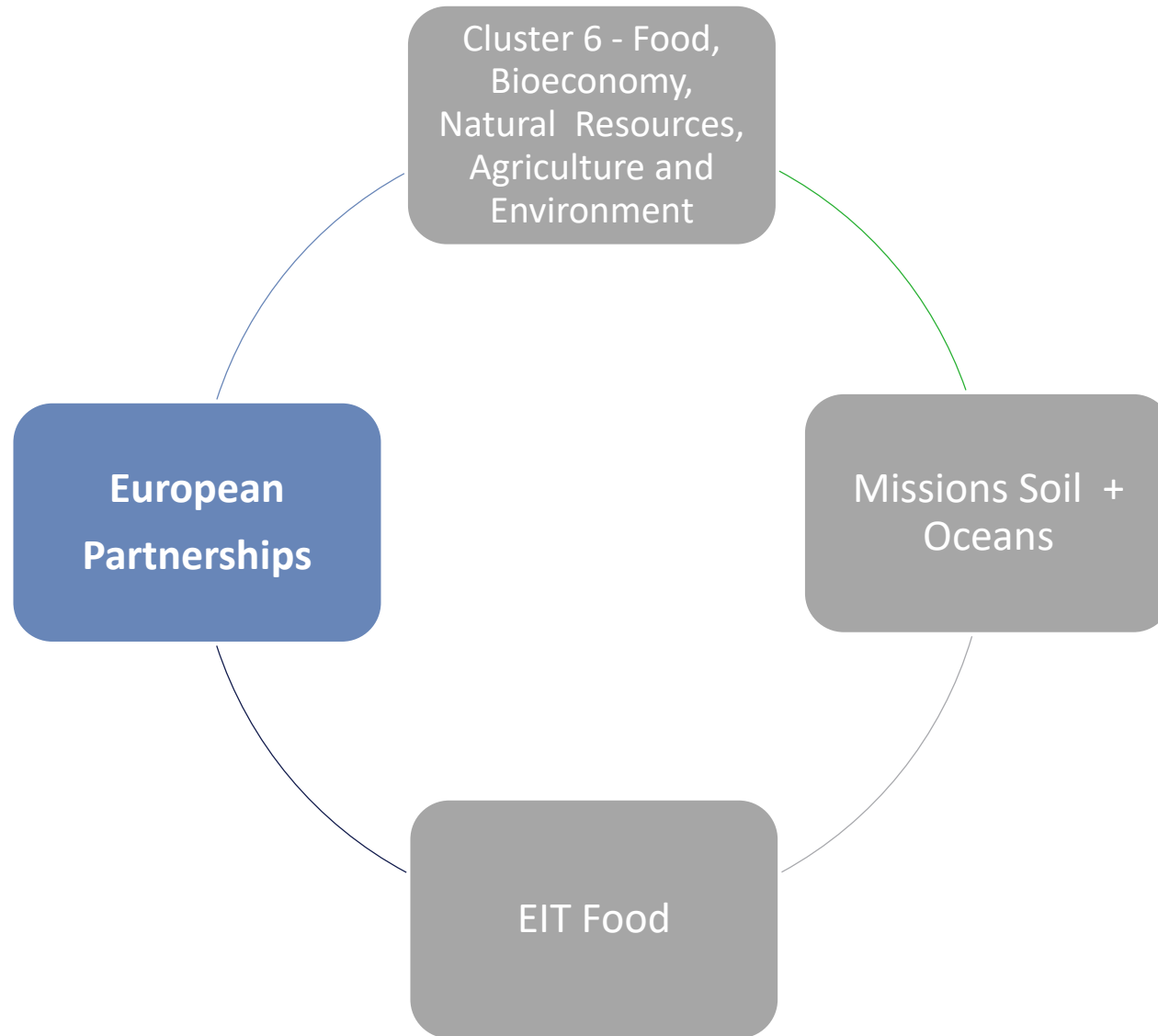
- 🔗 In line with the **European Green Deal** priorities and in particular the farm to fork strategy, and in support of the African Free Trade Area, the successful proposal will contribute to the **African Union (AU)-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation**, and its priority on Green Transition (and the respective **R&I partnerships on Food and Nutrition Security and Sustainable Agriculture and Climate Change and Sustainable Energy**), as well as to the implementation of the short-term actions outlined in the working document of the **AU-EU Innovation Agenda**, aiming to translate R&I efforts into tangible business, development and employment opportunities in Africa and Europe.

WP 2023-24  
Mission

Biodiversa +  
Water4all  
*Call chiuse per il  
2022*

CBE WP 2023







# CL6 - European Partnerships

## HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

| CLUSTER 1: Health   | CLUSTER 4: Digital, Industry & Space | CLUSTER 5: Climate, Energy & Mobility   | CLUSTER 6: Food, Bioeconomy, Agriculture, ...          |
|---|--------------------------------------|---|--|
| Innovative Health Initiative                                | Key Digital Technologies             | Clean Hydrogen                          | Circular Bio-based Europe                              |
| Global Health Partnership                                   | Smart Networks & Services            | Clean Aviation                          | Rescuing Biodiversity to Safeguard Life on Earth       |
| Transformation of health systems                            | High Performance Computing           | Single European Sky ATM Research 3      | Climate Neutral, Sustainable & Productive Blue Economy |
| Chemicals risk assessment                                   | European Metrology (Art. 185)        | Europe's Rail                           | Water4All  |
| ERA for Health  | AI-Data-Robotics                     | Connected and Automated Mobility (CCAM) | Animal Health & Welfare*                               |
| Rare diseases*  | Photonics                            | Batteries                               | Accelerating Farming Systems Transitions*              |
| One-Health Anti Microbial Resistance*                       | Made in Europe                       | Zero-emission waterborne transport      | Agriculture of Data*                                   |
| Personalised Medicine*                                      | Clean steel – low-carbon steelmaking | Zero-emission road transport            | Safe & Sustainable Food System*                        |
| Pandemic Preparedness*<br><i>Co-funded or co-programmed</i> | Processes4Planet                     | Built4People                            |  |
|   | Global competitive space systems**   | Clean Energy Transition                 |  |
|   |                                      | Driving Urban Transitions               |  |

- Institutionalised Partnerships (Art 185/7)
- Institutionalised Partnerships / EIT KICs
- Co-Programmed
- Co-Funded

## PILLAR III - Innovative Europe

| EIT (KNOWLEDGE & INNOVATION COMMUNITIES) | SUPPORT TO INNOVATION ECOSYSTEMS |
|--|----------------------------------|
| InnoEnergy                               | Innovative SMEs                  |
| Climate                                  |                                  |
| Digital                                  |                                  |
| Food                                     |                                  |
| Raw Materials                            |                                  |
| Manufacturing                            |                                  |
| Urban Mobility                           |                                  |
| Cultural and Creative Industries         |                                  |



**23% del budget del cluster 6 è dedicato alle EP (2.046 mln €)**

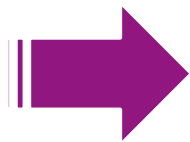
## CROSS-PILLARS II & III

European Open Science Cloud

## Cluster 6 Co-funded partnerships in Work Programmes



| CO-Funded Partnership   | Year      | HE expected contribution |
|---|-----------|--------------------------|
| Rescuing biodiversity to safeguard life on Earth  | 2021-2022 | 165                      |
| A climate neutral, sustainable and productive Blue Economy                                    | 2021-2022 | 150                      |
| European Partnership Water Security for the Planet (Water4All)                                | 2021-2022 | 126                      |
| Accelerating farming systems transition: agroecology living labs and research infrastructures | 2023-2024 | 150                      |
| Animal health: fighting infectious diseases   | 2023-2024 | 180                      |
| Environmental observations for a sustainable EU agriculture                                   | 2023-2024 | 100                      |
| Safe and sustainable food systems for people, planet and climate                              | 2023-2024 | 175                      |



**Total budget for all co-funded partnerships around EUR 1 billion**  
(figures are subject to changes depending on MS commitments).

**Outside the WP: Circular bio-based Europe (Joint Undertaking): EUR 1 billion**



Nel Cluster 6 sono previste 8 partnership in totale:

**Biodiversa:** Partnership co-funded. Partecipa il MUR e il MITE. Il MIPAAF è interessato, ma non partecipa direttamente. Il budget complessivo impegnato dal MUR è 25 M€ (cash and kind) (165 M€ la Commissione). Il MITE apporterà risorse in kind. **Bando aperto**

**Sustainable Blue Economy:** Partnership co-funded. Partecipa il MUR che si è candidato al coordinamento della partnership (.. con la Norvegia). Il budget complessivo impegnato dal MUR è 20 M€ (cash and kind) (150 M€ la Commissione).

**Water4All:** Partnership co-funded. Partecipa il MUR, coinvolto il CNR e ISPRA. Il budget complessivo impegnato dal MUR è 25 M€ (126 M€ la Commissione). **Bando aperto**

**Circular Bio-based Europe:** Partnership istituzionalizzata. Non è prevista la partecipazione diretta degli Stati membri che potranno soltanto nominare un proprio rappresentante in un organo consultivo denominato Member States Representatives Group. La Commissione investirà 1 miliardo di euro a condizione che anche gli altri partner investano almeno la stessa cifra. |



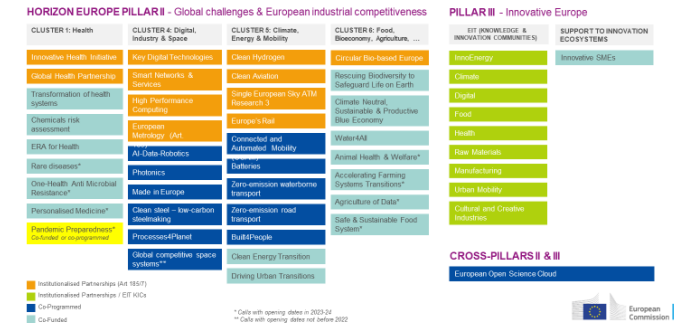


**Accelerating farming systems transition (agro-ecology):** Partnership co-funded. Dovrebbe partire nel 2023/24. Sono interessati sia il MUR che il MIPAAF. Non è stato ancora deciso l'impegno finanziario

**Animal Health:** Partnership co-funded. Dovrebbe partire nel 2023/24. Sono interessati sia il MUR che il MIPAAF e il Ministero Salute. Non è stato ancora deciso l'impegno finanziario

**Agriculture of data:** Partnership co-funded. Dovrebbe partire nel 2023/24. Sono interessati sia il MUR che il MIPAAF. Italia, Danimarca e Germania stanno lavorando per lo sviluppo di una proposta operativa. Non è stato ancora deciso l'impegno finanziario

**Safe and sustainable Food System:** Partnership co-funded. Dovrebbe partire nel 2023/24. Sono interessati sia il MUR che il MIPAAF. Non è stato ancora deciso l'impegno finanziario



## European Partnership Co-funded

### Accelerating farming systems transition: agroecology living labs and research infrastructures

🏠 Mira a strutturare e supportare una rete di living lab e infrastrutture di ricerca che accelerino la transizione verso l'agroecologia in tutta Europa. Intende promuovere spazi per sperimentazioni a lungo termine, site-specific, multi-stakeholder e fornire pratiche pronte per l'adozione, tali da supportare gli agricoltori nella comprensione e nell'attuazione di pratiche. Punta ad ottenere, entro il 2030, un ecosistema dell'agroecologia meglio connesso e una conoscenza migliore dei processi agroecologici.

\* Tipologia: cofinanziato – Avvio: 2023-24 – Partenariato precedente: nessuno

# European Partnership Co-funded

## Safe and Sustainable Food Systems

Intende istituire una piattaforma e un processo globale per sostenere la necessaria transizione verso sistemi alimentari sostenibili, contribuire alla strategia Farm-to-Fork collegando programmi di ricerca e innovazione nazionali, regionali ed europei e attori dei sistemi alimentari, a beneficio della nutrizione, del clima, della circolarità e dell'intera comunità.

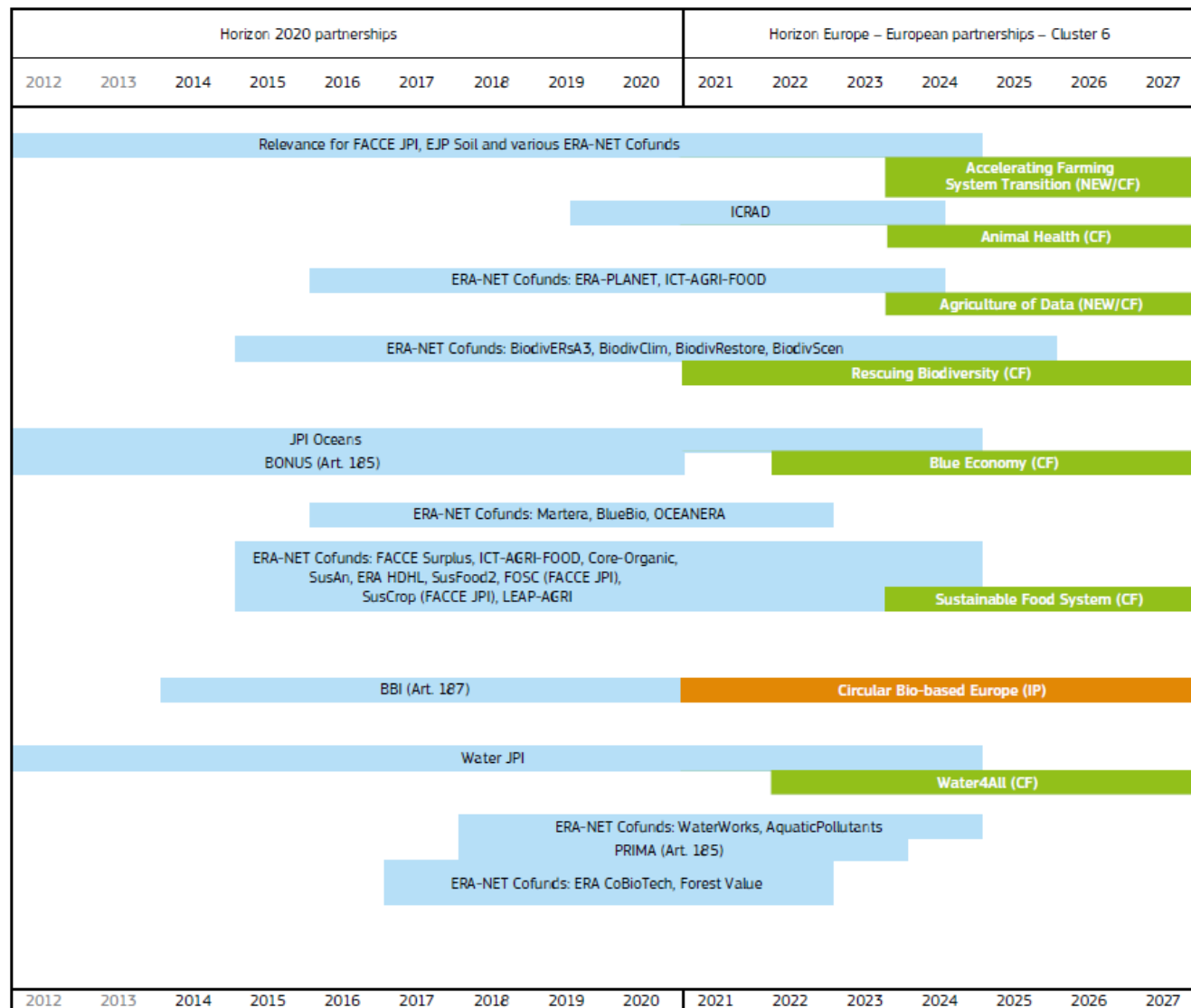
\* Tipologia: cofinanziato – Avvio: 2023-24 – Partenariato precedente: FACCE Surplus, ICT Agri2, CoreOrganic, ERA GAS, SUSAN, ERA HDL, SusFood2

### Overview of 49 candidate European Partnerships





# L'evoluzione delle Partnership del CL6





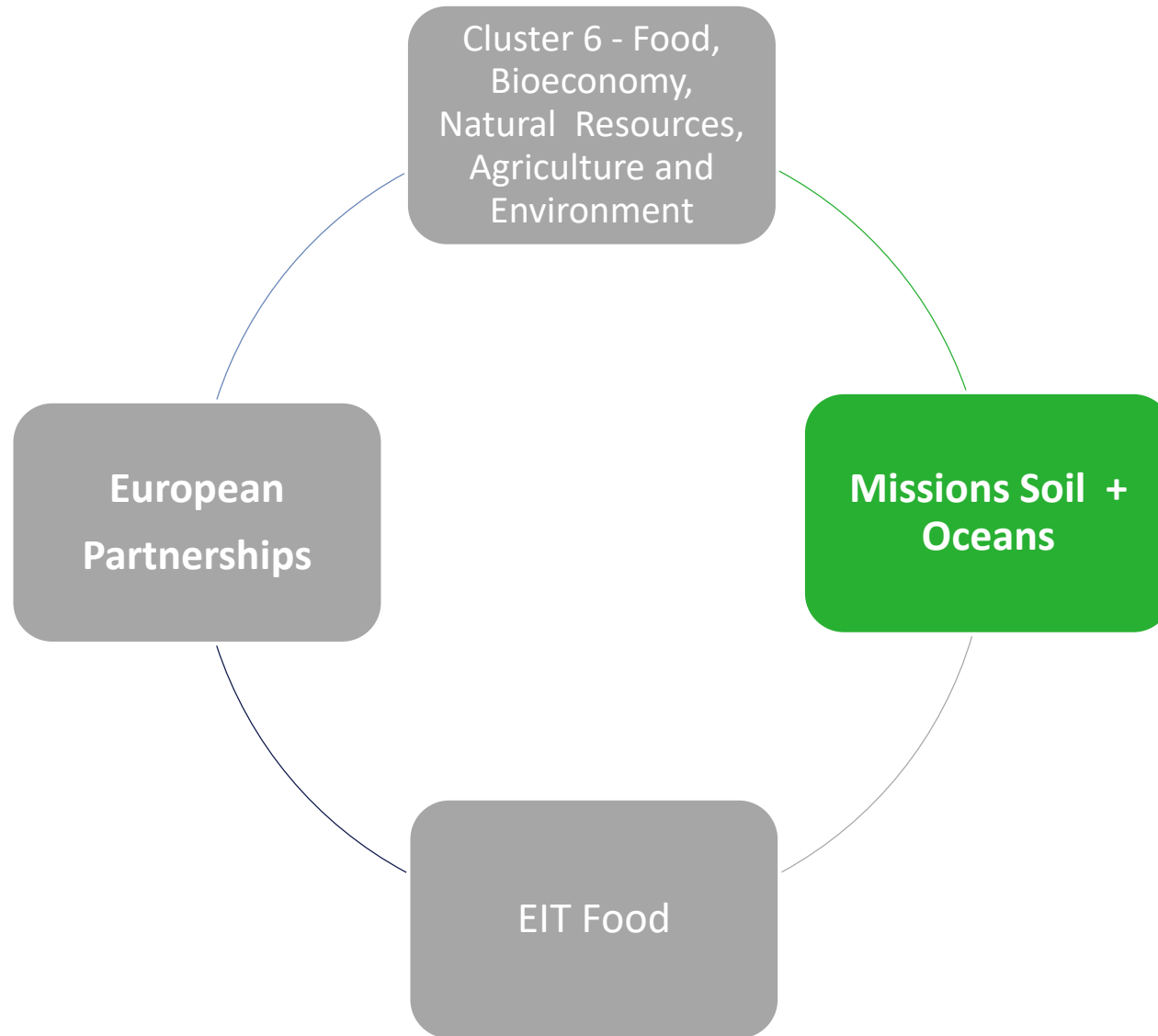
## EU Partnership HE con bandi lanciati



Deadline  
preproposal:  
**9 novembre**



Deadline  
preproposal:  
**31 ottobre**





EUROPEAN UNION

# EU MISSIONS



## Concrete solutions for our greatest challenges

Commission's Communication on European missions (29 September 2021) marks the official launch of the missions:

Adaptation to  
Climate Change

Cancer

Climate-neutral  
and Smart Cities

Restore our  
Ocean and Waters

Soil Deal  
for Europe



## 5 EU Missions areas



Adaptation to climate change, including societal transformation



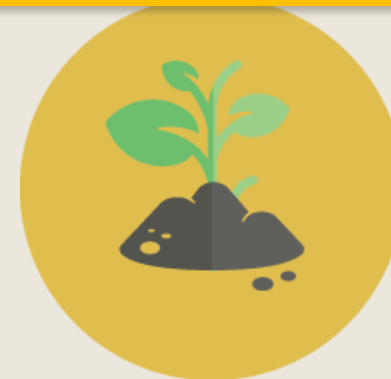
Cancer



Healthy oceans, seas, coastal & inland waters



Climate-neutral & smart cities



Soil health & food



Le Mission hanno finalità e struttura completamente diverse e **non** prevedono la partecipazione degli Stati membri né un cofinanziamento. Ciascuna Mission dovrà definire alcuni obiettivi strategici e misurabili che devono essere raggiunti grazie alle ricerche finanziate da Horizon Europe. Una volta definiti questi obiettivi, la Commissione focalizzerà su di essi una parte dei normali bandi di Horizon Europe, dotandoli di un budget complessivamente pari al **10%** del Pillar 2 di HE.





## 5 EU Missions

### What a EU mission is NOT

Missions are an entirely new approach based on **portfolios of actions** working towards broadly defined goals, not be confused with existing methods and instruments.

Missions are not the same as:

- R&I Programmes**
- R&I Partnerships**
- Focus Areas** from Horizon 2020
- Single projects or topics
- Horizon Europe **Clusters**

### Implementing Missions

#### Missions may involve:

- Launch **specific calls** in Horizon Europe and other programmes
- Identify specific actions to change/ improve **policy context** critical for missions success
- Make use of the appropriate **partnerships**
- Mobilise **structural funds**
- Establish the appropriate **links with national programmes**
- Combine efforts with **third country**

There is no fixed budget for each mission. Article 7 of the draft HE Regulation stipulates that during the first three years of the programme, a **maximum of 10%** of the **annual budget of Pillar II** shall be programmed through specific calls for implementing the missions.



## EU Mission | WP 23-24



Draft WP 23  
Deadline: **20 Sep 2023**  
# topic: **9**  
Budget: **126** mln €



Draft WP 23  
Deadline: **20 Sep 2023**  
# topic: **11**  
Budget: **87,7** mln €



## II WP 2023-24

**Scadenze:**

*Aprile – Settembre 2023*

*Horizon Europe - Work Programme 2023-2024  
Missions*

EN

**Horizon Europe**

**Work Programme 2023-2024**

*12. Missions*

DISCLAIMER

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

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| Topics | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>83</sup> | Indicative number of projects expected to be funded |
|--------|----------------|-----------------------|--|---|
|        |                | 2023                  |  |   |

Opening: 17 Jan 2023  
Deadline(s): 20 Sep 2023

|                               |    |                     |             |   |
|-------------------------------|----|---------------------|-------------|---|
| HORIZON-MISS-2023-OCEAN-01-01 | IA | 8.80 <sup>84</sup>  | Around 8.80 | 1 |
| HORIZON-MISS-2023-OCEAN-01-02 | IA | 17.00 <sup>85</sup> | Around 8.50 | 2 |
| HORIZON-MISS-2023-OCEAN-01-03 | IA | 16.00 <sup>86</sup> | Around 8.00 | 2 |
| HORIZON-MISS-2023-OCEAN-01-04 | IA | 12.00 <sup>87</sup> | Around 4.00 | 3 |

|                               |     |                     |             |   |
|-------------------------------|-----|---------------------|-------------|---|
| HORIZON-MISS-2023-OCEAN-01-05 | IA  | 12.00 <sup>88</sup> | Around 4.00 | 3 |
| HORIZON-MISS-2023-OCEAN-01-06 | RIA | 4.50 <sup>89</sup>  | Around 2.25 | 2 |
| HORIZON-MISS-2023-OCEAN-01-07 | RIA | 1.40 <sup>90</sup>  | Around 1.40 | 1 |
| HORIZON-MISS-2023-OCEAN-01-08 | RIA | 10.00 <sup>91</sup> | Around 3.30 | 3 |
| HORIZON-MISS-2023-OCEAN-01-09 | CSA | 2.00 <sup>92</sup>  | Around 2.00 | 1 |
| HORIZON-MISS-2023-OCEAN-01-10 | CSA | 2.00 <sup>93</sup>  | Around 2.00 | 1 |
| HORIZON-MISS-2023-OCEAN-01-11 | CSA | 2.00 <sup>94</sup>  | Around 2.00 | 1 |

|                           |  |       |  |  |
|---------------------------|--|-------|--|--|
| Overall indicative budget |  | 87.70 |  |  |
|---------------------------|--|-------|--|--|





|  |            |
|--|------------|
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| <b>Call - Research and Innovation and other actions to support the implementation of mission A Soil Deal for Europe.....</b>   | <b>110</b> |
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| HORIZON-MISS-2023-SOIL-01-08: Co-creating solutions for soil health in Living Labs .....   | 131        |
| HORIZON-MISS-2023-SOIL-01-09: Carbon farming in living labs .....  | 136        |



| Topics   | Type of Action | Budgets (EUR million) | Expected EU contribution per project (EUR million) <sup>172</sup> | Indicative number of projects expected to be funded |
|--|----------------|-----------------------|---|---|
|  |                | 2023                  |   |   |
| Opening: 17 Jan 2023<br>Deadline(s): 20 Sep 2023 |                |                       |   |   |
| HORIZON-MISS-2023-SOIL-01-01                     | RIA            | 12.00 <sup>173</sup>  | Around 6.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-02                     | RIA            | 14.00 <sup>174</sup>  | Around 7.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-03                     | IA             | 12.00 <sup>175</sup>  | Around 6.00   | 2   |
| HORIZON-MISS-2023-SOIL-01-04                     | IA             | 14.00 <sup>176</sup>  | Around 7.00   | 2   |

|                              |     |                      |              |   |
|------------------------------|-----|----------------------|--------------|---|
| HORIZON-MISS-2023-SOIL-01-05 | IA  | 13.00 <sup>177</sup> | Around 6.50  | 2 |
| HORIZON-MISS-2023-SOIL-01-06 | RIA | 7.00 <sup>178</sup>  | Around 7.00  | 1 |
| HORIZON-MISS-2023-SOIL-01-07 | CSA | 6.00 <sup>179</sup>  | Around 6.00  | 1 |
| HORIZON-MISS-2023-SOIL-01-08 | RIA | 36.00 <sup>180</sup> | Around 12.00 | 3 |
| HORIZON-MISS-2023-SOIL-01-09 | RIA | 12.00 <sup>181</sup> | Around 12.00 | 1 |
| Overall indicative budget    |     | 126.00               |              |   |



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Call - Demonstration of climate mitigation and resilience solutions in support of the implementation of the Adaptation to Climate Change and Cities Missions ..... 145

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Conditions for the Call..... 152

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|   |            |
|---|------------|
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EUROPEAN UNION



# EU MISSIONS

SOIL DEAL FOR EUROPE

**Concrete solutions for our greatest challenges**

100 living labs and lighthouses to lead the transition towards healthy soils by 2030

#EUmissions #HorizonEU #MissionSoil





EUROPEAN UNION

EU  
MISSIONS

## A Soil Mission to support the Green Deal

### Examples of Green Deal Targets related to soil health

#### By 2030

- 25% of land under organic farming
- Reduce the overall use and risk of chemical pesticides by 50% and the use of more hazardous pesticides by 50%
- Reduce fertilizer use by at least 20%
- Reduce nutrient losses by at least 50%
- Reduce by 30% microplastics released into the environment
- Reduce net greenhouse gas (GHG) emissions by at least 55% compared to 1990 levels.

#### By 2035

- the EU should aim to reach climate neutrality in the land use, forestry & agriculture sectors.

#### Mission part of:

- Farm to Fork Strategy
- EU Biodiversity Strategy for 2030
- Climate Adaptation Strategy
- Forest Strategy
- Zero Pollution Action Plan for air, water and soil
- Organic Action Plan
- Long term vision for rural areas
- Communication on carbon farming (upcoming)
- new Soil Strategy (upcoming)





EUROPEAN UNION

## A Soil Deal for Europe

EU  
MISSIONS

### Goal: 100 Living labs and lighthouses to lead the transition towards healthy soils by 2030

#### Specific objectives

1. Reduce desertification

2. Conserve soil organic carbon stocks

3. Stop soil sealing and increase re-use of urban soils

4. Reduce soil pollution and enhance restoration



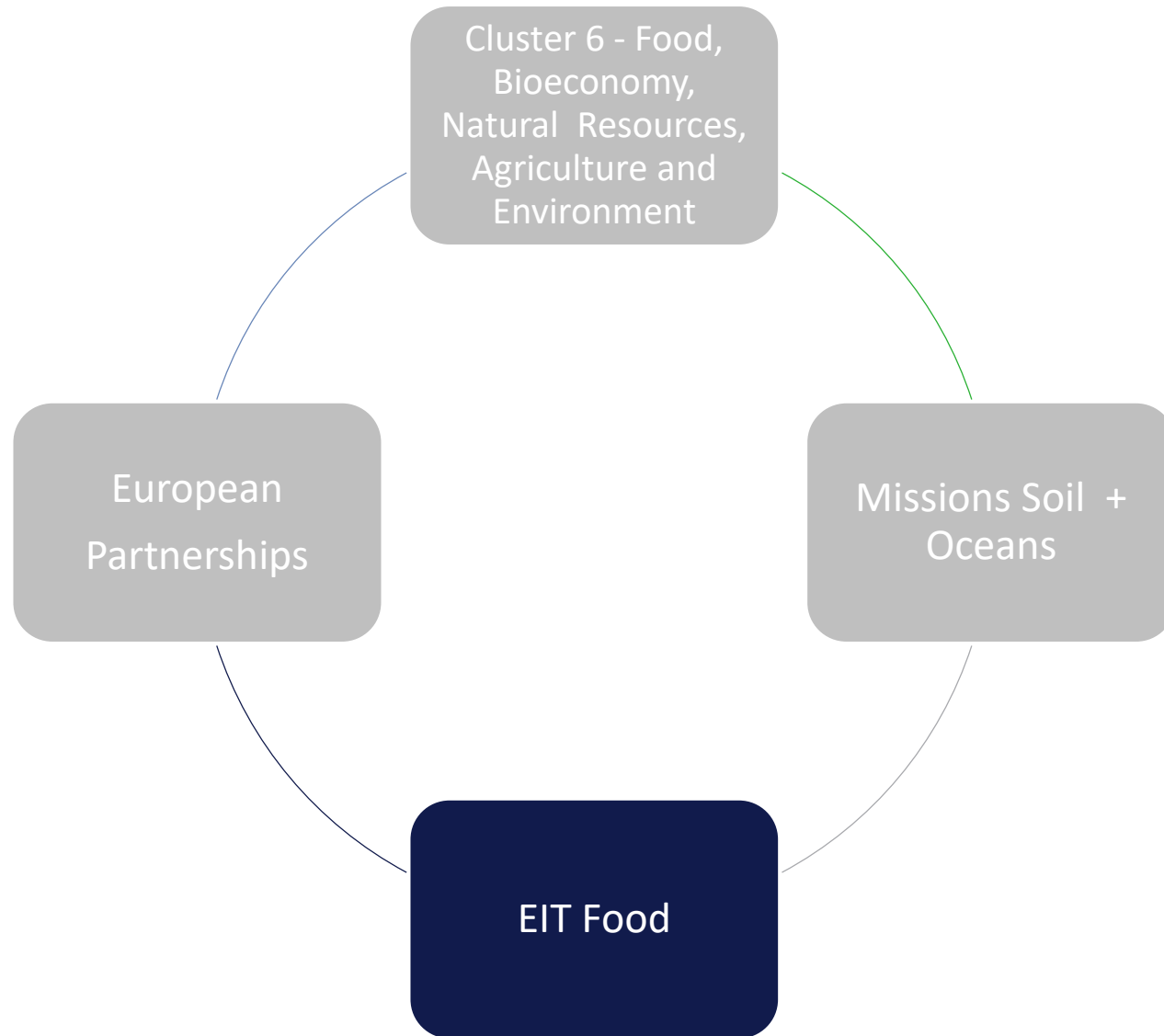
5. Prevent erosion

6. Improve soil structure to enhance soil biodiversity

7. Reduce the EU global footprint soils

8. Improve soil literacy in society

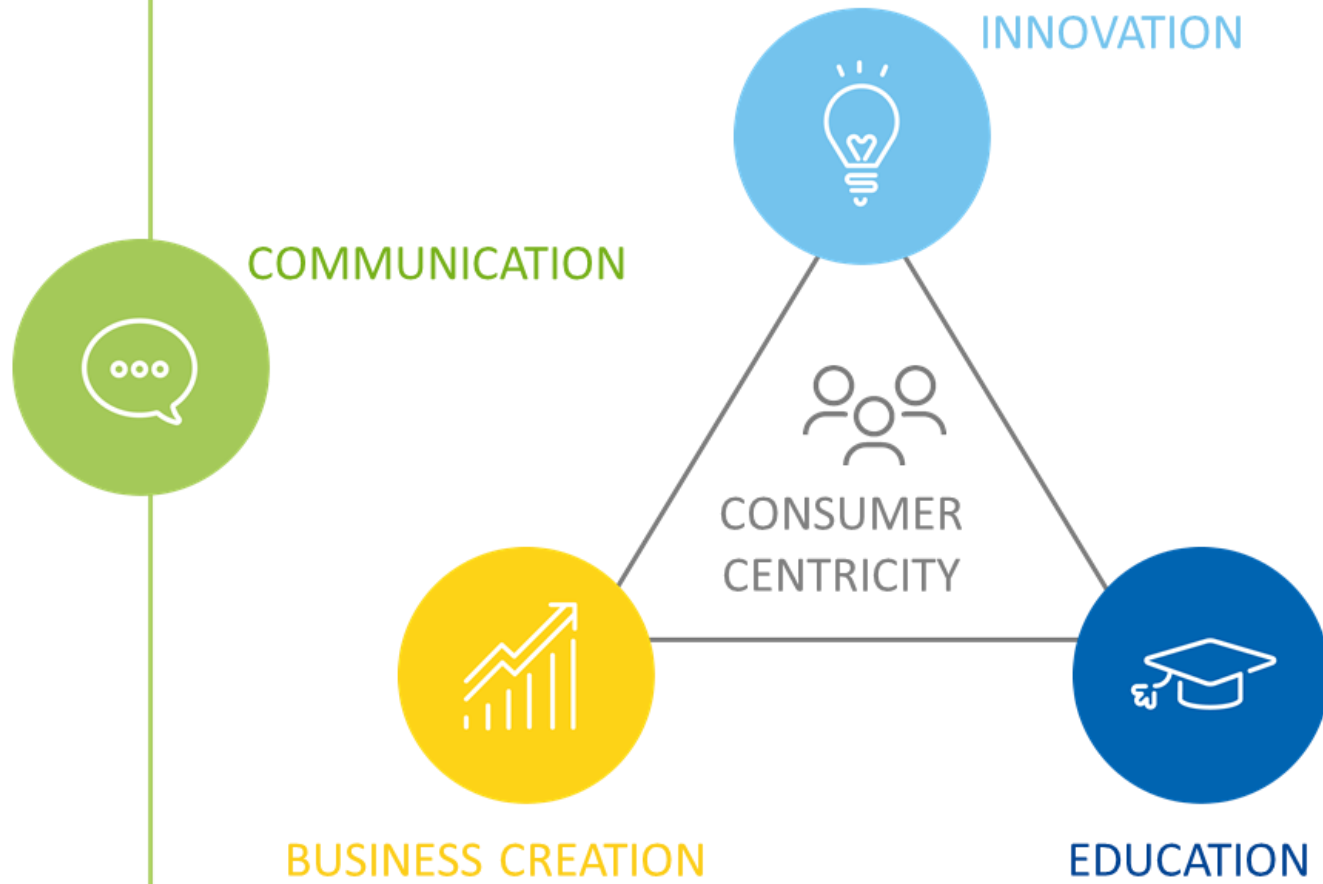
Each specific objective is backed by **one or more quantified targets** and **measurable indicators**. Objectives apply to **all types of land use**.





## Mission

EIT Food's mission is to catalyse the **transformation** of the food system and effectively **meet the global food sector demands** of present and future generations by building, managing and empowering a sustainable and trusted **multi-stakeholder community** with a **central role for the consumer**.







# EIT Food Innovation programmes



**EIT Food Assistant**

Empower consumers to self-monitor lifestyle and health performance and enable informed healthier decisions and sustainable consumption habits



**Your Fork2Farm**

Consumer-centric “fork-to-farm” approaches to deliver personalised healthy food at economies-of-scale associated with mass production



**The Web of Food**

Digitalisation of the food system to boost a demand-driven, resource-efficient food production and build trust by increasing traceability and auditability of food quality, safety and authenticity

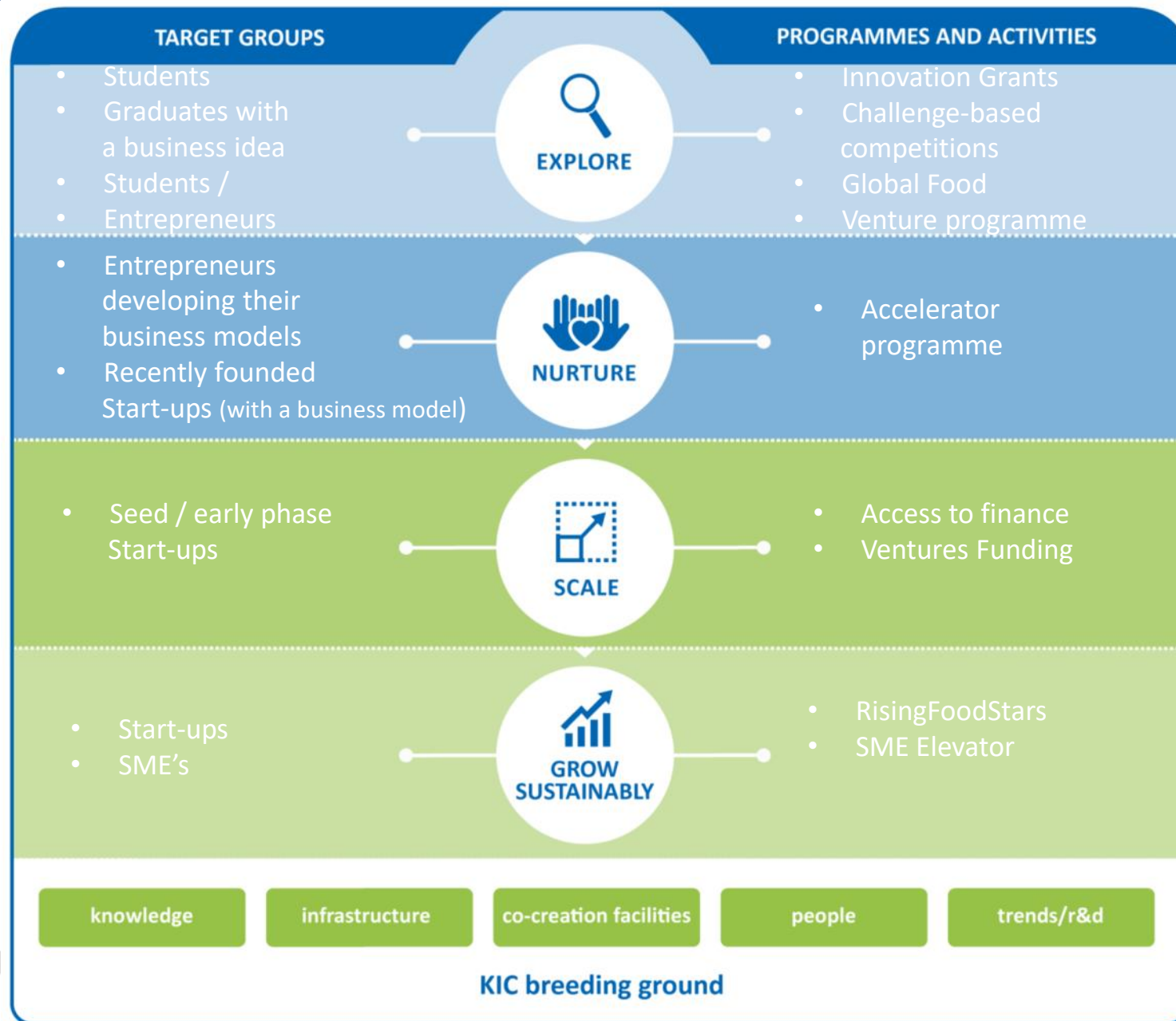


**The Zero Waste Agenda**

Transforming today’s linear “produce-use-dispose” model into a circular bio-economy centered around the consumer



# Business Creation programmes





# APPROFONDIMENTO TOPIC

## Work Programme 2023



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES



### POLICY CONTEXT

- Biodiversity Strategy and related initiatives: EU Forest Strategy 2030; EU Soil Strategy 2030; future Commission proposal on legally binding nature restoration targets and environmental reporting
- Other Green Deal initiatives notably: EU action plan: 'towards zero pollution for air, water and soil', EU climate adaptation strategy, EU farm to fork strategy
- Birds and Habitat Directives ("Natura 2000"); EU Pollinators Initiative
- Marine Strategy Framework Directive and new approach for a sustainable blue economy in the EU
- EU contribution to IPBES and the Convention on Biological Diversity



### IMPACT FROM STRATEGIC PLAN

"**Biodiversity** is back on a path to **recovery**, and **ecosystems** and their **services** are **preserved** and **sustainably restored** on land, inland water and at sea through improved knowledge and innovation"

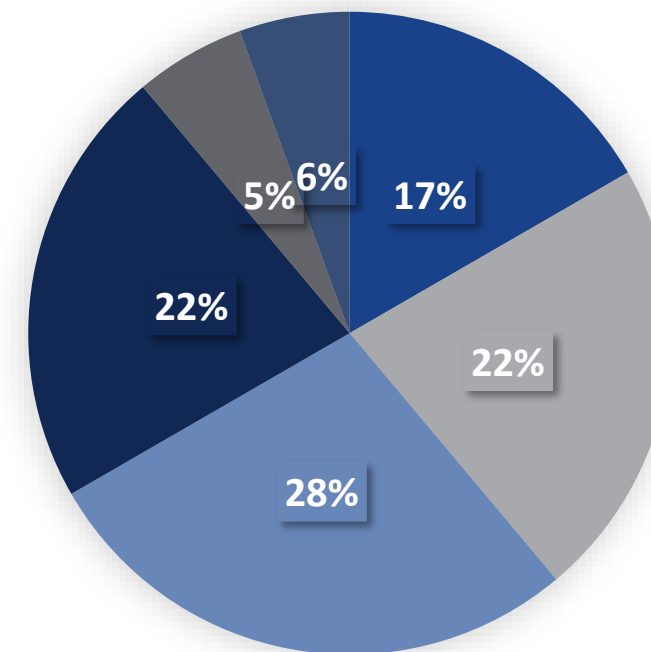




# D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

N° of topics

| Headings   | N° of topics |
|--|--------------|
| Understanding and addressing the main drivers of biodiversity loss       | 3            |
| Biodiversity protection and restoration                                  | 4            |
| Mainstreaming biodiversity in society and the economy                    | 5            |
| Biodiversity friendly practices in agriculture, forestry and aquaculture | 4            |
| Biodiversity and health  | 1            |
| Interconnection of biodiversity research and policies                    | 1            |



- Understanding and addressing the main drivers of biodiversity loss
- Biodiversity protection and restoration
- Mainstreaming biodiversity in society and the economy
- Biodiversity friendly practices in agriculture, forestry and aquaculture
- Biodiversity and health
- Interconnection of biodiversity research and policies

**Total number of topics: 18**



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

# Understanding and addressing the main drivers of biodiversity loss

### *Expected impact*

Understand and address direct **drivers of biodiversity decline** – land and sea use change, natural resource use and exploitation, climate change, pollution, invasive alien species – as well as indirect drivers – demographic, socio-economic, technological, etc.

| ID Topic                     | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|------------------------------|---|-----|---|--------------------------------------|
| HORIZON-CL6-2023-BIODIV-01-1 | Better understanding of routes of exposure and toxicological and ecological impacts of chemical pollution on terrestrial biodiversity | RIA | Around 5.50   | 4                                    |
| HORIZON-CL6-2023-BIODIV-01-2 | Impact of light and noise pollution on biodiversity   | RIA | Around 3.50   | 2                                    |
| HORIZON-CL6-2023-BIODIV-01-3 | Interdisciplinary assessment of changes affecting terrestrial and freshwater ecosystems, building on observation programmes           | RIA | Around 6.00   | 1                                    |



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

### Biodiversity protection and restoration

#### *Expected impact*

Plan, manage and expand **protected areas** and their networks and improve the status of species and habitats based on up-to-date knowledge and solutions.

| ID Topic                     | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|------------------------------|---|-----|---|--------------------------------------|
| HORIZON-CL6-2023-BIODIV-01-4 | Nature protection: Better methods and knowledge to improve the conservation status of EU-protected species and habitats | RIA | Around 4.00   | 2                                    |
| HORIZON-CL6-2023-BIODIV-01-5 | Understanding and reducing bycatch of protected species   | RIA | Around 9.00   | 2                                    |
| HORIZON-CL6-2023-BIODIV-01-6 | Restoration of deep-sea habitats  | IA  | Around 10.00  | 1                                    |
| HORIZON-CL6-2023-BIODIV-01-7 | Demonstration of marine and coastal infrastructures as hybrid blue-grey Nature-based Solutions                          | IA  | Around 5.00   | 2                                    |





## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

# Mainstreaming biodiversity in society and the economy

### *Expected impact*

Mainstream **biodiversity, ecosystem services and natural capital in the society and economy**: integrate them into public and business decision-making; build approaches for enabling transformative changes to tackle societal challenges including through the deployment of nature-based solutions (NBS).

| ID Topic                      | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-BIODIV-01-10 | Build up of knowledge on Nature Positive Economy and supporting its scale-up                                       | RIA | Around 5.00   | 1                                    |
| HORIZON-CL6-2023-BIODIV-01-11 | Biodiversity loss and enhancing ecosystem services in urban and peri-urban areas                                   | RIA | Around 5.00   | 1                                    |
| HORIZON-CL6-2023-BIODIV-01-12 | Reinforcing science policy support with IPBES and IPCC for better interconnected biodiversity and climate policies | CSA | Around 4.00   | 1                                    |
| HORIZON-CL6-2023-BIODIV-01-8  | Addressing biodiversity decline and promoting Nature-based Solutions in higher education                           | CSA | Around 3.00   | 1                                    |
| HORIZON-CL6-2023-BIODIV-01-9  | Biodiversity, economics and finance: unlocking financial flows towards reversing of biodiversity loss              | RIA | Around 5.00   | 1                                    |



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

# Biodiversity friendly practices in agriculture, forestry and aquaculture

### *Expected impact*

Develop and improve **practices in agriculture, forestry, fisheries and aquaculture** to support and make sustainable the use of biodiversity and a wide range of ecosystems services.

| ID Topic                      | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|-------------------------------|--|-----|---|-----------------------------|
| HORIZON-CL6-2023-BIODIV-01-13 | Crop wild relatives for sustainable agriculture  | RIA | Around 6.00   | 2                           |
| HORIZON-CL6-2023-BIODIV-01-14 | Biodiversity friendly practices in agriculture – breeding for Integrated Pest Management (IPM) | RIA | Around 5.00   | 2                           |
| HORIZON-CL6-2023-BIODIV-01-15 | Integrative forest management for multiple ecosystem services and enhanced biodiversity        | CSA | Around 7.00   | 1                           |
| HORIZON-CL6-2023-BIODIV-01-16 | Valorisation of ecosystem services provided by legume crops                                    | RIA | Around 5.00   | 2                           |



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

### Biodiversity and health

#### *Expected impact*

Understand **the biodiversity and health nexus, in particular at the level of ecosystems**, including with the One-health approach, in the context of climate change and globalization and address contributions and trade-offs.

| ID Topic                      | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-BIODIV-01-17 | Interlinkages between biodiversity loss and degradation of ecosystems and the emergence of zoonotic diseases | RIA | Around 4.00   | 3                                    |



## D1 – BIODIVERSITY AND ECOSYSTEM SERVICES

# Interconnection of biodiversity research and policies

### *Expected impact*

Interconnect **biodiversity research and support policies and processes** at EU and global levels, making use of advanced digital technologies and societal engagement where appropriate.

| ID Topic                      | Title topic                                    | ToA    | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-------------------------------|--|--------|---|--------------------------------------|
| HORIZON-CL6-2023-BIODIV-01-18 | European Biodiversity Partnership: Biodiversa+ | COFUND | Around 60.00  | 1                                    |



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION



### POLICY CONTEXT

- European Green Deal
- Farm to Fork Strategy
- Common Agricultural Policy
- Food2030
- Strategic Approach to EU Agricultural Research and Innovation



### IMPACT FROM STRATEGIC PLAN

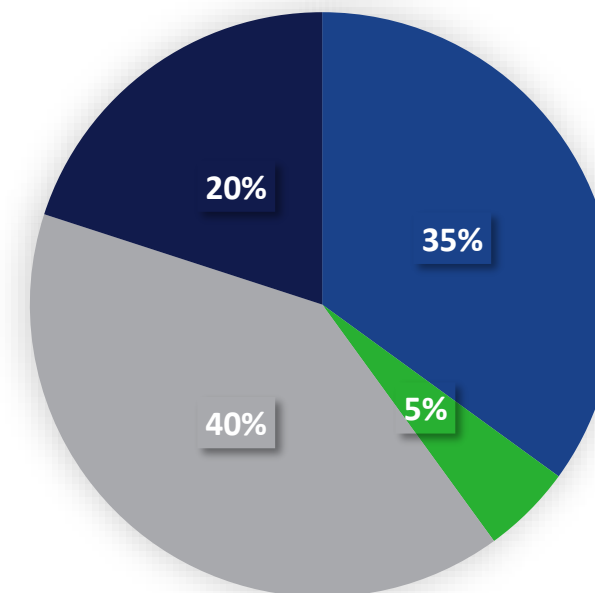
**Food and nutrition security for all within planetary boundaries is ensured** through knowledge, innovation and digitalisation in agriculture, fisheries, aquaculture and food systems, which are sustainable, resilient, inclusive, safe and healthy **from farm to fork**



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

| Headings   | N° of topics |
|--|--------------|
| Enabling sustainable farming systems                               | 7            |
| Enabling sustainable fisheries and aquaculture                     | 1            |
| Transforming food systems for health, sustainability and inclusion | 8            |
| Targeted international cooperation                                 | 4            |
| Enabling sustainable farming systems                               | 7            |
| Enabling sustainable fisheries and aquaculture                     | 1            |

N° of topics



- Enabling sustainable farming systems
- Enabling sustainable fisheries and aquaculture
- Transforming food systems for health, sustainability and inclusion
- Targeted international cooperation

**Total number of topics: 20**



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Enabling sustainable farming systems (1)

#### *Expected impact*

Enable **sustainable farming systems** providing consumers with affordable, safe, healthy and sustainable food, increasing the provision of ecosystem services, restoring and enhancing biodiversity, minimising pollution and pressure on ecosystems and emissions of greenhouse gases, fostering plant, animal and public health, improving animal welfare, and generating fair economic returns for farmer.

| ID Topic                        | Title topic  | ToA    | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|---------------------------------|--|--------|---|--------------------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-1 | European partnership on accelerating farming systems transition – agroecology living labs and research infrastructures | COFUND | Around 60.00  | 1                                    |
| HORIZON-CL6-2023-FARM2FORK-01-2 | European partnership on animal health and welfare  | COFUND | Around 60.00  | 1                                    |
| HORIZON-CL6-2023-FARM2FORK-01-3 | Improving yields in organic cropping systems   | CSA    | Around 4.00   | 2                                    |
| HORIZON-CL6-2023-FARM2FORK-01-4 | Towards research and innovation beyond Farm to Fork Strategy targets for pesticides after 2030                         | CSA    | Around 1.00   | 1                                    |





## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Enabling sustainable farming systems (2)

#### *Expected impact*

Enable **sustainable farming systems** providing consumers with affordable, safe, healthy and sustainable food, increasing the provision of ecosystem services, restoring and enhancing biodiversity, minimising pollution and pressure on ecosystems and emissions of greenhouse gases, fostering plant, animal and public health, improving animal welfare, and generating fair economic returns for farmer.

| ID Topic                        | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|---------------------------------|---|-----|---|-----------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-5 | Advancing vaccine development for African swine fever   | RIA | Around 6.00   | 2                           |
| HORIZON-CL6-2023-FARM2FORK-01-6 | Towards sustainable livestock systems: European platform for evidence building and transitioning policy               | RIA | Around 5.00   | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-7 | Innovations in plant protection: alternatives to reduce the use of pesticides focusing on candidates for substitution | IA  | Around 6.00   | 2                           |



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Enabling sustainable fisheries and aquaculture

#### *Expected impact*

Enable **sustainable fisheries and aquaculture**, in marine and inland waters, increasing aquatic multi-trophic biomass production in a way compatible with the protection of aquatic ecosystems and biodiversity, diversification of fisheries and aquaculture products, for fair, healthy, climate-resilient and environment-friendly food systems with lower impact on aquatic ecosystems and enhanced animal welfare.

| ID Topic                        | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|---------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-8 | Using automatic species recognition and artificial intelligence to fight illegal fish discards and revolutionise fisheries control | IA  | Around 5.00   | 1                                    |



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Transforming food systems for health, sustainability and inclusion (1)

#### *Expected impact*

Accelerate the transition to **sustainable, healthy and inclusive food systems**, delivering co-benefits for climate change mitigation and adaptation, environmental sustainability and circularity, sustainable healthy diets and nutrition, food poverty reduction, empowered citizens and communities, and flourishing food businesses, while ensuring food safety and the economic sustainability of EU food systems during the transition.

| ID Topic                         | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|----------------------------------|--|-----|---|-----------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-10 | Eradicate micronutrient deficiencies in the EU   | RIA | Around 9.00   | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-11 | New detection methods on products derived from new genomic techniques for traceability, transparency and innovation in the food system | RIA | Around 5.00   | 2                           |
| HORIZON-CL6-2023-FARM2FORK-01-12 | Thematic network ensuring food safety by translating research and innovation into practice   | CSA | Around 2.00   | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-13 | Cultured meat and cultured seafood – state of play and future prospects in the EU  | RIA | Around 7.00   | 1                           |



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Transforming food systems for health, sustainability and inclusion (2)

#### *Expected impact*

Accelerate the transition to **sustainable, healthy and inclusive food systems**, delivering co-benefits for climate change mitigation and adaptation, environmental sustainability and circularity, sustainable healthy diets and nutrition, food poverty reduction, empowered citizens and communities, and flourishing food businesses, while ensuring food safety and the economic sustainability of EU food systems during the transition.

| ID Topic                         | Title topic   | ToA    | <u>EU contribution per project</u> | N° of projects to be funded |
|----------------------------------|---|--------|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-14 | Providing marketing solutions to prevent and reduce the food waste related to marketing standards         | RIA    | Around 5.00                        | 2                           |
| HORIZON-CL6-2023-FARM2FORK-01-15 | Fostering resilient European food systems in a changing world   | RIA    | Around 8.00                        | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-16 | Microbiomes fighting food waste through applicable solutions in food processing, packaging and shelf life | IA     | Around 5.00                        | 2                           |
| HORIZON-CL6-2023-FARM2FORK-01-9  | European partnership on sustainable food systems for people, planet and climate                           | COFUND | Around 45.00                       | 1                           |



## D2 – FAIR, HEALTHY AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

### Targeted international cooperation

#### *Expected impact*

The successful proposal will contribute to the African Union (AU)-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation, and its priority on Green Transition, as well as to the implementation of the short-term actions outlined in the working document of the AU-EU Innovation Agenda, aiming to translate R&I efforts.

| ID Topic                         | Title topic   | ToA | <u>EU contribution on per project</u> | N° of projects to be funded |
|----------------------------------|---|-----|---------------------------------------|-----------------------------|
| HORIZON-CL6-2023-FARM2FORK-01-17 | EU-African Union cooperation – linking the activities of the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership and those of the Pan-African Network for Economic Analysis of Policies (PANAP) | CSA | Around 4.00                           | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-18 | Support for the implementation of a sustainable platform for the EU-African Union cooperation under the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership                                     | CSA | Around 4.00                           | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-19 | Support to the markets and trade of agroecological food products under the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership  | IA  | Around 7.00                           | 1                           |
| HORIZON-CL6-2023-FARM2FORK-01-20 | EU-Africa Union – food safety   | RIA | Around 5.00                           | 2                           |



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS



### POLICY CONTEXT

- European Green Deal
- Circular Economy Action Plan
- Biodiversity Strategy
- Bioeconomy Strategy
- Forest Strategy
- Plastics Strategy
- Industrial Strategy
- SME Strategy



### IMPACT FROM STRATEGIC PLAN

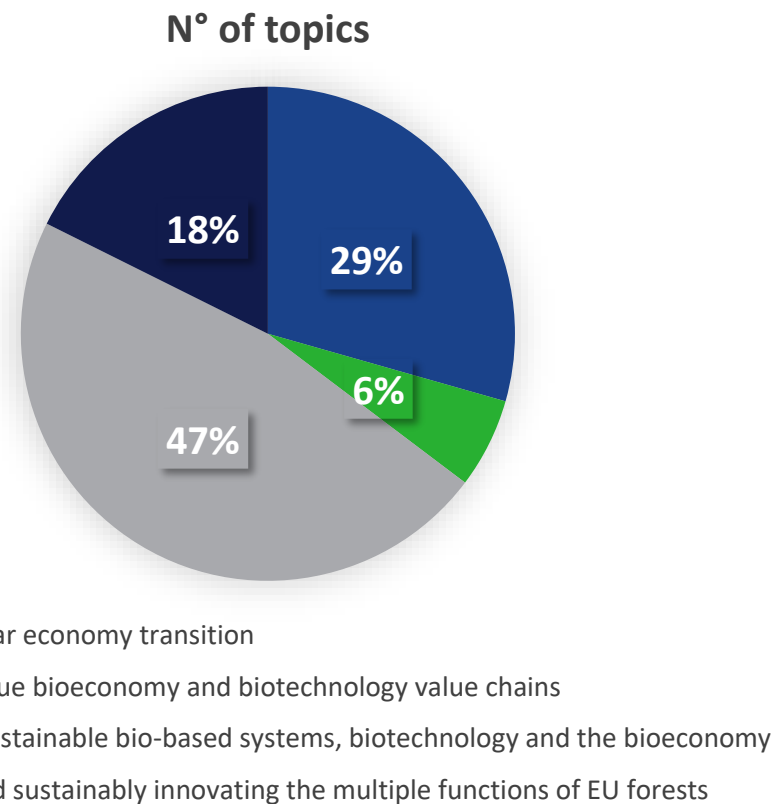
**Sustainable and circular management and use of natural resources** as well as **prevention and removal of pollution are mainstreamed**, unlocking the potential of the **bioeconomy**, ensuring competitiveness and guaranteeing healthy soil, air, fresh and marine water for all, through better understanding of planetary boundaries and deployment of innovative technologies and other solutions, notably in **primary production, forestry and bio-based systems**



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

| Headings   | N° of topics |
|--|--------------|
| Enabling a circular economy transition   | 5            |
| Innovating for blue bioeconomy and biotechnology value chains                  | 1            |
| Innovating for sustainable bio-based systems, biotechnology and the bioeconomy | 8            |
| Safeguarding and sustainably innovating the multiple functions of EU forests   | 3            |

**Total number of topics: 17**







## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

# Enabling a circular economy transition

### *Expected impact*

**Accelerate regional, rural, local/urban and consumer-based transitions** towards a sustainable, regenerative, inclusive, just and clean circular economy and bioeconomy across all regions of Europe; with special attention to the most sensitive/vulnerable<sup>224</sup> and greenhouse gas-intensive regions, based on enhanced knowledge and understanding of science, improved capacity to design, implement and monitor policies as well as by instruments for circular and bio-based transitions.

| ID Topic                      | Title topic  | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-------------------------------|--|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-CircBio-01-1 | Enhancing collaboration between Circular Cities and Regions Initiative's (CCRI) supporting organisations           | CSA | Around 2.50                        | 1                           |
| HORIZON-CL6-2023-CircBio-01-2 | One hundred circular model households: making European households sustainable through inclusive circular practices | IA  | Around 6.00                        | 3                           |
| HORIZON-CL6-2023-CircBio-01-3 | Harnessing the innovation potential and market uptake of successful circular economy water related projects        | CSA | Around 2.00                        | 1                           |
| HORIZON-CL6-2023-CircBio-02-1 | Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions  | IA  | 9.00 to 10.00                      | 6                           |
| HORIZON-CL6-2023-CircBio-02-2 | Novel, sustainable and circular bio-based textiles   | IA  | Around 7.00                        | 2                           |



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

# Innovating for sustainable bio-based systems, biotechnology and the bioeconomy (1)

### *Expected impact*

**Develop innovative and sustainable value-chains in the bio-based sectors** substituting fossil-based ones, increasing circular bio-based systems from sustainably sourced biological resources, replacing carbon-intensive and fossil-based systems. Such development will be supported via research and innovation on **biotechnology** and other enabling technologies, as a prerequisite and driver of future solutions for a circular economy and the bioeconomy transition, with inclusive engagement of all stakeholders, including policymakers and will increase access to finance and technical support along whole supply chains for bioeconomy projects.

| ID Topic                       | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|--------------------------------|--|-----|---|-----------------------------|
| HORIZON-CL6-2023-CircBio-01-10 | Supporting the fair and just transition from GHG-intensive economies facing challenges towards circular bioeconomy model regions | CSA | Around 2.00   | 1                           |
| HORIZON-CL6-2023-CircBio-01-4  | Land-based bioprospecting and production of bioactive compounds and functional materials for multiple bio-based value chains     | RIA | Around 4.00   | 1                           |
| HORIZON-CL6-2023-CircBio-01-5  | Broadening the spectrum of robust enzymes and microbial hosts in industrial biotechnology  | IA  | Around 5.00   | 2                           |
| HORIZON-CL6-2023-CircBio-01-6  | Bio-based solutions for humanitarian applications  | CSA | Around 1.50   | 2                           |



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

# Innovating for sustainable bio-based systems, biotechnology and the bioeconomy (2)

### *Expected impact*

**Develop innovative and sustainable value-chains in the bio-based sectors** substituting fossil-based ones, increasing circular bio-based systems from sustainably sourced biological resources, replacing carbon-intensive and fossil-based systems. Such development will be supported via research and innovation on **biotechnology** and other enabling technologies, as a prerequisite and driver of future solutions for a circular economy and the bioeconomy transition, with inclusive engagement of all stakeholders, including policymakers and will increase access to finance and technical support along whole supply chains for bioeconomy projects.

| ID Topic                      | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|-------------------------------|--|-----|---|-----------------------------|
| HORIZON-CL6-2023-CircBio-01-7 | Symbiosis in the bio-based industrial ecosystems   | CSA | Around 1.50   | 2                           |
| HORIZON-CL6-2023-CircBio-01-8 | Eco-friendly consumer products – low-toxicity/zero pollution construction bio-based materials  | IA  | Around 5.00   | 2                           |
| HORIZON-CL6-2023-CircBio-01-9 | Business models that balance the share of power and profit in the bioeconomy   | RIA | Around 4.00   | 2                           |
| HORIZON-CL6-2023-CircBio-02-3 | Non-plant biomass feedstock for industrial applications: technologies and processes to convert non-lignocellulosic biomass and waste into bio-based chemicals, materials and products, improving the cascading valorisation of biomass | RIA | Around 4.00   | 2                           |



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

# Innovating for blue bioeconomy and biotechnology value chains

### *Expected impact*

**Enlarge potential of marine and freshwater biological resources and blue biotechnology** to deliver greener (climate-neutral and circular) industrial products and processes, and to help characterize, monitor and sustain the health of aquatic ecosystems for a healthy.

| ID Topic                       | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|--------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-CircBio-01-11 | Novel culturing of aquatic organisms for blue biotechnology applications | RIA | Around 4.00   | 2                                    |



## D3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

# Safeguarding and sustainably innovating the multiple functions of EU forests

### *Expected impact*

**Safeguard multi-functionality and management of forests in Europe** based on the three pillars of sustainability (economic, environmental and social), in particular to optimise the contribution of forests and the forest-based sector to climate change mitigation and adaptation.

| ID Topic                       | Title topic   | ToA | <u>EU contribution on per project</u> | N° of projects to be funded |
|--------------------------------|---|-----|---------------------------------------|-----------------------------|
| HORIZON-CL6-2023-CircBio-01-12 | Optimising the sustainable production of wood and non-wood products in small forest properties and development of new forest-based value chains | RIA | Around 6.00                           | 2                           |
| HORIZON-CL6-2023-CircBio-01-13 | Capturing market trends and societal perceptions for tailor-made forest services  | RIA | Around 6.00                           | 2                           |
| HORIZON-CL6-2023-CircBio-01-14 | Monitoring the multi-functionality of European forests  | RIA | Around 4.00                           | 1                           |



## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION



### POLICY CONTEXT

- European Green Deal
- Clean environment and zero pollution ambition..
- Bioeconomy Strategy
- Circular Economy action plan
- Farm to Fork strategy
- Soil strategy
- Marine strategy
- EU water policy



### IMPACT FROM STRATEGIC PLAN

- **Sustainable and circular management and use of natural resources** as well as **prevention and removal of pollution** are mainstreamed, unlocking the potential of the bioeconomy, ensuring competitiveness and **guaranteeing healthy soil, air, fresh and marine water for all**, through better understanding of planetary boundaries and deployment of innovative technologies and other solutions, notably in primary production, forestry and bio-based systems

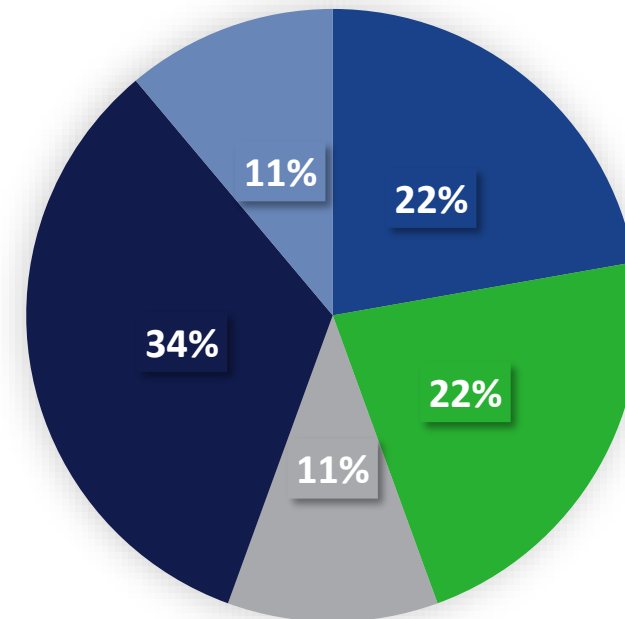


## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

| Headings   | N° of topics |
|--|--------------|
| Halting pollution of air, soil and water   | 2            |
| Addressing pollution in seas and ocean   | 2            |
| Increasing environmental performance and sustainability of processes and products            | 1            |
| Increasing environmental performances and sustainability of bio-based processes and products | 3            |
| Reducing the environmental impact and pollution in food systems                              | 1            |

Total number of topics: 9

N° of topics



- Halting pollution of air, soil and water
- Addressing pollution in seas and ocean
- Increasing environmental performance and sustainability of processes and products
- Increasing environmental performances and sustainability of bio-based processes and products
- Reducing the environmental impact and pollution in food systems





## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

# Halting pollution of air, soil and water

### *Expected impact*

Move towards achieving clean, unpolluted surface water and groundwater bodies in the EU and Associated Countries by advancing the understanding of diffuse and point sources of **water pollution in a global and climate change context**, enabling novel solutions to avoid degradation and restore water bodies, aquatic ecosystems and soil functionality, and further enhancing water quality and its management for safe human and ecological use, while fostering the EU's and Associated Countries' positions and roles in the global water scene.

| ID Topic                            | Title topic   | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-------------------------------------|---|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-ZEROPOLLUTION-01-1 | Knowledge and innovative solutions in agriculture for water availability and quality  | RIA | Around 6.00                        | 1                           |
| HORIZON-CL6-2023-ZEROPOLLUTION-02-1 | Optimisation of manure use along the management chain to mitigate GHG emissions and minimize nutrients/contaminants dispersion in the environment | RIA | Around 7.00                        | 1                           |



## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

# Addressing pollution in seas and ocean

### *Expected impact*

Move towards achieving **clean, unpolluted ocean and seas**, including in the Arctic as a result of successful scientific, technological, behavioural, socio-economic, governance and green-blue transitions.

| ID Topic                            | Title topic   | ToA | <u>EU contribution on per project</u> | N° of projects to be funded |
|-------------------------------------|---|-----|---------------------------------------|-----------------------------|
| HORIZON-CL6-2023-ZEROPOLLUTION-01-2 | Integrated assessment and monitoring of emerging pollutants in the marine environment                           | RIA | Around 6.25                           | 2                           |
| HORIZON-CL6-2023-ZEROPOLLUTION-01-3 | Tackling human and climate change induced pollution in the Arctic - building resilient socio-ecological systems | RIA | Around 6.00                           | 2                           |



## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

# Increasing environmental performances and sustainability of bio-based processes and products

*Expected impact*

**Enhance circular bio-based systems** to operate within planetary boundaries, replacing fossil-based systems and their carbon footprint, mitigating climate change, restoring biodiversity and protecting air, water and soil quality along the supply chain of biological feedstocks and industrial value chains within the EU and Associated Countries and across borders.

| ID Topic                            | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-------------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-ZEROPOLLUTION-01-4 | Environmental sustainability and circularity criteria for industrial bio-based systems                       | RIA | Around 4.00   | 2                                    |
| HORIZON-CL6-2023-ZEROPOLLUTION-01-5 | Industrial biotechnology approaches for improved sustainability and output of industrial bio-based processes | IA  | Around 6.00   | 2                                    |
| HORIZON-CL6-2023-ZEROPOLLUTION-01-6 | Biosensors and user-friendly diagnostic tools for environmental services                                     | RIA | Around 4.00   | 2                                    |



## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

# Reducing the environmental impact and pollution in food systems

### *Expected impact*

**Reduce the environmental impact** of food systems, including by increasing knowledge of the environmental and climate impacts stemming from the food systems and reducing the pollution of plastic food packaging.

| ID Topic                            | Title topic   | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-------------------------------------|---|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-ZEROPOLLUTION-01-7 | Strategies to prevent and reduce plastic packaging pollution from the food system | RIA | Around 4.00                        | 2                           |



## D4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

# Increasing environmental performance and sustainability of processes and products

### *Expected impact*

Substitute harmful chemicals with **safer and more sustainable alternatives**, notably by boosting innovative biotechnology and other sustainable technologies to create zero-pollution bio-based solutions.

| ID Topic                            | Title topic   | ToA | <u>EU contribution on per project</u> | N° of projects to be funded |
|-------------------------------------|---|-----|---------------------------------------|-----------------------------|
| HORIZON-CL6-2023-ZEROPOLLUTION-02-2 | Safe-and-sustainable-by-design bio-based platform chemicals, additives, materials or products as alternatives | RIA | Around 4.00                           | 2                           |



## D5 – LAND, OCEAN AND WATER FOR CLIMATE ACTION (1)



### POLICY CONTEXT

- European Green Deal
- Climate Action
- Biodiversity Strategy
- Farm to Fork Strategy
- Common Agricultural Policy
- EU Arctic Policy, All-Atlantic Ocean Research Alliance



### IMPACT FROM STRATEGIC PLAN

- Climate neutrality is achieved by reducing GHG emissions, maintaining natural carbon sinks, and enhancing the sequestration and storage of carbon in ecosystems, including by unfolding the potential of nature based solutions, production systems on land and at sea as well as rural and coastal areas, where adaptations to climate change are also being fostered for enhancing resilience



## D5 – LAND, OCEAN AND WATER FOR CLIMATE ACTION (1)

### *Expected impact*

Better understand and enhance the mitigation potential of ecosystems and sectors based on the sustainable management of natural resources.

| ID Topic                      | Title topic  | ToA    | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-------------------------------|--|--------|---|--------------------------------------|
| HORIZON-CL6-2023-CLIMATE-01-1 | Additional activities for the European Partnership Water Security for the Planet (Water4All)                   | COFUND | Around 36.00  | 1                                    |
| HORIZON-CL6-2023-CLIMATE-01-2 | Improve the reliability and effectiveness of alternative water resources supply systems and technologies       | IA     | Around 3.30   | 3                                    |
| HORIZON-CL6-2023-CLIMATE-01-3 | Ocean and coastal waters carbon- and biodiversity-rich ecosystems and habitats in Europe and the Polar Regions | RIA    | Around 5.00   | 2                                    |
| HORIZON-CL6-2023-CLIMATE-01-4 | Demonstration network on climate-smart farming – linking research stations                                     | RIA    | Around 20.00  | 1                                    |





## D5 – LAND, OCEAN AND WATER FOR CLIMATE ACTION (2)

### *Expected impact*

Better understand and enhance the mitigation potential of ecosystems and sectors based on the sustainable management of natural resources

| ID Topic                      | Title topic   | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-------------------------------|---|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-CLIMATE-01-5 | Pilot network of climate-positive organic farms   | CSA | Around 5.00                        | 1                           |
| HORIZON-CL6-2023-CLIMATE-01-6 | Analysing fossil-energy dependence in agriculture to increase resilience against input price fluctuations | RIA | Around 5.00                        | 1                           |
| HORIZON-CL6-2023-CLIMATE-01-7 | Enhancing the sustainable production of renewable energy at farm-level                                    | RIA | Around 5.00                        | 1                           |
| HORIZON-CL6-2023-CLIMATE-01-8 | Closing the research gaps on Essential Ocean Variables (EOVs) in support of global assessments            | IA  | 5.00 to 6.00                       | 3                           |



## D6 – RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES (1)



### POLICY CONTEXT

- European Green Deal
- Biodiversity Strategy
- Farm to Fork Strategy
- Zero pollution ambition
- Bioeconomy Strategy
- EU long-term vision for rural areas
- Digital age & digital decade
- European pillar of social rights
- Sustainable Development Goals



### IMPACT FROM STRATEGIC PLAN

- Rural, coastal and urban areas are developed in a sustainable, balanced and inclusive manner thanks to a better understanding of the environmental, socio-economic, behavioural and demographic drivers of change as well as deployment of digital, social and community-led innovations



## D6 – RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES (1)

### *Expected impact*

Rural, coastal and urban areas are developed in a sustainable, balanced, equitable and inclusive manner thanks to a better understanding of the environmental, socio-economic, behavioural, cultural, architectural and demographic structures, needs and drivers of change and their interconnections, as well as deployment of digital, nature-based, social and community-led innovations.

| ID Topic                          | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-----------------------------------|---|-----|---|--------------------------------------|
| HORIZON-CL6-2023-COMMUNITIES-01-1 | Enhancing social inclusion in rural areas: focus on people in a vulnerable situation and social economy | RIA | Around 5.00   | 2                                    |
| HORIZON-CL6-2023-COMMUNITIES-01-2 | Improving rural future through better territorial governance and rural-urban synergies                  | IA  | Around 5.50   | 2                                    |
| HORIZON-CL6-2023-COMMUNITIES-01-3 | International benchmarking of rural and territorial policies and delivery mechanisms                    | CSA | Around 3.00   | 1                                    |



## D6 – RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES (2)

### *Expected impact*

**Rural, coastal and urban communities are empowered to act for change**, be better prepared to achieve climate-neutrality and adapt to climate change, and turn digital and green transitions into increased resilience, and positive long-term prospects.

| ID Topic                          | Title topic  | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-----------------------------------|--|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-COMMUNITIES-01-4 | Investigating the contribution of geographical indications (GIs) to sustainable development and optimising support for newly established schemes | RIA | Around 3.00                        | 1                           |
| HORIZON-CL6-2023-COMMUNITIES-01-5 | Assessing urban farming impacts  | RIA | Around 5.00                        | 1                           |
| HORIZON-CL6-2023-COMMUNITIES-01-6 | Inclusive and smart ways to communicate sustainability of food   | RIA | Around 6.50                        | 1                           |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL



### POLICY CONTEXT

- European Green Deal
- European space programme with the Copernicus part on Earth observation, European Space Agency's (ESA) Earth observation programme
- The European digital strategy, the European strategy for data, the common agricultural policy, etc



### IMPACT FROM STRATEGIC PLAN

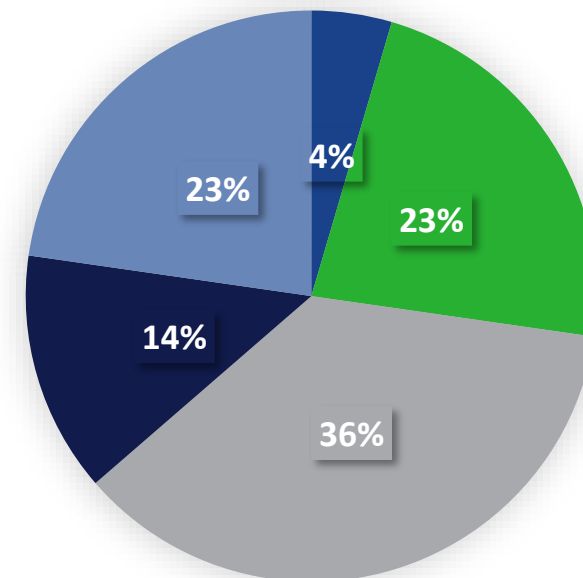
- **Innovative governance models** enabling sustainability and resilience are established and monitored through enhanced and shared use of new **knowledge**, tools, foresight, and **environmental observations** as well as **digital**, modelling and forecasting capabilities



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

| Headings   | N° of topics |
|--|--------------|
| Deploying and adding value to environmental observations           | 1            |
| Digital and data technologies as key enablers                      | 5            |
| Innovating with governance models and supporting policies          | 8            |
| Meteorological Organization and its affiliated bodies              | 3            |
| Strengthening agricultural knowledge and innovation systems (AKIS) | 5            |

N° of topics



- Deploying and adding value to environmental observations
- Digital and data technologies as key enablers
- Innovating with governance models and supporting policies
- Meteorological Organization and its affiliated bodies
- Strengthening agricultural knowledge and innovation systems (AKIS)

**Total number of topics: 22**



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Innovating with governance models and supporting policies (1)

#### *Expected impact*

Innovative governance models **enabling sustainability and resilience** notably to achieve better informed decision-making processes, societal engagement and innovation.

| ID Topic                         | Title topic  | ToA    | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|----------------------------------|--|--------|---|--------------------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-1 | European Partnership of Agriculture of Data  | COFUND | Around 40.00  | 1                                    |
| HORIZON-CL6-2023-GOVERNANCE-01-2 | Advancing analytical capacity and tools to support EU agri-food policies post 2027                       | RIA    | Around 6.00   | 1                                    |
| HORIZON-CL6-2023-GOVERNANCE-01-3 | Towards CAP post 2027: evidence on nudging farmers to leverage more sustainable practices and behaviours | RIA    | Around 3.00   | 1                                    |
| HORIZON-CL6-2023-GOVERNANCE-01-4 | Developing an interdisciplinary and inclusive pan-European academic network for food system science      | RIA    | Around 6.00   | 1                                    |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Innovating with governance models and supporting policies (2)

*Expected impact*  
 Innovative governance models **enabling sustainability and resilience** notably to achieve better informed decision-making processes, societal engagement and innovation.

| ID Topic                         | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|----------------------------------|---|-----|---|-----------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-5 | Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation | RIA | Around 5.00   | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-6 | Co-creation and trust-building measures for biotechnology and bio-based innovation systems  | CSA | Around 1.50   | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-7 | Integrated assessment of land use and biomass demands to contribute to a sustainable healthy and fair bioeconomy                  | RIA | Around 4.00   | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-8 | Mobilising BIOEAST networks for the development of national bioeconomy action programmes in support of the European Green Deal    | CSA | Around 3.50   | 1                           |





## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Deploying and adding value to environmental observations

#### *Expected impact*

European Green Deal related domains benefit from further deployment and exploitation of Environmental Observation data, products and 'green' solutions.

| ID Topic                         | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|----------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-9 | Coordination and supporting action to increase synergies in the dissemination and exploitation of climate observation by World Meteorological Organization and its affiliated bodies | CSA | Around 2.00   | 1                                    |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Meteorological Organization and its affiliated bodies

*Expected impact*  
 A strengthened Global Earth Observation System of Systems (GEOSS).

| ID Topic                          | Title topic  | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-----------------------------------|--|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-10 | Support to EuroGEO initiative coordination/establishing a EuroGEO secretariat  | CSA | Around 2.00                        | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-11 | Reducing observation gaps in the land-sea interface area   | RIA | Around 9.00                        | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-12 | Empowering citizens to monitor, report and act in partnership with relevant public authorities to protect their environment in the context of environmental compliance assurance | RIA | Around 7.00                        | 1                           |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Digital and data technologies as key enablers (1)

#### *Expected impact*

Sustainability performance and competitiveness in the domains covered by Cluster 6 are enhanced through further **deployment of digital and data technologies** as key enablers.

| ID Topic                          | Title topic  | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of<br>projects<br>to be<br>funded |
|-----------------------------------|--|-----|---|--------------------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-13 | Open source solutions for edge, cloud and mixed model applications to strengthen production and administrative capacities in agriculture   | RIA | Around 5.00   | 2                                    |
| HORIZON-CL6-2023-GOVERNANCE-01-14 | Digital and data technologies for livestock tracking   | CSA | Around 5.00   | 1                                    |
| HORIZON-CL6-2023-GOVERNANCE-01-15 | Digitalisation in agriculture and forestry: markets for data, and digital technologies and infrastructure – state of play and foresight in a fast changing regulatory, trade and technical environment | RIA | Around 5.00   | 1                                    |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Digital and data technologies as key enablers (2)

#### *Expected impact*

Sustainability performance and competitiveness in the domains covered by Cluster 6 are enhanced through further **deployment of digital and data technologies** as key enablers.

| ID Topic                          | Title topic   | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-----------------------------------|---|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-16 | Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures | RIA | Around 5.00                        | 2                           |
| HORIZON-CL6-2023-GOVERNANCE-01-17 | Data-driven solutions to foster industry's contribution to inclusive and sustainable food systems               | RIA | Around 4.00                        | 2                           |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Strengthening agricultural knowledge and innovation systems (AKIS)

#### *Expected impact*

Better informed and engaged stakeholders and end users including primary producers and consumers thanks to effective platforms such as Agriculture Knowledge and Innovation Systems (AKIS).

| ID Topic                          | Title topic   | ToA | <u>EU</u><br><u>contribution</u><br><u>on per</u><br><u>project</u> | N° of projects to be funded |
|-----------------------------------|---|-----|---|-----------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-18 | Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice | CSA | Around 2.00   | 2                           |
| HORIZON-CL6-2023-GOVERNANCE-01-19 | Thematic networks to compile and share knowledge ready for practice   | CSA | Around 3.00   | 2                           |
| HORIZON-CL6-2023-GOVERNANCE-01-20 | Developing an EU advisory network on organic agriculture  | CSA | Around 5.00   | 1                           |



## D7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

### Strengthening agricultural knowledge and innovation systems (AKIS)

#### *Expected impact*

Better informed and engaged stakeholders and end users including primary producers and consumers thanks to effective platforms such as Agriculture Knowledge and Innovation Systems (AKIS).

| ID Topic                          | Title topic   | ToA | <u>EU contribution per project</u> | N° of projects to be funded |
|-----------------------------------|---|-----|------------------------------------|-----------------------------|
| HORIZON-CL6-2023-GOVERNANCE-01-21 | Developing EU advisory networks to reduce the use of pesticides | CSA | Around 4.00                        | 1                           |
| HORIZON-CL6-2023-GOVERNANCE-01-22 | Developing EU advisory networks on the optimal fertiliser use   | CSA | Around 4.00                        | 1                           |



# PROPOSAL TEMPLATE



# Application Form

## 🔗 RIA/IA:

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af\\_he-ria-ia\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-ria-ia_en.pdf)

## 🔗 RIA/IA stage one:

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af\\_he-ria-ia-stage-1\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-ria-ia-stage-1_en.pdf)

## 🔗 CSA:

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af\\_he-csa\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-csa_en.pdf)





# Application form

- ☐ The Application Form has two parts :
  - PART A: *administrative information and budget*
  - PART B: *technical description of the project*
- ☐ Submission via the Funding & Tenders Portal.

## **Proposal page limit**

Substantial reduction in maximum length:

- RIAs and IAs type of actions: limit for a full application is **45 pages**
- CSAs: limit is **30 pages**
- First stage proposals: limit is **10 pages**
- EIC Pathfinder: limit is **17 pages**
- Exceptions, if any, would be specified in the call text.



## HORIZON EUROPE: elements

- **Part A** of the proposal is generated by the IT system. It is based on the information entered by the participants through the submission system in the **Funding & Tenders Portal**. The participants can update the information in the submission system at any time before final submission.
- **Part B** of the proposal is the **narrative part that includes three sections, each corresponding to an evaluation criterion**. Part B needs to be uploaded as a PDF document following the templates downloaded by the applicants in the submission system for the specific call or topic. The templates for a specific call may slightly differ from the example provided in this document.



# HORIZON EUROPE: elements

## Same general admissibility conditions

- Applications must be submitted before the call deadline, **electronically** via the Funding & Tenders Portal
- Applications must be **complete, readable, accessible and printable**, and include a **plan for the exploitation and dissemination of results**, unless provided otherwise in the specific call conditions.

The submission process consists of **6 steps**:

Step 1: Logging in the Portal

Step 2: Select the call, topic and type of action in the Portal

Step 3: Create a draft proposal: Title, acronym, summary, main organisation and contact details

Step 4: Manage your parties and contact details: add your partner organisations and contact details.

Step 5: Edit and complete web forms for proposal part A and upload proposal part B

Step 6: Submit the proposal

# Proposal template – Part B

## 1 – General information

Section 1 provides basic data on the proposal. It can be filled in by contacts of the coordinator. Other participants may view this section only. Read-only parts are marked in blue.

| Topic              | Type of action  |
|--------------------|---|
| Call               | Acronym is mandatory  |
| Proposal title     | Max 200 characters (with spaces). Must be understandable for non-specialists in your field.<br><small>Note that for technical reasons, the following characters are not accepted in the Proposal Title and will be removed: &lt; &gt; * &amp;</small> |
| Duration in months | Estimated duration of the project in full months.   |
| Fixed keyword      |   |
| Fixed keyword      | SDG?  |
| Free keywords      | Enter any words you think give extra detail of the scope of your proposal (max 200 characters with spaces).   |

### Abstract

The abstract should provide the reader with a clear understanding of the objectives of the proposal, how they will be achieved, and their relevance to the Work Programme. This summary will be used as the short description of the proposal in the evaluation process and in communications to the programme management committees and other interested parties. It must therefore be short and precise and should not contain confidential information. Use plain typed text, avoiding formulae and other special characters. If the proposal is written in a language other than English, please include an English version of this abstract in the Part B (technical description) of the proposal.

|   |                           |                          |
|---|---------------------------|--------------------------|
| Has this proposal (or a very similar one) been submitted in the past 2 years in response to a call for proposals under any EU programme, including the current call? A 'similar' proposal or contract is one that differs from the current one in minor ways, and in which some of the present consortium members are involved. | <input type="radio"/> Yes | <input type="radio"/> No |
| Please give the proposal reference or contract number   | XXXXX-X                   |                          |



## Proposal template Part B: technical description

(for full proposals: single stage submission procedure and 2<sup>nd</sup> stage of a two-stage submission procedure)

This template is to be used in a single-stage submission procedure or at the 2<sup>nd</sup> stage of a two-stage submission procedure.

The structure of this template must be followed when preparing your proposal. It has been designed to ensure that the important aspects of your planned work are presented in a way that will enable the experts to make an effective assessment against the evaluation criteria. Sections 1, 2 and 3 each correspond to an evaluation criterion.

Please be aware that proposals will be evaluated as they were submitted, rather than on their potential if certain changes were to be made. This means that only proposals that successfully address all the required aspects will have a chance of being funded. There will be no possibility for significant changes to content, budget and consortium composition during grant preparation.

**⚠ Page limit: The title, list of participants and sections 1, 2 and 3, together, should not be longer than 45 pages.** All tables, figures, references and any other element pertaining to these sections must be included as an integral part of these sections and are thus counted against this page limit.

The page limit will be applied automatically; therefore you must remove this instruction page before submitting.

If you attempt to upload a proposal longer than the specified limit before the deadline, you will receive an automatic warning and will be advised to shorten and re-upload the proposal. After the deadline, excess pages (in over-long proposals/applications) will be automatically made invisible, and will not be taken into consideration by the experts. The proposal is a self-contained document. Experts will be instructed to ignore hyperlinks to information that is specifically designed to expand the proposal, thus circumventing the page limit.

Please, do not consider the page limit as a target! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light.

**⚠** The following formatting conditions apply.

The reference font for the body text of proposals is Times New Roman (Windows platforms), Times/Times New Roman (Apple platforms) or Nimbus Roman No. 9 L (Linux distributions).

The use of a different font for the body text is not advised and is subject to the cumulative conditions that the font is legible and that its use does not significantly shorten the representation of the proposal in number of pages compared to using the reference font (for example with a view to bypass the page limit).

The minimum font size allowed is 11 points. Standard character spacing and a minimum of single line spacing is to be used. This applies to the body text, including text in tables.

Text elements other than the body text, such as headers, foot/end notes, captions, formula's, may deviate, but must be legible.

The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

### Excellence – aspects to be taken into account.

- Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

### 1. Excellence

**⚠** The following aspects will be taken into account only to the extent that the proposed work is within the scope of the work programme topic.

#### 1.1 Objectives and ambition [e.g. 4 pages]

- Briefly describe the objectives of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?
- Describe how your project goes beyond the state-of-the-art, and the extent the proposed work is ambitious. Indicate any exceptional ground-breaking R&I, novel concepts and approaches, new products, services or business and organisational models. Where relevant, illustrate the advance by referring to products and services already available on the market. Refer to any patent or publication search carried out.
- Describe where the proposed work is positioned in terms of R&I maturity (i.e. where it is situated in the spectrum from 'idea to application', or from 'lab to market'). Where applicable, provide an indication of the Technology Readiness Level, if possible distinguishing the start and by the end of the project.

**⚠** Please bear in mind that advances beyond the state of the art must be interpreted in the light of the positioning of the project. Expectations will not be the same for RIAs at lower TRL, compared with Innovation Actions at high TRLs.

#### 1.2 Methodology [e.g. 15 pages]

- Describe and explain the overall methodology, including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them. [e.g. 10 pages]

**⚠** This section should be presented as a narrative. The detailed tasks and work packages are described below under 'Implementation'.

- Describe any national or international research and innovation activities whose results will feed into the project, and how that link will be established; [e.g. 1 pages]
- Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an interdisciplinary approach is unnecessary in the context



# HORIZON EUROPE: new features

## NEW FIELDS IN PART A

- **Researchers table** – needed to follow up researchers careers (HE indicator)
- Role participating organisation
- Self-declaration on **gender equality plan**

## FIELDS MOVED FROM PART B TO PART A

- Ethics self-assessment
- **Security questionnaire** (NEW in all HE proposals)
- Information on participants' previous activities related to the call

## NEW IN PART B

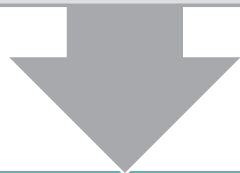
- Glossary of terms
- Consistency on the use of terminology is ensured in all project phases (from WP to proposal and reporting)
- Extensive explanations on what exactly should be included in each section



## 1. Excellence

- 1.1 Objectives and Ambition
- 1.2 Methodology

**The What - Concept**  
What is the project about?



## 2. Impact

- 2.1 Project's pathways towards impact
- 2.2 Measures to maximise impact - Dissemination, exploitation and communication
- 2.3 Summary

**The Impact - Value**  
What is the value of the project?



## 3. Implementation

- 3.1 Work plan and resources
- 3.2 Capacity of participants and consortium as a whole

**The How - Execution**  
How to meet the project objectives?



# Key points to consider when writing a proposal in HE



**Your proposed work must be within the scope of a work programme topic**



**You need to demonstrate that your idea is ambitious and goes beyond the state of the art**



**Your scientific methodology must take into account interdisciplinary, gender dimension and open science practices. It must not significantly harm the environment**



**You should show how your project could contribute to the outcomes and impacts described in the work programme (the pathway to impact)**



**You should describe the planned measures to maximise the impact of your project ('plan for the dissemination and exploitation including communication activities')**



**You should demonstrate the quality of your work plan, resources and participants**



# EVALUATION PROCESS





## Evaluation criteria

### Same criteria as in H2020

Same three award criteria: 'Excellence', 'Impact' and 'Quality and efficiency of the implementation'.

### Changes introduced upon lessons learnt

- The number of 'aspects to be taken into account' have been **reduced**, ensuring that the same aspect is not assessed twice
- **Open Science** practices assessed as part of the scientific methodology in the excellence criterion
- **New approach to impact**: Key Impacts Pathways (KIPs)
- The assessment of the **quality of applicants** is assessed under 'implementation', rather than as a separate binary assessment of operational capacity
- Assessment of **management structures** has been removed.



# Evaluation criteria (RIAs and IAs)

## EXCELLENCE

- ✓ Clarity and pertinence of the **project's objectives**, and the extent to which the proposed work is ambitious, and goes beyond the state-of-the-art.
- ✓ Soundness of the proposed **methodology**, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the **gender dimension** in research and innovation content, and the quality of **open science practices** including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

## IMPACT

- ✓ Credibility of the **pathways** to achieve the expected **outcomes and impacts** specified in the work programme, and the likely scale and significance of the contributions due to the project.
- ✓ Suitability and quality of the **measures to maximize expected outcomes and impacts**, as set out in the dissemination and exploitation plan, including communication activities.

## QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

- ✓ Quality and effectiveness of the **work plan**, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- ✓ Capacity and role of each **participant**, and extent to which the **consortium** as a whole brings together the necessary expertise.

Proposals aspects are assessed to the extent that the proposed work is within the scope of the work programme topic





# Evaluation criteria (RIAs and IAs) → FIRST STAGE

## EXCELLENCE

- ✓ Clarity and pertinence of the **project's objectives**, and the extent to which the proposed work is ambitious, and goes beyond the state-of-the-art.
- ✓ Soundness of the proposed **methodology**, including the underlying

## IMPACT

- ✓ Credibility of the **pathways** to achieve the expected **outcomes and impacts** specified in the work programme, and the likely scale and significance of the contributions due to the project.

## QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

*for first stage: overall*

Proposals aspects are assessed to the extent that the proposed work is within the scope of the work programme topic



European Commission



## Ranking Criteria for ex aequo proposals

### By order of priority

1. Aspects of the call that have not otherwise been covered by more highly ranked proposals
2. Scores on 'Excellence' then on 'Impact' (for IAs, scores on 'Impact' then 'Excellence')
3. **Gender balance among personnel named in the proposal who will be primarily responsible for carrying out the research and/or innovation activities, and who are included in the researchers table in the proposal**
4. Geographical diversity
5. ...



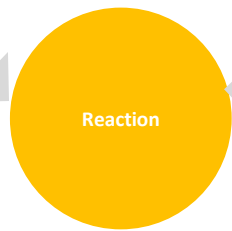
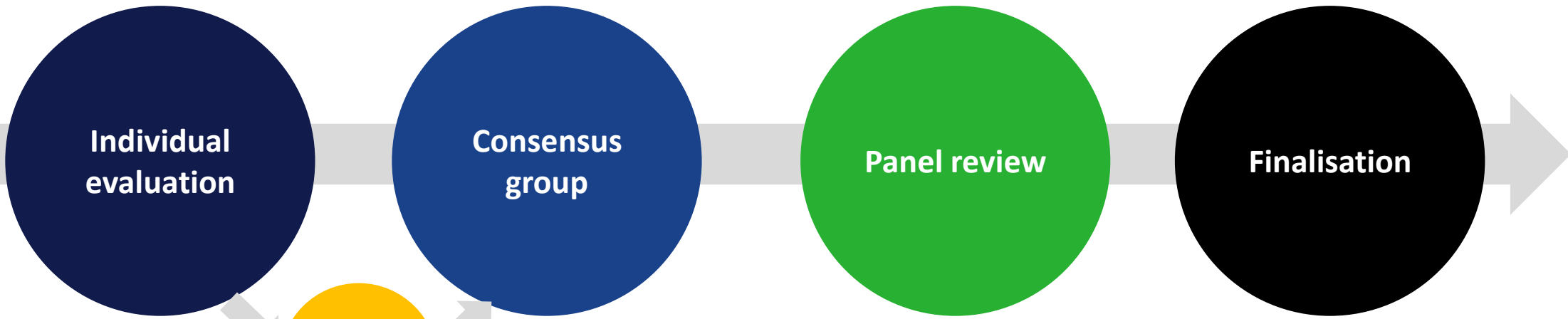
# Standard evaluation process

Experts assess proposals **individually**. Minimum of three experts per proposal (but often more than three).

All individual experts discuss together to agree on a **common position**, including comments and scores for each proposal.

The panel of experts reach an **agreement** on the scores and comments for all proposals within a call, checking **consistency across the evaluations**.

The Commission/Agency reviews the results of the experts' evaluation and puts together the **final ranking list**.

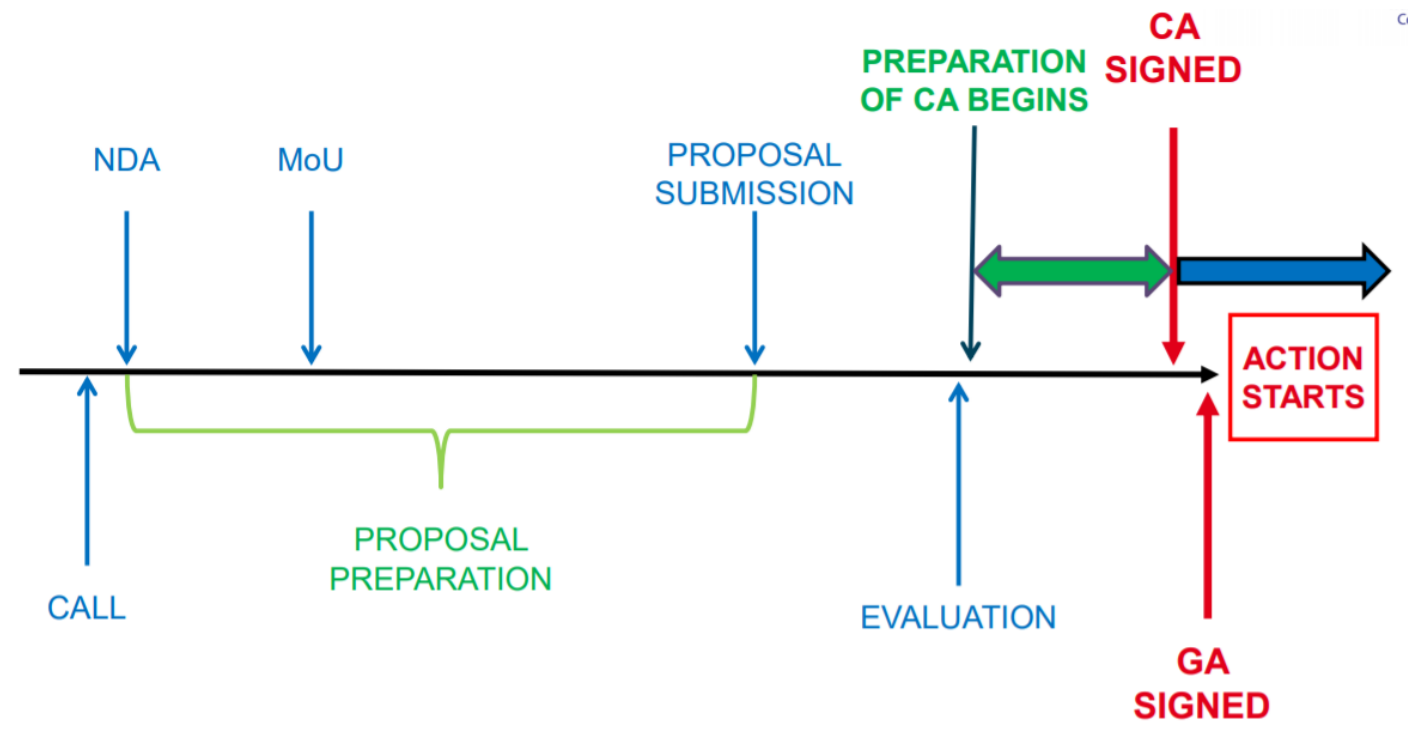


## New pilot process 'Right-to-react (Rebuttal)'

- to increase transparency, to correct any misunderstandings by experts at an early stage.
- Applicants will send their reactions to draft experts comments
- Experts will take applicants' reaction into account before finalising their final assessment.



# Timeline



- 5 months from submission to evaluation
- 3 months from the start of the negotiation to the signature of the Grant Agreement (GA)



# PROGETTAZIONE



# HORIZON EUROPE

## Part B1

### EXCELLENCE

#### 1.1 Objectives and ambition [e.g. 4 pages]

- a. Objective
- b. State of the art
- c. TRL

#### 1.2 Methodology [e.g. 15 pages]

- a. concepts, models and assumptions
- b. national or international R&I activities
- c. inter-disciplinary approach
- d. integration of social sciences and humanities
- e. Gender dimension
- f. open science practices
- g. data management

## Part B1

### IMPACT

#### 2.1 Project's pathways towards impact [e.g. 4 pages]

##### Objective

- a. the outcomes and the wider impacts
- b. requirements and potential barriers
- c. scale and significance of the project's contribution to

#### 2.2 Measures to maximise impact [e.g. 5 pages]

- a. plan for the dissemination and exploitation including communication activities'
- b. strategy for the management of intellectual property

#### 2.3 Summary ( e.g Canvas table]

## Part B1

### IMPLEMENTATION

#### 3.1 Work plan and resources [e.g. 14 pages – including tables]

- a. overall structure of the work plan;
- b. WP timing and components (Gantt chart or similar);
- c. graphical presentation with inter-relate (Pert chart or similar).
- d. detailed work description + table

#### 3.2 Capacity of participants and consortium as a whole [e.g. 3 pages]

##### concepts, models and assumptions

- a. Describe the consortium
- b. Critical infrastructure
- c. Complementarity
- d. the industrial/commercial involvement

- e. Third countries





# Proposal template Part B: technical description

## **1. Excellence**

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## **2. Impact**

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## **3. Quality and efficiency of the implementation**

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



# Proposal template Part B: technical description

## 1. Excellence

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## 2. Impact

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## 3. Quality and efficiency of the implementation

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



# Proposal template Part B: technical description

## 1. Excellence

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## 2. Impact

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## 3. Quality and efficiency of the implementation

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



# PROGETTAZIONE



# Proposal template Part B: technical description

## **1. Excellence**

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## **2. Impact**

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## **3. Quality and efficiency of the implementation**

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



# Proposal template Part B - Section 1

## 1. Excellence

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 14 pages]*



## 1.1 Objectives and ambition (e.g. 4 pages)

- ▣ Briefly describe the **objectives** of your proposed work. Why are they pertinent to the work programme topic? Are they measurable and verifiable? Are they realistically achievable?



## Objectives

- ▣ The goals of the work performed within the project, in terms of its research and innovation content. This will be translated into the project's results. These may range from tackling specific research questions, demonstrating the feasibility of an innovation, sharing knowledge among stakeholders on specific issues. The nature of the objectives will depend on the type of action, and the scope of the topic





## Objectives

- ▣ **Specific** – target a specific area for improvement
- ▣ **Measurable** – quantify or at least suggest an indicator of progress
- ▣ **Achievable** – state what results can realistically be achieved, given available resources
- ▣ **Relevant** – fit the purpose of the topic and address the vision of the project
- ▣ **Time-bound** – specify the specific timeline for completion



# Example 1

**SO3 – To develop a framework for the INTERNALISATION of externalities through policies and businesses models and strategies:** In order to underpin pathways towards sustainable food systems based on the internalisation of externalities, **policies** (regulations, fiscal policies, food labelling/certification, public procurement) **and businesses models and strategies** (labelling, supply chain contracts in the value chain, dedicated supply chains, risk management, investment strategies) **will be defined**. Based on the EU-global database of externality data, [redacted] will develop a policy modelling framework for the quantification of internalisation pathways. The framework encompasses well-established large scale agri-food models (CAPRI, MAGNET), enhanced by organic farming, air pollution and health indicators, as well as dedicated micro-models to assess the behavioural response of producers and consumers. In parallel, tools assessing the impact of business models and strategies that internalise externalities along the food value chain will be developed. The effectiveness of different policy and business model pathways will be evaluated in the case studies.

**KPIs:** [redacted] *Policy modelling framework for INTERNALISATION* ready at **M36**; [redacted] *Business and Value chain INTERNALISATION tools* available at **M36**; N° of CSs where the policy pathways are validated: **6**; N° of CSs where the business model pathways are validated: **7**.



## ESR (Criterion 1 – Excellence: tot. 3,5)

## Example 1

- ❏ The overall objective is clear and **pertinent to the requirements of the topic**. The four specific objectives are well formulated. They are clear, measurable, verifiable, and realistically achievable within the duration of the proposed work. The inclusion of key performance indicators with quantified and realistic targets is a positive aspect. However, the proposal does not sufficiently consider the positive externalities of food. For example, affecting consumers' choices towards healthier products by internalising external costs of unhealthy diets is poorly explored. *This is a shortcoming.*



# Example 2

- Obj1.** To accelerate the deployment of transparency solutions in EU food systems (especially among micro-enterprises and SMEs), to increase the sustainability and resilience of agrifood systems and improve the performance of production processes. **ExRes:** 15+ small consortia of micro-enterprises and SMEs supported through grants; co-creation and deployment of innovative integrated solutions demonstrated in a real environment through 15 Living Labs (LLs), with demonstrators on integrated technologies, implemented in different geographic areas focusing on 4 selected food chains (milk and meat, fish, fruit and vegetables, edible oils) and horizontally on short supply chains; Replication toolkit (including guidelines, protocols, portfolio, and solutions); Exploitation Roadmap.
- Obj2.** To reduce the vulnerability of the production chains to frauds and tampering, demonstrating, and communicating origin and authenticity of raw materials and products. **ExRes:** “*EPCIS to track and identify the origin food products*” demonstrated in 2 operational environments for meat and fruit & vegetables; “*Oil diffused platform for traceability, healthy & sustainable diets*” demonstrated in 3 operational environments for olive oil, hemp oil and seed oil; “*Food quality and traceability benchmark tool*” demonstrated; *Green Point* with integrated technologies’ platform for the short supply chain demonstrated in 2 operational environments.





## ESR (Criterion 1 – Excellence: tot. 4,5)

## Example 2

- ▣ The objectives are very clearly described, measurable and verifiable and the proposal is very convincing in relation to their achievability. The central objective of developing a platform hosting the information on the existing technological solutions and implemented integrated solutions, including an EU Hub of Expertise in transparency in the food value chain, is highly pertinent to the Topic.



## ESR (Criterion 1 – Excellence)

## Example 3

1. The six **specific objectives** are clear and **pertinent to the topic**, ambitious and realistically achievable, measurable and verifiable with quantified indicators specifically described for each single objective. This is excellent.
2. The **objectives** are clear as they are specific, measurable, achievable and realistic. This is very good. The objectives are pertinent and fully aligned with the scope of the call topic as the proposal aims to demonstrate replicable regenerative circular systemic models and solutions that address the end-of-life glass and fiber-reinforced polymer composites with a focus on transportation (automotive, aerospace, naval), construction (building and infrastructures, wind turbines), electrical/electronic components and consumer/sporting goods manufacturing areas. This is very good.
3. The **objectives** of the proposal are **pertinent to the scope of the topic**. The proposal aims to develop and validate easy-to-use tools and guidance to address the lack of information for food loss and waste, to select best practices, to pilot identified innovative practices and to provide recommendations. The objectives are sufficiently clear, they are measurable and verifiable (based on detailed key performance indicators) and realistically achievable. However, while food waste starting at the retail stage is well addressed, the proposal insufficiently considers food loss at the upstream level (farming and food production). This is a minor shortcoming.



## Why are they PERTINENT to the work programme topic?

### **H2020** Relation to the work programme

Indicate the work programme topic to which your proposal relates, and *explain how your proposal addresses the specific challenge and scope* of that topic, as set out in the work programme

### **HE** pertinence of the objectives to the work programme topic

*How the proposal's objectives address the topic*

# Example 1

**Objective 1: Establishment of innovative governance framework** to increased awareness and enhanced engagement of all actors achieved through co-creation processes and contributions from the humanities/art/design/culture to bioeconomy fostering role of innovation and sustainability for the new bio-based materials, new functionalities, safety, user-friendliness, understanding incl. dissemination thereof.

**Challenge:** enable sustainable engagement; embed art and design as key elements to connect, integrate and communicate bioeconomy in co-developed activities.

**Relevance to the work programme:** *The integration of human-centric principles, offered by art, culture and eco-design in respect to the bio-based feedstock, incl. traditional and novel biological materials ... Assess and integrate the contribution from the humanities/art/design/culture into bioeconomy/bio-based economy sectors*

**KPIs:** developed and integrated 'boundary objects' in hubs' activities; number of co-created activities (in education, outreach and regional development); number of social innovations (products, solutions, approaches, job increase) developed within the hubs; number of webinars, number of dissemination and communication actions

**Achievability:** - Developed boundary objects facilitating to connect, or transfer knowledge and experiences between stakeholders in bioeconomy within the 5 hub topics (D1.1, implementation in WP2 and WP3); - establishment of 15 co-creation workshops (WP2) to develop on local development (D2.1), education (D2.2), broad outreach and communication (D2.3) – 5 future visions for region (T2.3) and strategical approach (D2.2) – 2 webinars (10 in total) socio-spacial contexts and foster outreach (T3.5)





# Example 2

|  |  |
|--|--|
| <b>SO1</b>   | Co-creating innovative approaches, formats, materials and tools, through the cooperation between children, young adults, parents, teachers and other formal and non-formal education professionals, to provide educational and informational toolkits on bioeconomy in general and bio-based sectors.  |
| <b>Operational Objectives</b>  | <p>GenB promotes the “Co-creation of innovative approaches” (WP1), by:</p> <ul style="list-style-type: none"> <li>a) Collecting &gt;100 bioeconomy awareness, information and education contents, from &gt;50 sources (T1.1)</li> <li>b) Co-creating innovative approaches for awareness and education through the organization of (T1.3):             <ul style="list-style-type: none"> <li>#1 European Common Ground Camp</li> <li>#3 Focus groups in 3 countries SP, EL, BE</li> <li>#3 Living Labs per target age in 3 countries AT, IT, SK</li> </ul> </li> <li>c) Making available approaches, formats, contents and tools through:             <ul style="list-style-type: none"> <li>#1 GenB resources Library (T1.2)</li> <li>#6 toolkits for young people, teachers and other multipliers (T1.4)</li> </ul> </li> </ul> |
| <p>The GenB SO1 is pertinent to the topic because contributes to the following scope and expected outcomes:</p> <p><i>This topic should involve the effective contribution of SSH disciplines</i></p> <p><i>Innovative approaches to provide a toolkit with educational and information material</i></p> <p><i>Strengthened cooperation between teachers, parents and youth by developing new approaches</i></p> |  |

## 1.1 Objectives and ambition (e.g. 4 pages)

- Describe how your project goes **beyond the state-of-the-art**, and the extent the proposed work is ambitious. Indicate any exceptional ground-breaking R&I, novel concepts and approaches, new products, services or business and organisational models. Where relevant, illustrate the advance by referring to products and services already available on the market. Refer to any patent or publication search carried out.



# Example 1

## 1.1.2 *Ambition*

In line with the abovementioned four SOs, [redacted] brings advances beyond the state of the art in the following areas: 1) stakeholder platform, 2) valuation, 3) internalisation and 4) impact, as reported in Table 1:

| State of the art   | Progress beyond the state of the art in [redacted]  |
|--|---|
| <b><i>STAKEHOLDER PLATFORM supporting the transition towards a sustainable food system</i></b>   |   |
| <p>Currently, internalisation of externalities is a niche activity applied by frontrunners. Moreover, there are several actors in the field with diverse expertise and perspectives, but there is a lack of cooperation due to different factors (barriers in collaboration, lack of platforms putting in contact all actors, etc.).</p> | <p>Internalisation of externalities <b>will move to broader audience of policy makers and business actors</b> including progressive investors and asset managers willing to invest in sustainable companies, through the CoP, the MMLs and the case studies. [redacted] <b>will create a cooperative environment</b>. A wide number of actors will co-create activities using a multi-actor approach (WP4).</p> |
| <b><i>VALUATION of externalities</i></b>   |   |



## ESR (Criterion 1 – Excellence: tot. 3,5)

## Example 1

- On the whole, the proposal provides a good overview of the state of the art. The proposed work is ambitious and goes well beyond the state of the art, for example by developing the MAGNET model to include environmental externalities in food and by using experimental methods at the micro level. However, the proposal mainly explores land-based production systems and does not describe the current state of fish food resources in sufficient detail, which is reflected both in the analysis of the state of the art and the case studies. This is a shortcoming.





## Example 2

The main contributions of [REDACTED] are as follows, going **beyond the state of the art**: **1) Novel framework to identify and assess drivers, barriers and impacts of XG and edge-based solutions** considering multiple dimensions, such as SEET and policy ones, linking SDGs to the concept of last-mile communities; **2) Analysis of the state of the art on connectivity solutions, XG and Edge-based and last-mile**, to define criteria for the identification of viable solutions from multiple points of views in different contexts; **3) Innovative business models** with clear demonstrable impact on users' SEET benefits; **4) Collaborative approach in LLS** via workshops, interviews and social events, raising awareness on XG solutions potential and to collectively identify needs and plausible solutions to foster sustainable development and use; **5) Set-up of software and hardware components** to demonstrate the potential of 5G/XG and last-mile solutions taking as reference the solutions identified in LLS; **6) Development of a DSS to support actors** – i.e., farms, foresters, firms, communities, and other stakeholders – in the identification of the most viable options for XG connectivity based on the framework above; **7) Guidelines for policymakers** in supporting and implementing availability and use of solutions in rural areas; **8) Robust dissemination strategy** to reach a wide audience and raise awareness on the potential of existing and upcoming XG/5G connectivity solutions.



## ESR (Criterion 1 – Excellence: tot. 4,5)

## Example 2

- ▣ The proposed work is ambitious and it goes beyond the state of the art in developing a novel conceptual framework called socio-economic environmental-technological (SEET) engaging the relevant actors. The proposal target is a decision support tool for rural last-mile communities, with Living Labs used for testing and validation. Such inclusive and community-level driven approach is innovative. However, five living labs are located in the digitally more developed countries while less digitally developed countries are mostly abandoned in the implementation of living labs, even if representatives of those countries are in the consortium. This is a shortcoming.



## 1.1 Objectives and ambition (e.g. 4 pages)

- ▣ Describe where the proposed work is **positioned in terms of R&I maturity** (i.e. where it is situated in the spectrum from ‘idea to application’, or from ‘lab to market’). Where applicable, provide an indication of the Technology Readiness Level, if possible distinguishing the start and by the end of the project.

*Note Please bear in mind that advances beyond the state of the art must be interpreted in the light of the positioning of the project. Expectations will not be the same for RIAs at lower TRL, compared with Innovation Actions at high TRLs.*



# Positioning of the project

Fundamental  
research

Feasibility

Validation  
(lab scale)

Demonstration  
(large scale)

Commercialisation







# Technology Readiness Levels

Where the specific call conditions require a Technology Readiness Level (TRL)

- ▣ TRL 1 — Basic principles observed
- ▣ TRL 2 — Technology concept formulated
- ▣ TRL 3 — Experimental proof of concept
- ▣ TRL 4 — Technology validated in a lab
- ▣ TRL 5 — Technology validated in a relevant environment (industrially relevant environment in the case of key enabling technologies)
- ▣ TRL 6 — Technology demonstrated in a relevant environment (industrially relevant environment in the case of key enabling technologies)
- ▣ TRL 7 — System prototype demonstration in an operational environment
- ▣ TRL 8 — System complete and qualified
- ▣ TRL 9 — Actual system proven in an operational environment (competitive manufacturing in the case of key enabling technologies, or in space)



# Example 1

## 1.2.9 [redacted] tech ecosystem (and R&I TRL): Platform System Architecture, AI-DSS, Trials demos oriented to related needs + requirements + solutions

[redacted] will make available an ecosystem of technologies with different levels of maturity (TRL) that will be available during the project, as summarized in the illustration. Precisely: a Cloud Infrastructure (TIM), an open source Field-Edge-Cloud FIWARE-based platform, where to test the potentials of the different connectivity solutions in term of data processing, a test-bed (TEI) to ensure all partners to simulate the IoT-Edge-Cloud data processing benefits and potentials, an Adaptive Incremental Decision Support System implemented on the platform that will support the different users with different digital skills in the decision making, a proximity alarm tool for raising awareness of climate change related risks hazard in the XG contexts. AI-GConnect also intends to create an application platform that implements algorithms equipped with AI (Artificial Intelligence) modules (including Big Data Analytics, ML and, Deep Learning modules). It will be used by the [redacted] S, relating and analysing the users' needs, the connectivity requirements, the connectivity solutions and especially the availability of local connectivity, providing as results the best and most suitable solutions in technical and economic terms, having as

### [redacted] ecosystem, R&I maturity TRL/Start-To

- **Cloud Infrastructure (TIM) TRL8**
- **IoT-Edge-Cloud FIWARE open source platform + Cloud platform (TIM) – From TRL4 to TRL5 (UMU)**
- **Test-bed for last-miles rural areas connectivity service demos including IoT/Field-Edge-Cloud processing – From TRL3 to TRL5 (TEI)**
- **Adaptive Incremental Decision Support System – AI-[redacted] (DIG) – From TRL4 to TRL5 (DIGIO)**
- **Logical Grid/KPIs SEET assessment & impact tool** assumed by the DSS – **From TRL2 to TRL3 (LUT/WU/UNIFG/CNR/POLIMI)**
- **Shifting multiple geodata sources analysis at the edge for land degradation** (Living Lab Trials – on field implementation) – **From TRL3 (GeopanAPP) to TRL4 (POLIMI)**
- **Proximity alarm service application** tested on XG-last miles solutions/communities in climate change hazard alarm – **From TRL3 to TRL5 (TEI)**



## ESR (Criterion 1 – Excellence: tot. 3,5)

## Example 1

- ▣ The project aims to build on and integrate existing technology, which is already used in different settings. The target is a TRL5 for most of these components and the evolution for others is a TRL7 and above. This is positive as it exceeds expectations.



### Increasing the Technology Readiness Level (TRL)

██████████ will implement advanced affective technological solutions to support food transparency with an ambitious innovation component. Table below shows the TRLs that ██████████ aims at for each main innovation. With its array of demand-driven innovation actions, tools and technologies already developed by partners at TRL 2-7 will be validated and demonstrated to reach a TRL 6 (technology demonstrated in relevant environment), 7 (system prototype demonstration in operational environments), 8 (system complete and qualified) or 9 (actual systema proven in operational environment).

## Example 2

| Innovation solution                                   | Description   | TRL (from - to) |
|---|---|-----------------|
| FoodCASE Research                                     | Light version of FoodCASE for researchers, industry and interested persons.   | TRL4 - TRL9     |
| FoodCASE Lab  | FoodCASE version to manage laboratory data.   | TRL4 - TRL9     |
| FoodCASE Web crawler                                  | Web crawler to autonomously extract data from web and present to users.   | TRL2 - TRL7     |
| METROFOOD-RI Catalogues                               | Catalogues for datasets, apps and services  | TRL3 - TRL7     |
| METROFOOD-RI Analytical Search Engine                 | Search engine that can query several system and search data.  | TRL4 – TRL6/7   |
| METROFOOD-RI AAI                                      | Authentication and authorisation infrastructure   | TRL7 - TRL9     |
| Identification technologies                           | Data source with various identification technologies including one- and two-dimensional barcodes, passive RFID tags or IoT LPWAN beacons. | TRL4 – TRL6     |
| GS1 EPCIS   | Event database based GS1 EPCIS standard, which will record events related to the flow of products in the supply chain.                    | TRL4 – TRL6     |
| Analogue and digital labels measuring fish freshness. | Microbe reading labels to evaluate freshness of fish products.  | TRL6 - TRL8     |
| Rapid analytical tools for food                       | Untargeted methods for fingerprinting   | TRL5 – TRL7     |



## ESR (Criterion 1 – Excellence: tot. 4,5)

## Example 2

- ▣ The maturity of the proposed technologies and their expected TRL by the end of the project is well aligned with the Topic description.



## ESR (Criterion 1 – Excellence)

## Example 3

- ▣ The advancements beyond the state of the art are ambitious and credible due to the thorough understanding of implications of climate neutrality policies and measures in the agri-food sector, and to the identification of strategies for achieving and supporting it, which makes this project innovative and is convincing, considering the areas of the planned case studies.
- ▣ The proposed work is ambitious. The proposal presents a number of advanced technological solutions to support food transparency, covering novel concepts and approaches, new products and services. The proposal clearly describes the current state of the art, and goes beyond in the application of ICT tools and digitalisation of the agri-food system. This is very good.



## 1.2 Methodology [e.g. 15 pages]

- ▣ Describe and explain the **overall methodology**, including the concepts, models and assumptions that underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any important challenges you may have identified in the chosen methodology and how you intend to overcome them. [e.g. 10 pages]

*Note This section should be presented as a narrative. The detailed tasks and work packages are described below under 'Implementation'.*

*Note Where relevant, include how the project methodology complies with the 'do no significant harm' principle as per Article 17 of **Regulation (EU) No 2020/852** on the establishment of a framework to facilitate sustainable investment (i.e. the so-called '**EU Taxonomy Regulation**'). This means that the methodology is designed in a way it is not significantly harming any of the six environmental objectives of the EU Taxonomy Regulation.*



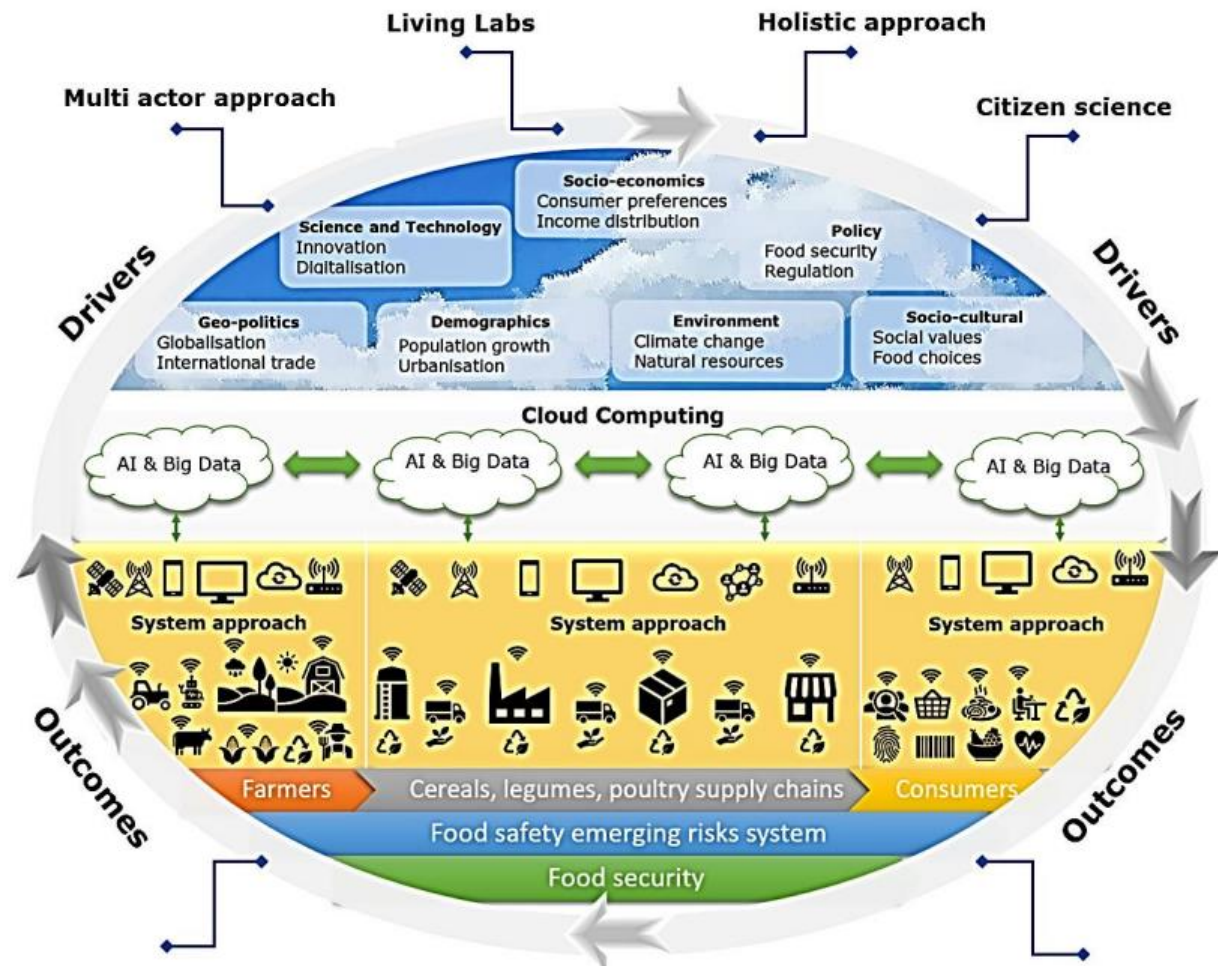
## Methodology

- ❏ How will be solved the problems and needs described
- ❏ Detailed but concise description of the solution
- ❏ Rational why the project is composed this way, in the different stages identified (research, demonstration, etc.)
- ❏ Description of the pilot cases (if any)
- ❏ Flow chart visualizing the phases of the project and their interconnections
- ❏ Verify coherence among objectives, activities, results





# Example





## ESR (Criterion 1 – Excellence: tot. 4,5)

## Example

- ❏ The methodology is appropriate to achieve the intended objectives. It appropriately reflects the inherent complexity of food safety. It covers many aspects related to food safety, risk assessment, risk communication, and consumer behavior. Various suitable methods and tools will be used, which will be supported by innovative IT technologies: research, case studies, qualitative research among consumers, information exchange between food market participants, living labs and workshops.
- ❏ However, even though the proposal states that it will significantly improve the current risk analysis framework, there is not enough evidence that it can achieve this ambitious task. Moreover, although assessment of risk is highlighted as a priority in the rationale of the projects' tasks, there are no sufficient concrete actions to support this claim. For example, the proposal does not specify clearly the type of toxicological information and necessary points of departure to conduct the risk assessment appropriately. This is a shortcoming.



## HORIZON-CL2-2021-HERITAGE-01-01: Green technologies and materials for cultural heritage

*The overall methodology is adequate. However, specific steps of the scientific methodology which should be taken to develop the new products, are insufficiently detailed. For example, the plausibility of a significant rise of the TRL. Moreover, objective 3 proposes solutions of new materials, but it is not fully clear how these solutions are to be applied to cultural heritage.*

*Another focus is to foster innovative use of IoT to improve the accessibility and maintenance of historic sites in regard to the interconnection of different platforms and user interfaces. The concept to mobilize citizens to act as intermediaries to convey data from the sensors to an e-platform is innovative. However, the privacy aspects regarding the visitors' engagement as Human Sensors are not fully addressed.*

*The gender dimension is well-considered and open science practices are appropriately adopted, including the engagement of citizens, civil society, and end-users.*

## The “Do No Significant Harm” concept

- ❏ EU Taxonomy regulation defines when an economic activity can be considered sustainable. Present focus is on climate mitigation and adaptation.
- ❏ Concepts adopted by EU Taxonomy such as “Substantial Contribution” and “Do No Significant Harm” (DNSH) to be assessed with a life cycle approach, together with the definition of the **six environmental objectives** are relevant also beyond the financial sector:
  - Horizon Europe
  - Resilience and Recovery Plan
- ❏ Guidelines published for RRP could be used also for Horizon Europe:  
[https://ec.europa.eu/info/sites/default/files/c2021\\_1054\\_en.pdf](https://ec.europa.eu/info/sites/default/files/c2021_1054_en.pdf)



# What is the EU taxonomy

The [Taxonomy Regulation](#) was published in the Official Journal of the European Union on 22 June 2020 and entered into force on 12 July 2020. It establishes the framework for the EU taxonomy by setting out four overarching conditions that an economic activity has to meet in order to qualify as environmentally sustainable.

The Taxonomy Regulation establishes **six environmental objectives**:

1. An economic activity is considered to do significant harm to **climate change mitigation** if it leads to significant greenhouse gas (GHG) emissions;
2. An economic activity is considered to do significant harm to **climate change adaptation** if it leads to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets;
3. An economic activity is considered to do significant harm to the **sustainable use and protection of water and marine resources** if it is detrimental to the good status or the good ecological potential of bodies of water, including surface water and groundwater, or to the good environmental status of marine waters;
4. An economic activity is considered to do significant harm to the **circular economy**, including waste prevention and recycling, if it leads to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources, or if it significantly increases the generation, incineration or disposal of waste, or if the long-term disposal of waste may cause significant and longterm environmental harm;
5. An economic activity is considered to do significant harm to **pollution prevention and control** if it leads to a significant increase in emissions of pollutants into air, water or land;
6. An economic activity is considered to do significant harm to the **protection and restoration of biodiversity and ecosystems** if it is significantly detrimental to the good condition and resilience of ecosystems, or detrimental to the conservation status of habitats and species, including those of Union interest.



## ”Do No Significant Harm” in the proposals

- ☞ Applicants can refer to the DNSH principle when presenting their research methodology and the expected impacts of the project, to show that their project will not carry out activities that make a significant harm to any of the six environmental objectives of the EU Taxonomy Regulation listed above
- ☞ **Evaluators will not score applications** in relation to their compliance with the DNSH principle unless explicitly stated in the work programme





# Example HE

Table 5 Neutral (0), negative (-) or positive (+) (in)direct effects on DNSH principle during project and beyond, and mitigation.

| Objectives                | methodology   | Long-term impact  |
|---------------------------|---|---|
| Climate change mitigation | <p>0/- Negligible adverse effects (GHG emissions) during research phase. Pilot facility BBEPP uses renewable energy (photovoltaic system).</p> <p>+ According to Annex VI, Methodology for climate tracking,<sup>40</sup> activity contributes to objective with coefficients of 40-100%: Intervention Field (IF) 022/023: <i>R&amp;I processes, technology transfer and cooperation between enterprises focusing on the low-carbon economy, resilience to climate change/circular economy.</i></p> | <p>0/- Emissions during production phase: LCA results. TPB develops electric instead of gas-based drying. Production facility of TPB planned in Breda (local mitigation measures by replacing gas with sustainable alternatives). LDF will use i) direct heat energy recovery for temperature control of fermenters; ii) cell recycling (energy savings; lengthening fermentation runs reduces number of sterilisations); iii) anaerobic digestion of excess biomass for energy/gas recovery; iv) use of wind energy to directly compress air for fermenter aeration.</p> <p>+ Substantial contribution by switch to the use of sustainably sourced raw materials (2G food processing side streams) for food production: TR§10-1d.<sup>41</sup> Significant GHG emissions savings are expected; S2.1.1.</p> <p>+ Use of 2G biomass and MP production substantially contribute to strengthening land carbon sinks (e.g., avoiding deforestation (see below), and restoration of croplands, grasslands, wetlands): TR§10-1f.</p> <p>+ Contributes to reducing livestock farming (16.5% of global GHG emissions)<sup>1</sup>; MP production has far lower carbon footprint; S2.1.1.</p> <p>+ Upon launch of [redacted] technologies, they contribute to the green economy (green skills and jobs), with a climate coefficient of 100%.</p> |
| Climate change adaptation | <p>+ Use of 2G feestocks at pilot level, minimisation of process</p>  | <p>+ By diversification of the food pattern, [redacted] contributes to increasing the resilience of the global food industry and avoiding</p>   |



## 1.2 Methodology *[e.g. 15 pages]*

- ▮ Describe any national or international **research and innovation activities** whose results will feed into the project, and how that link will be established; [e.g. 1 pages]
- ▮ Explain how expertise and methods from different disciplines will be brought together and integrated in pursuit of your objectives. If you consider that an **inter-disciplinary approach** is unnecessary in the context of the proposed work, please provide a justification. [e.g. 1/2 page]
- ▮ For topics where the work programme indicates the need for the **integration of social sciences and humanities**, show the role of these disciplines in the project or provide a justification if you consider that these disciplines are not relevant to your proposed project. [e.g. 1/2 page]













### Relevant national and international activities

HOLiFOOD partners are, and have been involved, in many national and international projects relevant for this topic, often in a leading role. HOLiFOOD will build on the results of these projects and establish links with ongoing initiatives through a dedicated task in WP5/WP7. HOLiFOOD will benefit from > 15 finalized EU framework projects in which the HOLiFOOD partners had a leading role such as SAFEFOODS, MoniQA Network of Excellence, MycoKey, MytoolBox, EU-China-Safe, AGINFRA+ or EFSA funded projects RiskBenefit4EU, Aquarius, DEMETER, & RAKIP. Furthermore, HOLiFOOD will seek to exchange data, models and enable shared linked data and model infrastructure with ongoing relevant initiatives. Examples of the projects are listed in the Table below including the role of the HOLiFOOD partner.

| Project (acronym), Research conducted, HOLiFOOD partner involved, role and Input to WP   |
|--|
| <b>H2020 “FOODSAFETY4EU” (2021-2023). CNR (coordinator). APRE (partner)</b>  |
| Design, develop and release a multi-stakeholder platform for the future European Food Safety System (FSS). The platform aims to establish a network of FSS actors at national, European and international level. Input to WP4 and WP5.   |
| <b>IAEA Research Agreement No. 22299/RO (2017-2022). CNR (partner)</b>   |
| “Development, validation and harmonization of analytical methods for multiple contaminants in food”. The project will contribute to delivering of analytical methods for multi-contaminant methods validation. Input to WP2.   |
| <b>H2020 “MycoTwin” (2020-2023). CNR (partner)</b>   |
| The goal is to strengthen effective and sustainable mycotoxin management for minor crops by exchange of knowledge and new pre- and post-harvest measures. The project will focus on the planning of the cropping system to crop cultivation, harvest, storage and consumption. Input to WP2 and WP4. |
| <b>H2020 “SafeConsume” (2017-2022). INRAE (partner)</b>  |
| Safer food through changed consumer behaviour: Effective tools and products for consumer education and a food safety policy reducing health burden from foodborne illnesses.   |
| <b>H2020 “PROTECT” (2019-2022). INRAE and CREM (partner)</b>   |
| This project will develop predictive modelling approaches (including multicriteria analysis) to assess the effects of climate change on food safety. Input to WP1, WP3 and WP6.  |
| <b>Horizon Europe Partnership: PARC (2022-2028). ANSES (coordinator). PIR (partner)</b>  |
| Partnership for the Assessment of Risk from Chemicals; European Partnership under Horizon Europe. Input to WP1 and WP6   |

# Example

| Project  | How outcomes fit BIOVoices Objectives   |
|--|---|
|  <b>BIOCANNDO</b> - A Bioeconomy discourse project, which is developing multi-stakeholder key messages for communicating functionality and sustainability aspects of bio-based products with the broader public. Many of the BIOK consortium are already engaged with this project through the BIOWAYS project and BBIJU.   | The communication strategy developed in BioCannDo may represent a starting point for defining mobilisation and mutual learning strategies improving the societal confidence related to bio-based products. The bioeconomy resources developed for citizen awareness could be used in the bio-based communities for knowledge sharing and citizen awareness.   |
|  <b>BIO-PROM</b> - Promoting sustainable production and use of bioenergy in the Russian Federation and Ukraine  | The analysis of Russia/Ukraine bioenergy projects along with the criteria for assessing them defined in BIO-PROM could be used to support the identification and categorization of past and ongoing BBP related projects and initiatives.   |
|  <b>BIOWAYS</b> - <a href="http://www.bioways.eu/">http://www.bioways.eu/</a> - The project mission is to promote the huge potential of bio-based research results and products to the public at large, through communication campaigns, public engagement activities, and educational tools and materials.   | The analysis on bio-based products applications provided in BIOWAYS may be used as input for defining recommendations and policy options for bio-based products. BIOWAYS will provide an analysis of the market maturity and potential at European and national level that may represent a starting point for defining new bio-based market opportunities.  |
|  <b>BioSTEP</b> - BioSTEP ( <a href="http://www.bio-step.eu">www.bio-step.eu</a> ) will apply a three-tier approach which aims at reaching all relevant actors in the bioeconomy domain, particularly policy makers, various stakeholder groups, and citizens. Tailored communication tools, including workshops, conferences and exhibitions, will be developed for each target group. | The BioSTEP project delivered a database with information on existing bioeconomy products and processes. This database can represent an important input for increasing the societal confidence related to bio-based products and industries within the BIOVoices project. The guidelines and the analysis of the social, economic and environmental impacts of the bioeconomy can provide input for creating a sustainable multi-actor bio-community. |
|  <b>BioBaseEurope</b> Open innovation and education center for the biobased economy. This joint initiative of the Flanders region and The Netherlands consists of a flexible and multipurpose pilot plant for biobased products and processes and a Training Center, network and exhibition center promoting a sustainable biobased economy.  | The BioBaseEurope network consists of key worldwide players in the biobased economy that could be engaged within the multi-actor Bio-community.   |
|  <b>BIOSURF</b> The BIOSURF consortium consists of 11 partners from 7 countries and strives to increase the production and use of biomethane, for grid injection and as transport fuel. ISABEL partner FNR is part of the consortium. ( <a href="http://www.biosurf.eu">www.biosurf.eu</a> )  | The inventory and the analysis of biomethane related EU and national political acts, regulations and support schemes provided by the BIOSURF project could be used as input for providing recommendations and policy options for bio-based issues at EU, national and sub-national levels within the BIOVoices project.   |
|  <b>ETIP Bioenergy-SABS</b> - European Technology and Innovation Platform – Support of Advanced Bioenergy Stakeholders 2016-17  | The standardisation activities performed by the ETIP Bioenergy project could represent a starting point for defining the framework conditions for new bio-based market opportunities levels within the BIOVoices project.   |
|  <b>greenGain</b> - Supporting Sustainable Energy Production from Biomass from Landscape Conservation and Maintenance Work  | The greenGain project provided an analysis of the most evident frameworks of legal, policy and financial regulations and lists a series of good practices of the involvement of the civil society and the participation of public administration in the context of good   |



# Example HE

## 1.2.2 Link with other R&I activities

The [redacted] rationale and ambition have robust foundation on knowledge and networks that have been developed in recent or ongoing EU projects and initiatives, in which [redacted] partners are involved. Notably, the following R&D projects (Table 4) are considered relevant to develop the [redacted] concept:

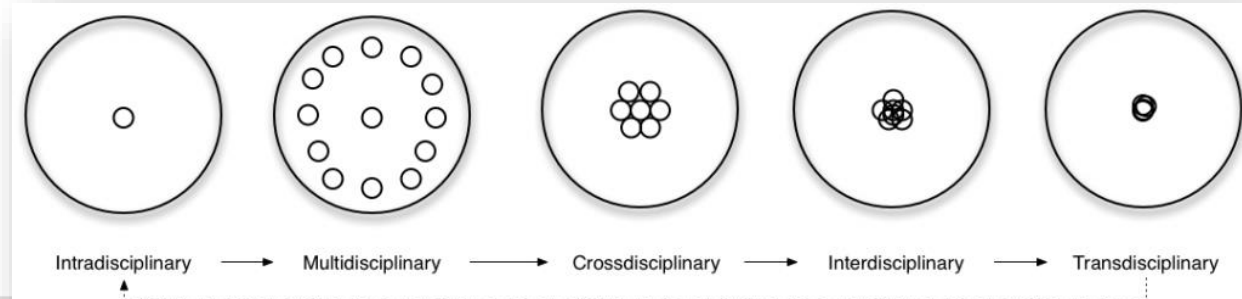
| Project                                     | Outcome and valorisation in [redacted]   |
|---|--|
| <a href="#">FoodSIVI</a><br><i>UOX, DAN</i> | The food system impact valuation initiative (FoodSIVI) collaborative project led by UOX raises awareness & perform research on food costing impact and its internalisation in the food system by 1) running an annual meeting (over 200 civil society organizations and business), 2) webinars (over 300 participants, 3) co-production of reports (e.g. with WBCSD, 2019), 4) developing consistent dataset of marginal damage costs. FoodSIVI contributes a stakeholder and practitioner network for development and dissemination of [redacted] activities (WP4 and WP7), and a foundation dataset for marginal costing of food system externalities (WP1). |
| <a href="#">True Cost</a><br><i>SMI</i>     | “True Cost – from Costs to Benefits in Food and Farming” is an initiative of various market leaders in the food and farming sector who want to develop, pilot and implement integrated impact accounting guidelines. Within the True Cost, several social and ecological indicators have been developed with the goal of practical feasibility. The knowledge of how to develop indicators within the context of businesses will support [redacted] considering perspectives of businesses while developing indicators based on current scientific research.   |
| <a href="#">SUSFANS</a> -<br><i>WR</i>      | SUSFANS identifies how food production and nutritional health in the EU can move towards a diet that supports sustainable food consumption and production. [redacted] use and enhance the  |





# Disciplinarity

- 🔗 **Intradisciplinary:** working within a single discipline
- 🔗 **Multidisciplinary:** people from different disciplines working together, each drawing on their disciplinary knowledge
- 🔗 **Crossdisciplinary:** viewing one discipline from the perspective of another
- 🔗 **Interdisciplinary:** integrating knowledge and methods from different disciplines, using a real synthesis of approaches
- 🔗 **Transdisciplinary:** creating a unity of intellectual frameworks beyond the disciplinary perspectives; a shared conceptual model of the problem that integrates and transcends each of their separate disciplinary perspectives





## Social Science and Humanities

### Social sciences, education, business and law

- ▮ **Social and behavioural sciences:** economics, economic history, political science, sociology, demography, anthropology (except physical anthropology), ethnology, futurology, psychology, geography (except physical geography), peace and conflict studies, human rights.
- ▮ **Education science:** curriculum development in non-vocational and vocational subjects, educational policy and assessment, educational research.
- ▮ **Journalism and information:** journalism, library and museum sciences, documentation techniques, archival sciences.
- ▮ **Business and administration:** retailing, marketing, sales, public relations, real estate, finance, banking, insurance, investment analysis, accounting, auditing, management, public and institutional administration.
- ▮ **Law:** law, jurisprudence, history of law.

### Humanities and the arts

- ▮ **Humanities:** religion and theology, foreign languages and cultures, living or dead languages and their literature, area studies, native languages, current or vernacular language and its literature, interpretation and translation, linguistics, comparative literature, history, archaeology, philosophy, ethics.
- ▮ **Arts:** fine arts, performing arts, graphic and audio-visual arts, design, crafts.



## Project requirements - SSH flagged topics

Applicants should ensure that:

- ▣ contributions from SSH disciplines are integrated throughout their proposed project, and
- ▣ the actions required, participants and disciplines involved as well as the added value of SSH contributions are clearly stated in the proposal

The SSH methodologies used in the projects should be described, or if the applicant consortium considers that SSH is not relevant to their particular proposal, they should explain why

- ▣ Where relevant, applicants are also encouraged to include contributions from the SSH in a project proposal under any call, even if it is not SSH-flagged



## 1.2 Methodology [e.g. 15 pages]

- 71 Describe how the **gender dimension** (i.e. sex and/or gender analysis) is taken into account in the project's research and innovation content [e.g. 1 page]. If you do not consider such a gender dimension to be relevant in your project, please provide a justification.

*Note: This section is mandatory except for topics which have been identified in the work programme as not requiring the integration of the gender dimension into R&I contentification.*

*Note: Remember that that this question relates to the content of the planned research and innovation activities, and not to gender balance in the teams in charge of carrying out the project.*

*Note: Sex and gender analysis refers to biological characteristics and social/cultural factors respectively. For guidance on methods of sex / gender analysis and the issues to be taken into account, please refer to [http://ec.europa.eu/research/swafs/gendered-innovations/index\\_en.cfm?pg=home](http://ec.europa.eu/research/swafs/gendered-innovations/index_en.cfm?pg=home)*



# Gender dimension

- ❏ Here, it is NOT about gender balance in the consortium, but about SCIENCE.
- ❏ Are there scientific reasons for having a closer look at gender?
- ❏ How are you going to address this in your approach and methodology?

For guidance on methods of sex / gender analysis and the issues to be taken into account, please refer to

[Gendered Innovations 2: How inclusive analysis contributes to research and innovation](#)



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"As EU Commissioner for Innovation, Research, Culture, Education and Youth, and holding gender equality matters very close to my heart, I am determined to step up our efforts on equality. I am committed to ensuring that the gender dimension is fully integrated into research and innovation content in Horizon Europe, and that it is fully acknowledged in the European Research Area."

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth



## Gender dimension

- Integrating sex and gender analysis into R&I content improves the scientific quality and societal relevance of the produced knowledge, technologies and innovation. It:
  - adds value to research and innovation in terms of excellence, creativity, rigor, reproducibility and business opportunities
  - helps researchers and innovators question gender norms and stereotypes, and rethink standards and reference models
  - leads to an in-depth understanding of all people's needs, behaviours, and attitudes
  - contributes to the production of goods and services better suited to new markets
  - is crucial to secure Europe's leadership in science & technology and support inclusive and sustainable growth





## Gender dimension in the proposals

### Reflect on why sex and/or gender could matter:

- ☞ Think about and present the ways in which taking into account the gender dimension will **provide added value** in terms of creativity, excellence, and return on investment, both from public and private perspectives.
- ☞ Consider the production of new knowledge on gender: Consider what is already known in your area in terms of the gender dimension (e.g. related scientific literature) and identify **what is missing**. In many areas, gender knowledge still needs to be generated.
- ☞ Include sex and gender aspects **as part of a multidisciplinary approach**: Reflecting on sex and gender considerations in relation to health, transport, energy, security, etc. is a great opportunity to foster cooperation between scientists with gender expertise and others. It helps concepts cross the borders of scientific fields and encourages research methods to evolve.
- ☞ Consider social categories/factors intersecting with sex and gender: **the way a research problem is formulated** will determine which intersecting variables are relevant for analysis. Intersectional research should be designed to illuminate the multiplicative effects of different, but interdependent, categories and factors



## 1.2 Methodology [e.g. 15 pages]

- ▣ Describe how appropriate **open science** practices are implemented as an integral part of the proposed methodology. Show how the choice of practices and their implementation are adapted to the nature of your work, in a way that will increase the chances of the project delivering on its objectives [e.g. 1 page]. If you believe that none of these practices are appropriate for your project, please provide a justification here.

*Note: **Open science** is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process. Open science practices include early and open sharing of research (for example through preregistration, registered reports, preprints, or crowd-sourcing); research output management; measures to ensure reproducibility of research outputs; providing open access to research outputs (such as publications, data, software, models, algorithms, and workflows); participation in open peer-review; and involving all relevant knowledge actors including citizens, civil society and end users in the co-creation of R&I agendas and contents (such as citizen science).*

*Note: Please note that this question does not refer to outreach actions that may be planned as part of communication, dissemination and exploitation activities. These aspects should instead be described below under 'Impact'*

# Example HE

## 1.2.8 Open Science practices relevance for our proposal

Our project fully complies with the principles of open science: **(A) Systematic sharing of knowledge and tools as early and widely as possible:** i) preregistration, registered reports and preprints, will be used whenever applicable; ii) measures to ensure reproducibility of research outputs: pending the need of confidentiality and IPR, we will ensure a timely access to research results including (meta)data, to ensure re-use and reproducibility (S1.2.9). Open access journals will be preferred, *e.g.*, Open Research Europe, and other open access repositories (*e.g.*, Zenodo). Data, protocols, software and other tools underlying the publications will be released at the same time, either via Zenodo or in discipline-specific repositories, providing the DOI to the publication. **(B) Involving all relevant knowledge actors:** we will apply an anticipatory approach, to favour that the needs, expectations, and key features relevant for stakeholders in the full value chain are considered during the development strategy, in line with a Responsible Research and Innovation (RRI) approach. This will allow to better align the process and its results with the values, needs and expectations of society and will help the consortium to ensure broader social support during the development of food ingredients and products. We will enable citizens to contribute their time, observations, and expertise to assist and inform the scientific research process, for example, via participation in tastings panels. Open collaboration within the scientific community will be ensured via joint activities with other funded projects and initiatives. Sections 1.2.2 and 2.1.1 describe stakeholder engagement in detail. In the workplan, stakeholder feedback is actively considered in WP3 (consumers), WP4 (value chain stakeholders) and WP6 (policymakers).

## Open science in Horizon Europe

- Open science is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process. It has the potential to increase the quality and efficiency of research and accelerate the advancement of knowledge and innovation by sharing results, making them more reusable and improving their reproducibility. It entails the involvement of all relevant knowledge actors.
- Horizon Europe moves beyond open access to open science** for which it features a comprehensive policy implemented from the proposal stage to project reporting.



## Open science in Horizon Europe

- 🏠 **Open science practices include** early and open sharing of research (for example through preregistration, registered reports, pre-prints, or crowd-sourcing); research output management; measures to ensure reproducibility of research outputs; providing open access to research outputs (such as publications, data, software, models, algorithms, and workflows); participation in open peer-review; and involving all relevant knowledge actors including citizens, civil society and end users in the co-creation of R&I agendas and contents (such as citizen science).



## Mandatory open science practices

Some **open science practices** are mandatory for all beneficiaries per the grant agreement. They concern:

- 🔗 **open access** to scientific publications under the conditions required by the grant agreement
- 🔗 **responsible management of research data** in line with the FAIR principles of ‘Findability’, ‘Accessibility’, ‘Interoperability’ and ‘Reusability’, notably through the generalised use of data management plans, and open access to research data under the principle ‘as open as possible, as closed as necessary’, under the conditions required by the grant agreement
- 🔗 **information about the research outputs/tools/instruments** needed to validate the conclusions of scientific publications or to validate/re-use research data
- 🔗 **digital or physical access to the results needed** to validate the conclusions of scientific publications, unless exceptions apply
- 🔗 **in cases of public emergency**, if requested by the granting authority, immediate open access to all research outputs under open licenses or, if exceptions apply, access under fair and reasonable conditions to legal entities that need the research outputs to address the public emergency



## Recommended open science practices

**Non-exhaustive list** of practices:

- ▣ involving all relevant knowledge actors, including citizens
- ▣ early and open sharing of research
- ▣ output management beyond research data
- ▣ open peer-review





# Citizen, civil society and end-user engagement

- ❏ Provide clear and succinct information **on how citizen, civil society and end-user engagement will be implemented** in your project, where/if appropriate. The kinds of engagement activities will depend on the type of R&I activity envisaged and on the disciplines and sectors implicated.
- ❏ **This may include:** co-design activities (such as workshops, focus groups or other means to develop R&I agendas, roadmaps and policies) often including deep discussion on the implications, the ethics, the benefits and the challenges related to R&I courses of action or technology development; co-creation activities (involving citizens and/or end-users directly in the development of new knowledge or innovation, for instance through citizen science and user-led innovation); and co-assessment activities (such as assisting in the monitoring, evaluation and feedback to governance of a project, projects, policies or programmes on an iterative or even continual basis).
- ❏ The extent of engagement in the proposal could range from one-off activities alongside other methodological approaches to being the primary focus or methodological approach of the project itself. Engagement will require **resources** and **expertise** and is therefore often conducted by dedicated interlocutor organisations or staff with relevant expertise.



## Important documents and resources

- ❏ **Model grant agreement (MGA)**, article 17 –lists the obligations you have, i.e. the requirements of the policy
- ❏ **Work Programme General Annexes**, evaluation criteria described; open science- a couple of additional obligations outlined there (access for validation and public emergency).
- ❏ **Proposal template** - shows where and how to address open science- definition of open science practices
- ❏ **Annotated Grant Agreement (AGA)**, article 17- offers explanations and guidance for open science requirements
- ❏ **Horizon Europe Programme Guide** – presents what is required at proposal stage and how open science is evaluated; open science practices analysed and resources provided-useful for proposers and evaluators



### 1.2.6 Open science

Within FOODCoST principles of Open Science will be implemented. Beyond the strict research community, FOODCoST follows a **multi-actor approach** (see previous sections) Regarding consumers, FOODCoST focuses on inclusiveness and takes into account differences in culture, gender, SEP, and geographic aspects (WP2, 3, 5). Regarding policy makers, actors in the value chain (farmers, food industry, retail and caterers) and NGO's at the international, national, regional level will be involved discussing designs and assumptions of studies and outcomes and results (WP4) and in the case studies (WP5). Networking with other projects and aligned organisations working on internalisation of externalities is seen as essential for the project (WP4, and WP7). FOODCoST website will have a dedicated section to share research with researchers outside the project, which will be advocated via the network of the FOODCoST community. After registration, researchers can enter this dedicated section. They 1) can provide feedback on the scientific approach, ethical aspects and social inclusiveness of research designs or concept surveys, before the experimental work is done, 2) have access to methods aiding the harmonisation of research, and 3) have access to the data after publication. Announcements, when new research is available, will be made via Twitter and LinkedIn. Open Science will be embedded throughout the whole scientific process. For **the management of research data** a DMP will be developed (see 1.2.6 and WP8). To realize **the early and open sharing of the** FOODCoST partners will Open Access pre-register protocols and when feasible publish registered reports through preprints (by using servers like bioRxiv for Life sciences or multidisciplinary like Preprints, Zenodo). Furthermore, stakeholders will discuss the design of case studies (WP5), scenarios (WP6) in dedicated workshops (WP4). **Digital access to the results** will be organised via DANS-EASY, EOSC or FNH-RI depending on the type of data/results. Regarding **the open access** to “increase the circulation and exploitation of knowledge” (European Parliament, 2013): all outcomes will be made accessible in Open Access and free of charge, as under the terms and conditions laid down in the Model grant agreement. FOODCoST chooses the “gold” Open Access model as first preference and will make all reports and datasets Open Access and freely available upon publication through the trusted repository. Connection to the tools proposed by the European Commission (e.g. Open Research Publishing Platform), which will grant access to the publications and to a bibliographic metadata in a standard format including information will be part of the publication procedure. Protection of knowledge will be ensured by adopting licenses which enable free circulation of documents while safeguarding authors' (and the project's) IPR; for peer-reviewed articles the CC-BY, CC-BY-NC or CC-BY-ND licence. Adequate protection of project, Commission's image and the content integrity will be ensured. Metadata of deposited publications will be open under a Creative Common Public Domain Dedication or equivalent, in line with the FAIR principles and provide information about: publication (author(s), title, date of publication, publication

# Example



## 1.2 Methodology [e.g. 15 pages]

- ☞ **Research data management** and management of other research outputs: Applicants generating/collecting data and/or other research outputs (except for publications) during the project must provide maximum 1 page on how the data/ research outputs will be managed in line with the **FAIR principles** (Findable, Accessible, Interoperable, Reusable), addressing the following (the description should be specific to your project): [1 page]
- **Types of data/research outputs** (e.g. experimental, observational, images, text, numerical) and their estimated size; if applicable, combination with, and provenance of, existing data.
  - **Findability of data/research outputs:** Types of persistent and unique identifiers (e.g. digital object identifiers) and trusted repositories that will be used.
  - **Accessibility of data/research outputs:** IPR considerations and timeline for open access (if open access not provided, explain why); provisions for access to restricted data for verification purposes.
  - **Interoperability of data/research outputs:** Standards, formats and vocabularies for data and metadata.
  - **Reusability of data/research outputs:** Licenses for data sharing and re-use (e.g. Creative Commons, Open Data Commons); availability of tools/software/models for data generation and validation/interpretation /re-use.
  - **Curation and storage/preservation costs;** person/team responsible for data management and quality assurance.

## 1.2 Methodology [e.g. 15 pages]

*Note: Proposals selected for funding under Horizon Europe will need to develop a detailed **data management plan** (DMP) for making their data/research outputs findable, accessible, interoperable and reusable (FAIR) as a deliverable by **month 6** and revised towards the end of a project's lifetime.*

*Note: For guidance on open science practices and research data management, please refer to the relevant section of the HE Programme Guide on the Funding & Tenders*



# Data Management Plan Template

Accessible via Funding and Tender>Reference Documents>Project Reporting Templates:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents;programCode=HORIZON>

|  |   |
|--|---|
| 1. Data Summary .....  | 4 |
| 2. FAIR data .....   | 4 |
| 2.1. Making data findable, including provisions for metadata ..... | 4 |
| 2.2. Making data accessible .....                                  | 4 |
| 2.3. Making data interoperable .....                               | 5 |
| 2.4. Increase data re-use.....                                     | 5 |
| 3. Other research outputs.....                                     | 5 |
| 4. Allocation of resources .....                                   | 5 |
| 5. Data security.....  | 5 |
| 6. Ethics .....  | 6 |
| 7. Other issues .....  | 6 |





# Example HE

## 1.2.9 Data management

Data quality assurance measures and data management are at the heart of creditable scientific practice. This is acknowledged by the endorsement of the FAIR data principles (Findable, Accessible, Interoperable, and Re-usable) and their enforcement by the European Commission, also in the frameworks of Open Science practices. A Data Management Plan (DMP, WP1) based on the principle "as open as possible, as closed as necessary" will be prepared by M6 and continuously updated. The data management procedure should maximise the internal re-use of data as well as facilitate the process of sharing them outside the consortium, if applicable. **The DMP will also offer a clear process to decide which data can be released in open access and when.**

*Table 7 Data Management – compliant with FAIR data principles endorsed by the European Commission.*

|  |  |
|--|--|
| <b>Types of data/<br/>research outputs</b> | APPETITE uptakes raw data (primary data) from various data streams and partners as part of its data harvesting activity. Data will be either in the format of numerical values, in <i>e.g.</i> , excel sheets, text, or images. We estimate that the generated data will be within 1TB (Terabytes) per partner.  |
| <b>Findability</b>                         | Data repository that provides a DOI upon deposition will be selected – discipline-specific repository will be preferred, <i>e.g.</i> , Uniprot (proteins), GenBank (genomes), Gene Expression Omnibus (transcriptomes); or community-recognised; alternatively, OpenAire recognised repository Zenodo.   |
| <b>Accessibility</b>                       | We will make data open as early as possible. For IP sensitive data, it will be made available after 5 year of project closure (unless IP rights are claimed by any partner within this time). Data <b>underlying publications</b> (data that are mentioned or used to derive conclusions in scientific publications) should always be shared upon the paper publication. |
| <b>Inter-operability</b>                   | The Dublin core standard will be considered as a guideline.  |





# Proposal template Part B: technical description

## 1. Excellence

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## 2. Impact

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## 3. Quality and efficiency of the implementation

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



## 2.1 Project's pathways towards impact [e.g. 4 pages]

- ☞ Provide a **narrative** explaining how the project's results are expected to make a difference in terms of impact, **beyond the immediate scope and duration of the project**. The narrative should include the components below, tailored to your project.
  - a) Describe the unique contribution your project results would make towards **(1)** the outcomes specified in this topic, and **(2)** the wider impacts, in the longer term, specified in the respective destinations in the work programme.

*Be specific, referring to the effects of your project, and not R&I in general in this field.*

*State the target groups that would benefit. Even if target groups are mentioned in general terms in the work programme, you should be specific here, breaking target groups into particular interest groups or segments of society relevant to this project.*

***The outcomes and impacts of your project may:***

- ***Scientific***, e.g. contributing to specific scientific advances, across and within disciplines creating new knowledge, reinforcing scientific equipment and instruments, computing systems (i.e. research infrastructures);
- ***Economic/technological***, e.g. bringing new products, services, business processes to the market, increasing efficiency, decreasing costs, increasing profits, contributing to standards' setting, etc.
- ***Societal***, e.g. decreasing CO2 emissions, decreasing avoidable mortality, improving policies and decision making, raising consumer awareness.

*Only include such outcomes and impacts where your project would make a significant and direct contribution. Avoid describing very tenuous links to wider impacts. However, include any potential negative environmental outcome or impact of the project including when expected results are brought at scale (such as at commercial level). Where relevant, explain how the potential harm can be managed.*



## 2.1 Project's pathways towards impact [e.g. 4 pages]

- b) Describe any **requirements and potential barriers** - arising from factors beyond the scope and duration of the project - **that may determine whether the desired outcomes and impacts are achieved**. These may include, for example, other R&I work within and beyond Horizon Europe; regulatory environment; targeted markets; user behaviour. Indicate if these factors might evolve over time. Describe any **mitigating measures** you propose, **within or beyond your project**, that could be needed should your assumptions prove to be wrong, or to address identified barriers.

*Note that this does not include the critical risks inherent to the management of the project itself, which should be described below under 'Implementation'*

- c) Give an indication of the **scale and significance** of the project's contribution to the expected outcomes and impacts, should the project be successful. Provide quantified estimates where possible and meaningful.

*'Scale' refers to how widespread the outcomes and impacts are likely to be. For example, in terms of the size of the target group, or the proportion of that group, that should benefit over time; 'Significance' refers to the importance, or value, of those benefits. For example, number of additional healthy life years; efficiency savings in energy supply.*

*Explain your baselines, benchmarks and assumptions used for those estimates. Wherever possible, **quantify your estimation of the effects that you expect from your project**. Explain assumptions that you make, referring for example to any relevant studies or statistics. Where appropriate, try to use only one methodology for calculating your estimates: not different methodologies for each partner, region or country (the extrapolation should preferably be prepared by one partner).*

*Your estimate must relate to this project only - the effect of other initiatives should not be taken into account.*

# The impact in different contexts



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|  |   |  |
|--|---|--|
| <p><b>CULTURAL</b> </p> <p>Contribution to understanding of ideas and reality, values and beliefs.</p>                                     | <p><b>ECONOMIC</b> </p> <p>Contribution to the sale price of products, a firm's costs and revenues (micro level), and economic returns either through economic growth or productivity growth (macro level).</p> | <p><b>ENVIRONMENTAL</b> </p> <p>Contribution to the management of the environment, for example, natural resources, environmental pollution, climate and meteorology.</p> |
| <p><b>HEALTH</b> </p> <p>Contribution to public health, life expectancy, prevention of illnesses and quality of life.</p>                  | <p><b>POLITICAL</b> </p> <p>Contribution to how policy makers act and how policies are constructed and to political stability.</p>  | <p><b>SCIENTIFIC</b> </p> <p>Contribution to the subsequent progress of knowledge, the formation of disciplines, training and capacity building.</p>                     |
| <p><b>SOCIAL</b> </p> <p>Contribution to community welfare, quality of life, behaviour, practices and activities of people and groups.</p> | <p><b>TECHNOLOGICAL</b> </p> <p>Contribution to the creation of product, process and service innovations.</p>   | <p><b>TRAINING</b> </p> <p>Contribution to curricula, pedagogical tools, qualifications</p>  |

European Science Foundation Impact Classifications



## Impact

**IMPACT = THE BENEFITS DERIVED FROM THE INNOVATION;**

The larger the benefit, the larger the impact

- Impact is not limited to economic or commercial aspects;
- it can also be societal, environmental, technical, educational, or scientific

It must go beyond the life-cycle of the project





# The impact in different contests



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|  |   |  |
|--|---|--|
| <p><b>CULTURAL</b> </p> <p>Contribution to understanding of ideas and reality, values and beliefs.</p>                                     | <p><b>ECONOMIC</b> </p> <p>Contribution to the sale price of products, a firm's costs and revenues (micro level), and economic returns either through economic growth or productivity growth (macro level).</p> | <p><b>ENVIRONMENTAL</b> </p> <p>Contribution to the management of the environment, for example, natural resources, environmental pollution, climate and meteorology.</p> |
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European Science Foundation Impact Classifications



## Knowledge production

- ↗ **New peer reviewed publications and citations**
- ↗ **Presentations to national and international conferences**
- ↗ New 'grey literature' including research reports, interviews, policy briefings, editorials, newsletters, web articles, social media, presentations with/to stakeholders
- ↗ New systematic reviews or findings
- ↗ Increased availability of evidence including open access data
- ↗ **Establishment of new datasets, databases or research data**





## Economic impact

- ↗ **New or expanded products, licenses, or services created**
- ↗ Spinout or start-up businesses registered
- ↗ Improved performance or processes adopted
- ↗ **Employment created or increased**
- ↗ Improved international reputation for investment in Ireland
- ↗ More efficient use of public resources
- ↗ Leveraging of national and international funding
- ↗ Increased income generated
- ↗ Reduced redundancies and costs



## Environmental impacts\*

- ↻ Improving awareness and understanding of [climate change](#) and its consequences
- ↻ **Stimulation of public debate and awareness on the environment**
- ↻ Provision of information to civil and civic societies
- ↻ **Environmental policy or planning decisions are evidence-informed**
- ↻ Improved management or conservation of natural resources to advance climate justice
- ↻ **Improved management of environmental risks or hazards**
- ↻ Improved private or public services to meet relevant environmental policies or goals
- ↻ New/improved technologies or processes to reduce pollution and/or the impact of pollutants
- ↻ Improvement in [sustainable use of resources](#) for resilient societies
- ↻ Improved understanding of health risks to livestock and disease risks to crops for better health and food security
- ↻ Improved built environment infrastructure including transportation systems and land use.

A polar bear is sitting on a dark, jagged rock in the foreground. The background shows a dramatic, stormy sky with dark, heavy clouds and a hint of a sunset or sunrise. The ocean is visible in the distance, with white-capped waves breaking against the shore. The overall mood is somber and urgent, reflecting the impact of climate change on the polar bear's habitat.

## Climate action includes:

- ↗ **mitigating** climate change (helping to cut greenhouse gas emissions)
- ↗ **adapting** to the impact of climate change by building resilience to phenomena such as flooding, droughts and other extreme weather events
- ↗ **contributing to understanding** the causes of climate change.



# Activities contributing to climate action

- ❏ energy efficiency, energy savings or energy recovery in any sector;
- ❏ renewable non-fossil energy (e.g. wind, solar, aero-thermal, geothermal, hydrothermal, ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, biogases) & related infrastructure including energy storage and 'smart grids';
- ❏ low-carbon technologies, manufacturing processes, goods & services;
- ❏ carbon capture & storage;
- ❏ reducing road & air traffic emissions; encouraging cycling, walking & use of public transport systems, inland waterways & short sea shipping,
- ❏ biological sequestration/conservation of CO<sub>2</sub> emissions (e.g. afforestation, re-vegetation, forest/cropland management, reduced tillage, soil maintenance/remediation), including sinks & reservoirs of greenhouse gases (e.g. soil, peatlands, wetlands, forests);
- ❏ eliminating or substantially reducing emissions of other greenhouse gases such as methane, N<sub>2</sub>O, PFCs, HFCs, SF<sub>6</sub> & NF<sub>3</sub>;
- ❏ building resilience & reducing vulnerability to climate-related disasters (heatwaves, floods, extreme weather events, etc.), covering any sector including transport, energy, supply chains, communication networks & other infrastructure, planning, insurance; risk prevention & risk/disaster management, ICT for early warning systems;
- ❏ combating heat effects &/or adapting to drought, including water efficiency measures;
- ❏ strengthening coastal defences against erosion, storm surges & sea-level rise;
- ❏ taking advantage of any opportunities that may arise as a result of climate change;
- ❏ integrating climate change concerns in specific policy activities, developing capacity, strengthening the regulatory & policy framework;
- ❏ socioeconomic issues associated with climate change options, such as behavioural patterns, societal acceptance & barriers to uptake of policies or technologies;
- ❏ understanding climate change processes &/or effects, including sea ice/ice sheet/glaciers, permafrost, air and sea surface temperatures, precipitation, biodiversity loss, movement or distribution of plant/fish/animal species, ocean acidity, crop yields, hydropower potential, seasonal tourism patterns, habitats for disease vectors, etc.





# Health & wellbeing impacts

- ↗ National or international health and wellbeing outcomes due to new or improved interventions, services, drug/treatments/therapies, diagnostic or medical technologies, care practices or processes.
- ↗ **Improved health and wellbeing at an individual level**
- ↗ Reduced inequalities in health status and health and social care utilisation through information and policies targeting vulnerable/disadvantaged groups
- ↗ **Increased efficiency in the delivery of public health and social services, as well as health-related interventions and services delivered by NGOs and others in the community**
- ↗ Decisions by public, private and voluntary stakeholders informed by research evidence
- ↗ Improved quality of life due to improved health and wellbeing services/interventions, products or processes
- ↗ Enhanced animal health and welfare
- ↗ **Reduction in costs and delays for treatments, interventions, practices, and processes due to newly**
- ↗ Developed or improved alternatives (e.g. new treatments, interventions, drugs, devices or diagnostics)
- ↗ Mitigation of risks to health or well-being through preventative or early intervention services and measures
- ↗ Increase in number of participants enrolled in clinical and community-based trials
- ↗ Increase in number of individuals engaging in healthy lifestyles



## Social and cultural impacts

- ↗ Enhanced opportunities for creativity, self-expression and human development
- ↗ **Increased appreciation and/or design of cultural services such as museums, galleries, libraries**
- ↗ Attitudinal changes, education and understanding
- ↗ Stimulation or informing of public debate or interest
- ↗ **Greater awareness of the public's role and responsibility in contributing to solving social challenges**
- ↗ **Increased confidence of the general public to address issues affecting them**
- ↗ Exchange of public tacit knowledge to inform new or improved products, services and processes
- ↗ Improved quality of life through improved access to services
- ↗ Local, regional or national development and regeneration plans
- ↗ New processes for responding to public research needs and partnerships
- ↗ Improved human performance due to new or changed technologies or processes.



## Policy & product development impacts

- ❏ **Implementation, revision or evaluation of policies to improve efficiency, efficacy of public services, products and processes, and government regulation**
- ❏ **Policy and related budget decisions, changes to legislation, regulations, guidelines, or funding are evidence-informed**
- ❏ Revised educational curricula, across all levels, informed by new knowledge
- ❏ Commissioned reports or projects from government departments or agencies
- ❏ Policy briefing papers, practical handbooks and other grey material produced for/ disseminated to relevant professionals, policy makers, and civic and civil society organisations
- ❏ Patents and other IP applications and award of commercialisation support grants to develop products or services
- ❏ **License agreements and revenues generated as a result of spin-out companies or formal collaborative**
- ❏ Partnerships between researchers and relevant research stakeholders.





## Professional & public service impacts

- ↗ **New or improved professional standards, working practices, guidelines or training**
- ↗ Quality, efficiency or productivity of a service
- ↗ **Professional body practices are evidence-informed**
- ↗ Practice or process changes in companies or other organisations through capacity building
- ↗ **Increased inter-agency collaboration**
- ↗ Improved services evaluation methods and technologies
- ↗ Improvements in risk management across public and private sectors
- ↗ Advancements against strategic plans.



## Internationalisation impact

- ↗ **Success of researchers and relevant entities in attaining international research funding, for example, through EU Framework programmes**
- ↗ **Attraction and retention of international talent**
- ↗ New connections to international expertise providing access to state-of-the-art knowledge, ideas and publics
- ↗ Leveraging of international funding through industrial and collaborative research
- ↗ New national/international collaborations or strategic partnerships formed with other research teams, community and industry partners or relevant agencies.
- ↗ **Increased global social responsibility, cultural awareness, and languages**
- ↗ Contribution to international relations and the international profile and reputation of EU.



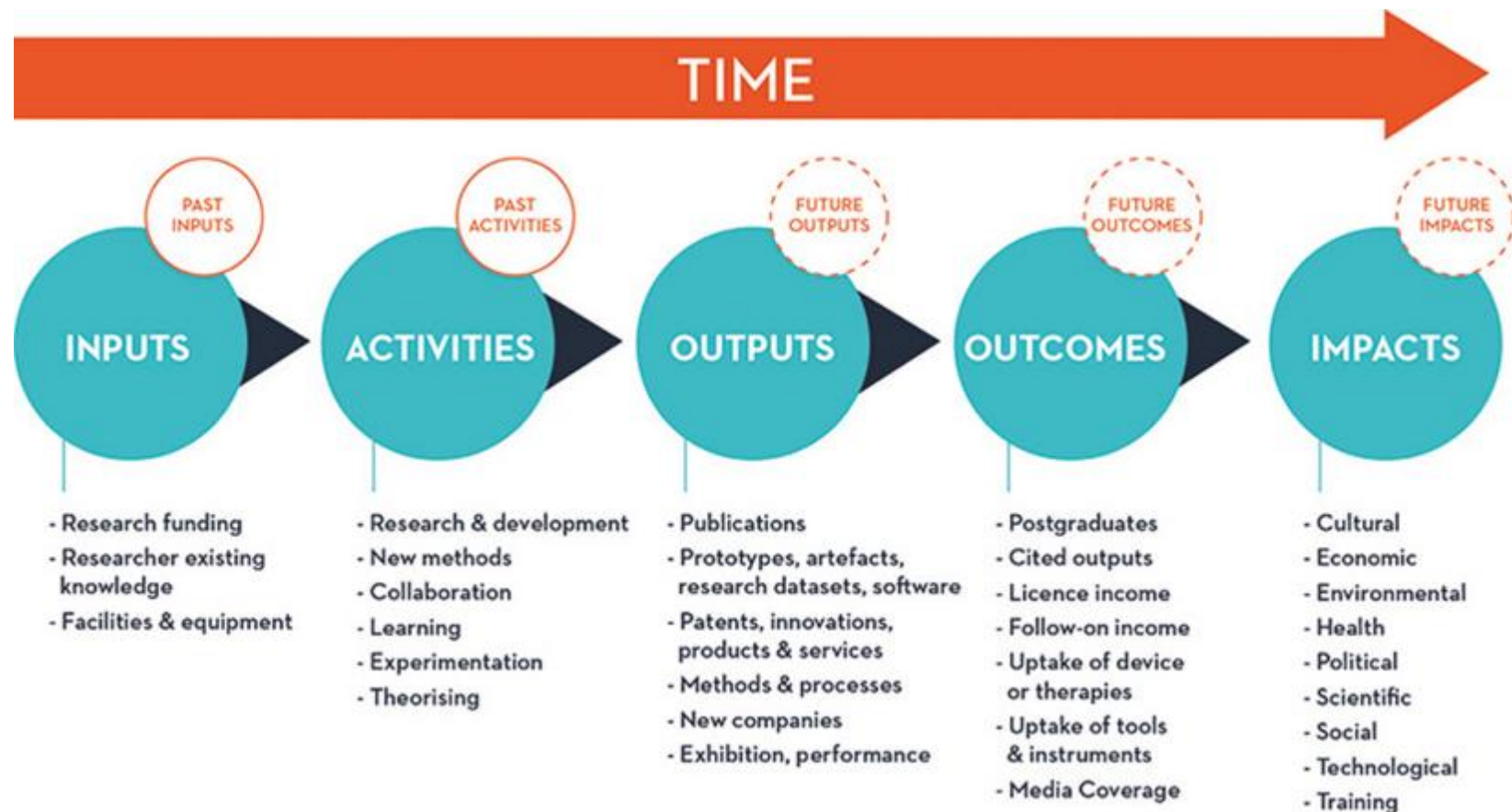
## Capacity-building impacts

- ↗ **Education, training and improved skills of current and future populations and workers for public and industry services, and academia**
- ↗ Improved relevancy of educational curricula at all levels
- ↗ Higher degrees and research experience obtained by research personnel
- ↗ **Retention rates of research personnel in national research system**
- ↗ Increased leveraged funding due to number and level of highly skilled researchers
- ↗ Increased national, EU, international social capital
- ↗ Increased levels of engagement of members of the public with research, and corresponding levels of confidence in public-science dialogue
- ↗ Spin-off projects developed and further research funding leveraged
- ↗ Development and use of novel research techniques
- ↗ Establishment of new datasets, databases or research data lodged in national database

# The impact journey

The impact journey traces research impact over time including identification of distinctive stages in its development, and its subsequent diffusion between disciplines and the wider society.

The diagram below demonstrates the various pathways to impact and distinguishes between inputs, activities, outputs, outcomes and impacts.





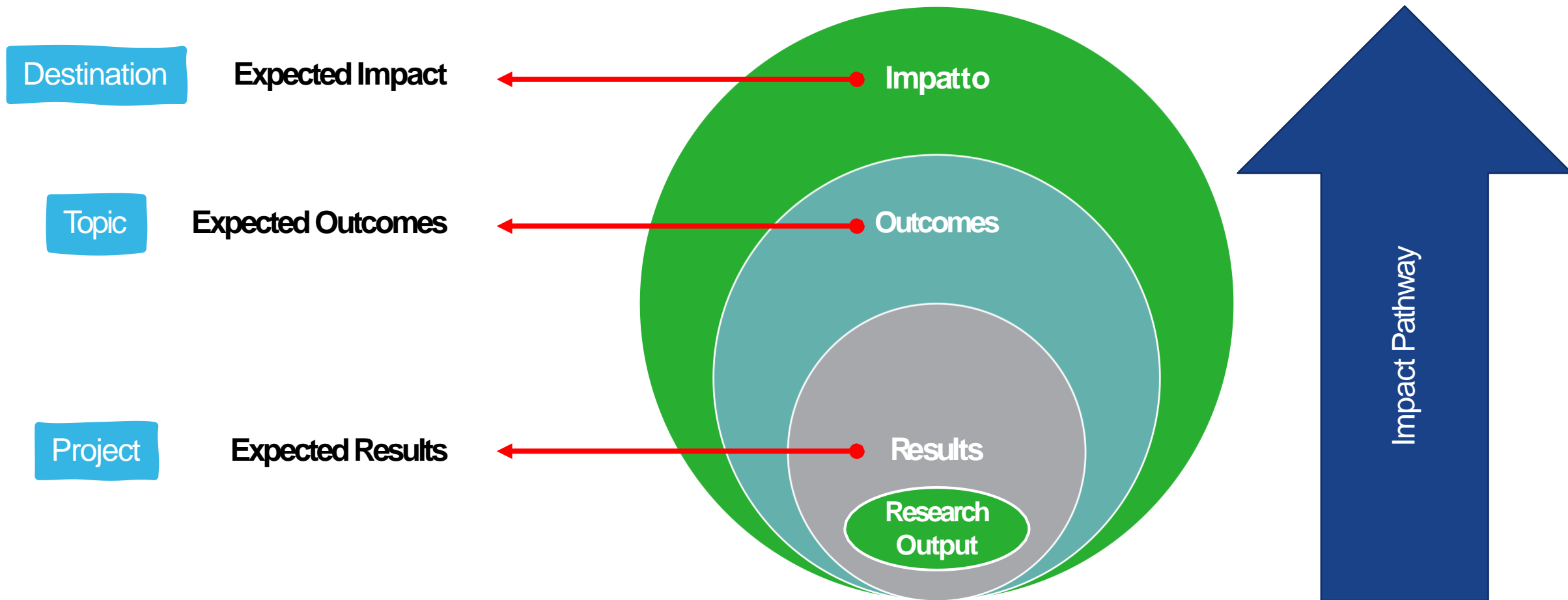
# Impact Logic

|                 |                           |  |                      |
|-----------------|---------------------------|--|----------------------|
| Strategic Plan* | ECPolicy Priority         | Based on the Political Guidelines for the European Commission 2019-2024 with a focus on three key priorities: Green Deal, Europe fit for the Digital Age, and Economy that Works for People  | General policy level |
|                 | Key Strategic Orientation | Set of strategic objectives within the ECpolicy priorities where R&I investments are expected to make a difference   | Programme level      |
|                 | Expected Impacts          | Wider effects on society (including the environment), the economy and science, enabled by the outcomes of R&I outcomes(long-term)  | Cluster level        |
| Work Programme  | Destination               | Packages of actions around which each Work Programme part within Pillar II will be designed. Destinations are a series of coherent packages aimed at contributing to the expected impacts set out in the Strategic Plan. The Destinations will provide the policy narrative for the calls and actions included in the WP.In the WP,the text of the Destination should reflect the expected impact as set out in the StrategicPlan. | Cluster WP Level     |
|                 | Call for proposal         | Each Destination will be implemented by means of calls for proposals. Under Horizon Europe, we need to align our definition of a 'call' with the Financial Regulation and with the common approach across all MFF programmes.  |                      |

\*This first Horizon Europe Strategic Plan defines the strategic orientations for our research and innovation investments over the period 2021-2024 and acts as a compass to stay on course with the political priorities of the Commission: a climate-neutral and green Europe, fit for the digital age, where the economy works for the people. The aim is to ensure an effective interface between EU policy priorities and programme activities.



# Impact Pathway



# Key impact pathways in Horizon Europe





## Key impact pathways in Horizon Europe

The KIPs will aim to:

- Tell the story of the progress of the Programme as a whole, according to its objectives
- Monitor progress at any moment in time (short-term, mid-term, long-term)



## Key impact pathways in Horizon Europe

In this process, we need to :

- Know who the individual researchers are (e.g. through unique identifiers)
- Track the FP outputs better, through a structured reference to the funding source in publications, patents and other IPR applications
- Make more use of available data and links to relevant existing databases so as to minimise the administrative burden of beneficiaries



# IMPACT DESIGN IN HORIZON EUROPE

## THREE TYPES OF IMPACT BASED ON OBJECTIVES



### **Scientific impact**

Promote scientific excellence, support the creation and diffusion of high-quality new fundamental and applied knowledge, skills, training and mobility of researchers, attract talent at all levels, and contribute to full engagement of Union's talent pool in actions supported under the Programme.



### **Societal impact**

Generate knowledge, strengthen the impact of R&I in developing, supporting and implementing Union policies, and support the uptake of innovative solutions in industry, notably in SMEs, and society to address global challenges, inter alia the SDGs

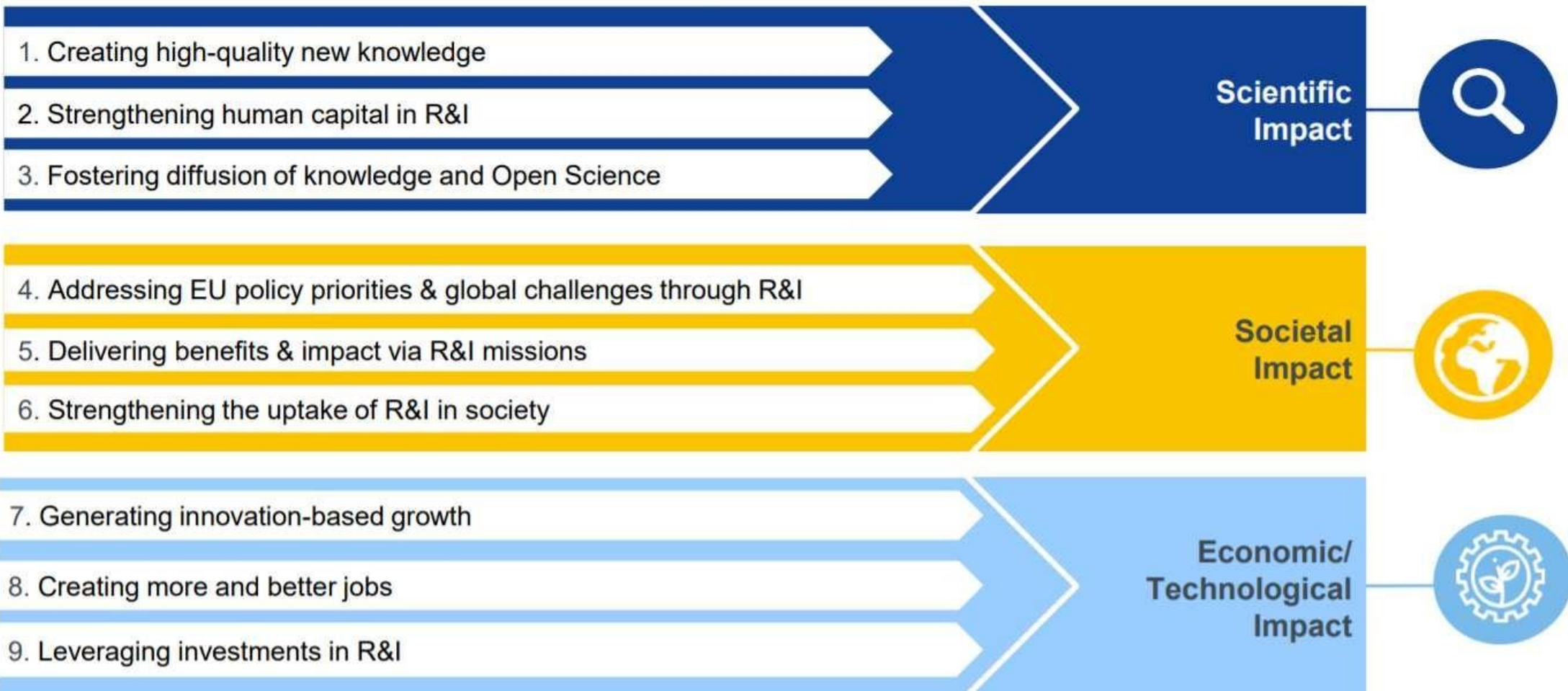


### **Economic impact**

Foster all forms of innovation, facilitate technological development, demonstration and knowledge transfer, and strengthen deployment of innovative solutions



## The 9 KIPs



*Article 50 & Annex V 'Time-bound indicators to report on an annual basis on progress of the Programme towards the achievement of the objectives referred to in Article 3 and set in Annex V along impact pathways'*



# Key impact pathways in Horizon Europe

## Pathway 1. Creating high quality new knowledge



**STORY LINE:** The FP creates and diffuses high quality new knowledge, as shown by the high-quality publications that become influential in their field and worldwide.

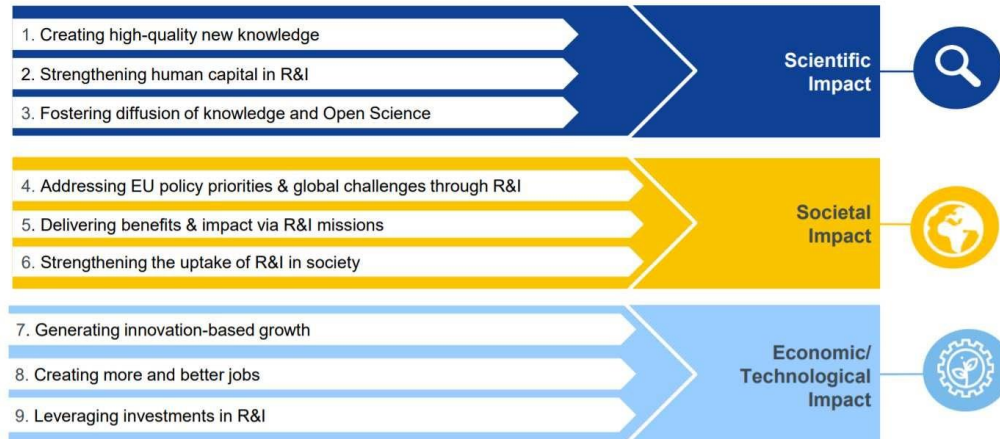
### Indicator (short, medium, long-term)



**Data needs:** Identification of publications co-funded by the FP through the insertion of a specific funding source ID when publishing, allowing follow-up tracking of the perceived quality and influence through publication databases and topic mapping.



## The 9 KIPs





# Pathway to impact

Annex V – table 1

| <b>Towards scientific impact</b>                  | <b>Short-term</b>  | <b>Medium-term</b>   | <b>Longer-term</b>  |
|---|--|--|---|
| Creating high-quality new knowledge               | <u>Publications</u> -<br>Number of FP peer reviewed scientific publications  | <u>Citations</u> -<br>Field-Weighted Citation Index of FP peer reviewed publications                                 | <u>World-class science</u> -<br>Number and share of peer reviewed publications from FP projects that are core contribution to scientific fields                       |
| Strengthening human capital in R&I                | <u>Skills</u> -<br>Number of researchers involved in upskilling (training, mentoring/coaching, mobility and access to R&I infrastructures) activities in FP projects | <u>Careers</u> -<br>Number and share of upskilled FP researchers with increased individual impact in their R&I field | <u>Working conditions</u> -<br>Number and share of upskilled FP researchers with improved working conditions, including researchers' salaries                         |
| Fostering diffusion of knowledge and Open Science | <u>Shared knowledge</u> -<br>Share of FP research outputs (open data/publication/ software etc.) shared through open knowledge infrastructures                       | <u>Knowledge diffusion</u> -<br>Share of open access FP research outputs actively used/cited                         | <u>New collaborations</u> -<br>Share of FP beneficiaries having developed new transdisciplinary/ transsectoral collaborations with users of their open FP R&I outputs |





# Pathway to impact

Annex V – table 2

| Towards societal impact   | Short-term  | Medium-term   | Longer-term   |
|---|---|---|---|
| Addressing EU policy priorities and global challenges through R&I | <p><u>Outputs -</u><br/>Number and share of outputs aimed at addressing identified EU policy priorities and global challenges (including SDGs) (multidimensional: for each identified priority)</p> <p>Including: Number and share of climate-relevant outputs aimed at delivering on the EU's commitment under the Paris Agreement</p> | <p><u>Solutions -</u><br/>Number and share of innovations and research results addressing identified EU policy priorities and global challenges (including SDGs) (multidimensional: for each identified priority)</p> <p>Including: Number and share of climate-relevant innovations and research results delivering on EU's commitment under the Paris Agreement</p> | <p><u>Benefits -</u><br/>Aggregated estimated effects from use/exploitation of FP-funded results, on tackling identified EU policy priorities and global challenges (including SDGs), including contribution to the policy and law-making cycle (such as norms and standards) (multidimensional: for each identified priority)</p> <p>Including: Aggregated estimated effects from use /exploitation of FP-funded climate-relevant results on delivering on the EU's commitment under the Paris Agreement including contribution to the policy and law-making cycle (such as norms and standards)</p> |
| Delivering benefits and impact through R&I missions               | <p><u>R&amp;I mission outputs -</u><br/>Outputs in specific R&amp;I Missions (multidimensional: for each identified mission)</p>  | <p><u>R&amp;I mission results -</u><br/>Results in specific R&amp;I Missions (multidimensional: for each identified mission)</p>  | <p><u>R&amp;I mission targets met -</u><br/>Targets achieved in specific R&amp;I missions (multidimensional: for each identified mission)</p>   |
| Strengthening the uptake of research and innovation in society    | <p><u>Co-creation -</u><br/>Number and share of FP projects where EU citizens and end-users contribute to the co-creation of R&amp;I content</p>  | <p><u>Engagement -</u><br/>Number and share of FP beneficiary entities with citizen and end-users engagement mechanisms after FP project</p>  | <p><u>Societal R&amp;I uptake -</u><br/>Uptake and outreach of FP co-created scientific results and innovative solutions</p>  |






# Pathway to impact

Annex V – table 3

| Towards technological / economic impact | Short-term   | Medium-term   | Longer-term   |
|---|--|---|---|
| Generating innovation-based growth      | <u>Innovative outputs</u> -<br>Number of innovative products, processes or methods from FP (by type of innovation) & Intellectual Property Rights (IPR) applications | <u>Innovations</u> -<br>Number of innovations from FP projects (by type of innovation) including from awarded IPRs                              | <u>Economic growth</u> -<br>Creation, growth & market shares of companies having developed FP innovations                         |
| Creating more and better jobs           | <u>Supported employment</u> -<br>Number of FTE jobs created, and jobs maintained in beneficiary entities for the FP project (by type of job)                         | <u>Sustained employment</u> -<br>Increase of FTE jobs in beneficiary entities following FP project (by type of job)                             | <u>Total employment</u><br>Number of direct & indirect jobs created or maintained due to diffusion of FP results (by type of job) |
| Leveraging investments in R&I           | <u>Co-investment</u> -<br>Amount of public & private investment mobilised with the initial FP investment   | <u>Scaling-up</u> -<br>Amount of public & private investment mobilised to exploit or scale-up FP results (including foreign direct investments) | <u>Contribution to '3% target'</u> -<br>EU progress towards 3% GDP target due to FP   |



## Definizione Research output nel template

 Results generated by the action to which access can be given in the form of scientific publications, data or other engineered outcomes and processes such as software, algorithms, protocols and electronic notebooks.



# Some definitions...

## Results:

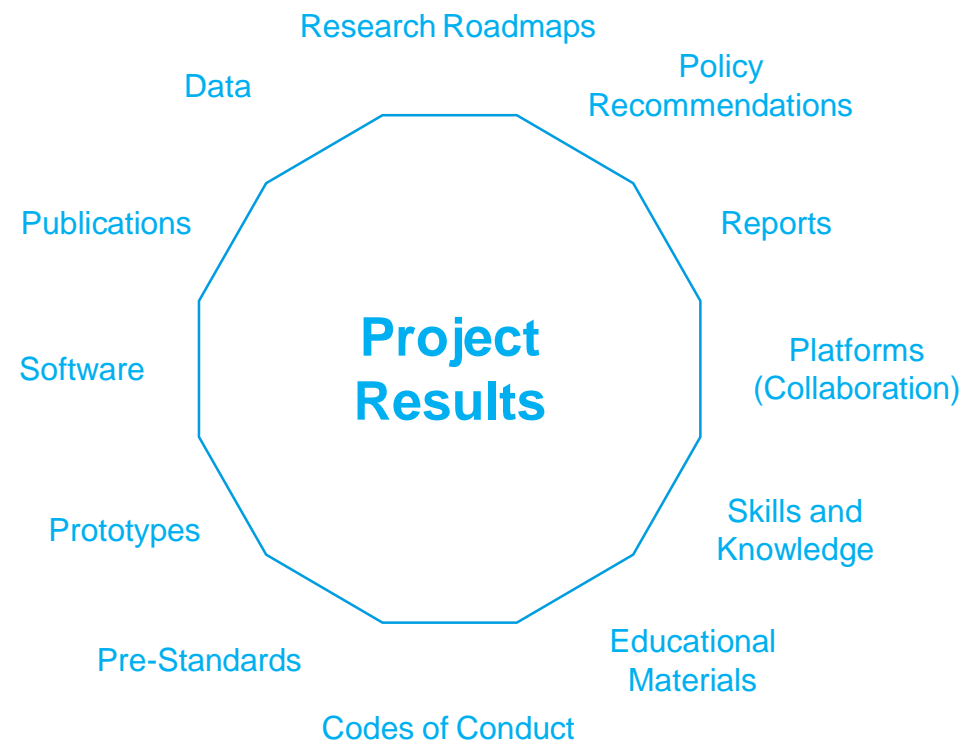
Results' means any tangible or intangible effect of the action, such as data, know-how or information, whatever its form or nature, whether or not it can be protected, as well as any rights attached to it, including intellectual property rights...

Key results are the **outputs generated during the project which can be used and create impact**, either by the project partners or by other stakeholders

Project results can be reusable and exploitable (e.g. inventions, prototypes, services) as such, or elements (knowledge, technology, processes, networks) that have potential to contribute for further work on research or innovation

Research Communities

MS. EU Policymakers



Industry. Innovators

Civic Society. Citizens





## Definizione di outcomes nel template

**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.**

*Example: 9 European airports adopt the advanced forecasting system demonstrated during the project.*



## Definizione di impatto nel template

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.

*Example: The deployment of the advanced forecasting system enables each airport to increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs.*

## Definizione impact pathway in proposal template

↗ Logical steps towards the achievement of the expected impacts of the project over time, in particular beyond the duration of a project. A pathway begins with the projects' results, to their dissemination, exploitation and communication, contributing to the expected outcomes in the work programme topic, and ultimately to the wider scientific, economic and societal impacts of the work programme destination.



## Impact – aspects to be taken into account.

- Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.
- Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities

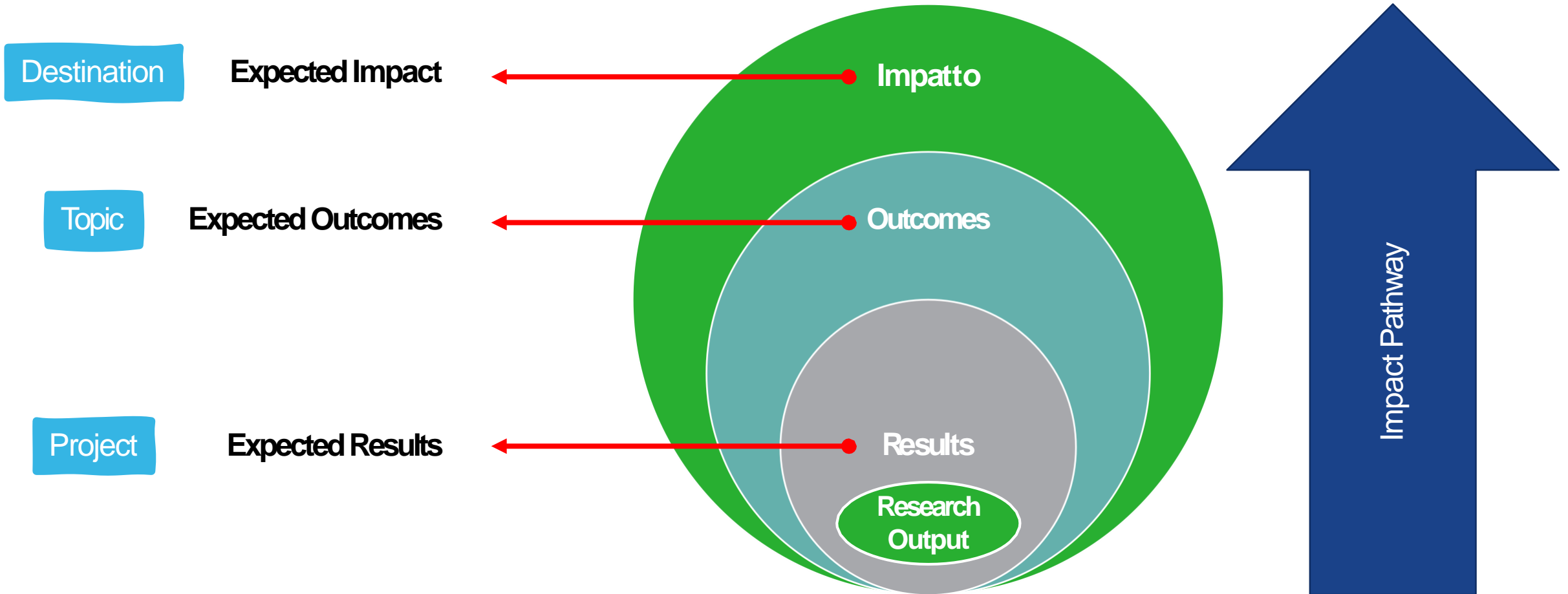
The results of your project should make a contribution to the expected outcomes set out for the work programme topic over the medium term, and to the wider expected impacts set out in the ‘destination’ over the longer term.

In this section you should show how your project could contribute to the outcomes and impacts described in the work programme, the likely scale and significance of this contribution, and the measures to maximise these impacts.





# Impact Pathway

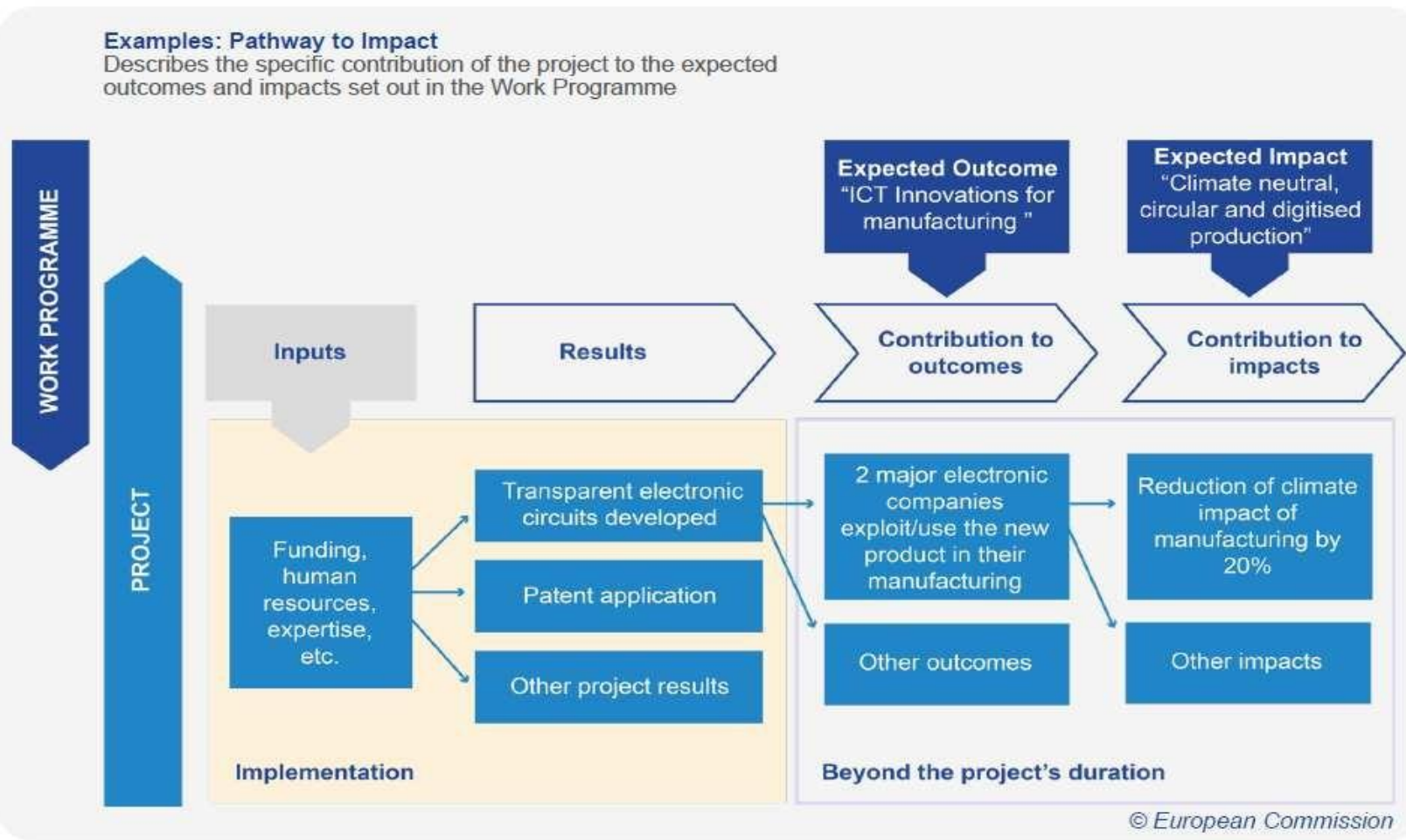




# Impact Pathway

## Examples: Pathway to Impact

Describes the specific contribution of the project to the expected outcomes and impacts set out in the Work Programme



### Keep in mind!

Link your proposal to the policy context of the call for proposals.

Think of how your project's results, outputs, and impacts will contribute to the topic and destination of the work programme. Proposals will be assessed based on the credibility of their pathway towards impact. In working on this pathway, consider the following questions:

- What are the expected outputs and impacts of your project?
- How do they contribute in a concrete way to the work programme?
- What target groups (user communities? Parts of the society?) would benefit from those impacts?
- What are the risks and barriers to impact, and how can they be addressed to make the pathway towards impact more credible?

Successful valorisation of knowledge and research results in Horizon Europe : boosting the impact of your project through effective communication, dissemination and exploitation  
DOI: 10.2826/437645



## 2.2 Measures to maximise impact - Dissemination, exploitation and communication [e.g. 5 pages]

- Describe the planned measures to maximise the impact of your project by providing a first version of your **'plan for the dissemination and exploitation including communication activities'**. Describe the dissemination, exploitation and communication measures that are planned, and the target group(s) addressed (e.g. scientific community, end users, financial actors, public at large).

*Please remember that this plan is an admissibility condition, unless the work programme topic explicitly states otherwise. In case your proposal is selected for funding, a more detailed 'plan for dissemination and exploitation including communication activities' will need to be provided as a mandatory project deliverable within 6 months after signature date. This plan shall be periodically updated in alignment with the project's progress.*

*Communication measures should promote the project throughout the full lifespan of the project. The aim is to inform and reach out to society and show the activities performed, and the use and the benefits the project will have for citizens. Activities must be strategically planned, with clear objectives, start at the outset and continue through the lifetime of the project. The description of the communication activities needs to state the main messages as well as the tools and channels that will be used to reach out to each of the chosen target groups.*

*All measures should be proportionate to the scale of the project, and should contain concrete actions to be implemented both during and after the end of the project, e.g. standardisation activities. Your plan should give due consideration to the possible follow-up of your project, once it is finished. In the justification, explain why each measure chosen is best suited to reach the target group addressed. Where relevant, and for innovation actions, in particular, describe the measures for a plausible path to commercialise the innovations.*

*If exploitation is expected primarily in non-associated third countries, justify by explaining how that exploitation is still in the Union's interest.*

*Describe possible feedback to policy measures generated by the project that will contribute to designing, monitoring, reviewing and rectifying (if necessary) existing policy and programmatic measures or shaping and supporting the implementation of new policy initiatives and decisions.*



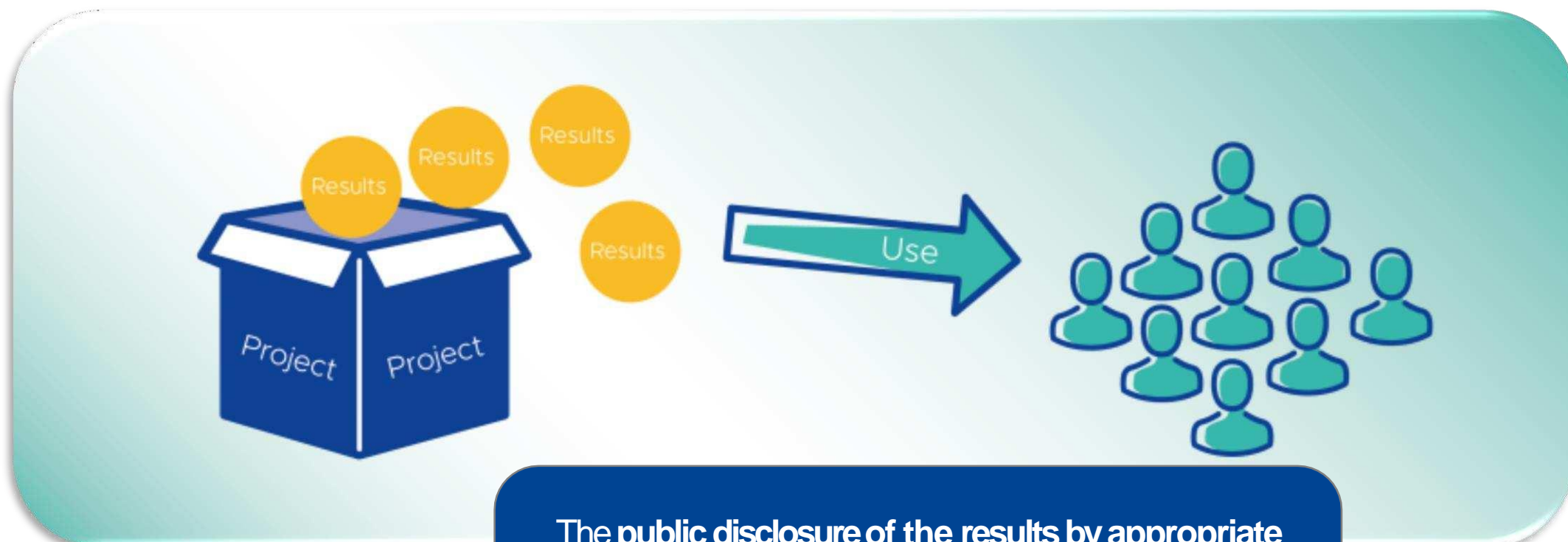
# Communication



Communication measures should promote the project throughout the full lifespan of the project. The aim is to **inform and reach out to society and show the activities performed, and the use and the benefits the project will have for citizens.**



# Dissemination



The public disclosure of the results by appropriate means, other than resulting from protecting or exploiting the results, including by scientific publications in any medium.



# Exploitation



The **use of results** in further research and innovation activities other than those covered by the action concerned, including among other things, commercial exploitation such as developing, creating, manufacturing and marketing a product or process, creating and providing a service, or in standardisation activities.



## Definizioni

| Communication  | Dissemination  | Exploitation  |
|--|--|---|
| Taking strategic and targeted measures for promoting the action itself and its results to a multitude of audiences, including the media and the public, and possibly engaging in a two-way exchange* | Making the results of a project public, not only by scientific publications in any medium* | The utilisation of results in developing, creating and marketing a product or process, or in creating and providing a service, or in standardisation activities.* |

\* [http://ec.europa.eu/research/participants/portal/desktop/en/support/reference\\_terms.html](http://ec.europa.eu/research/participants/portal/desktop/en/support/reference_terms.html)





# In a nutshell

\*\*\*certain tools and activities can oscillate between communication and dissemination, depending on the target group and content

| Communication   | Dissemination   | Exploitation   |               |                     |
|---|---|--|---------------|---------------------|
| <p><b>Reach out to society</b> and show the <b>impact and benefits of EU-funded R&amp;I activities</b>.<br/>Targeted communication activities must address the public policy perspective of European R&amp;I funding by considering aspects such as (i) the benefits of transnational cooperation in a European consortium or (ii) scientific excellence or (iii) contributing to competitiveness and to solving societal challenges.</p> | <p><b>Transfer knowledge &amp; results</b> with the aim to enable others to use or reuse and take up results, thus maximising the impact of EU-funded research.</p> | <p><b>Effectively use/reuse project results</b> through scientific, economic, political or societal exploitation routes aiming to turn R&amp;I actions into concrete value and impact for society.</p> | <br>Objective |                     |
| <p><b>Inform about and promote the project AND its results/success</b> in a non-technical manner and through strategically planned actions – possibly engaging in a two-way exchange.</p>   | <p><b>Describe and ensure results available</b> for others to <b>USE or REUSE</b> → focus on results only!</p>  | <p><b>Make concrete use/reuse</b> of research results (not restricted to commercial use.)</p>  |               | <br>Focus           |
| <p><b>Multiple audiences</b> beyond the project's own community incl. media and the broad public.</p>   | <p>Audiences that may take an interest in the potential <b>USE/REUSE</b> of the results (e.g. scientific community, industrial partner, policymakers).</p>          | <p>People/organisations including project partners themselves that make concrete use/reuse of the project results, as well as user groups outside the project.</p>                                     |               | <br>Target Audience |





## 2.2 Measures to maximise impact - Dissemination, exploitation and communication [e.g. 5 pages]

- Outline your strategy for the **management of intellectual property**, foreseen protection measures, such as patents, design rights, copyright, trade secrets, etc., and how these would be used to support exploitation.

*If your project is selected, you will need an appropriate consortium agreement to manage (amongst other things) the ownership and access to key knowledge (IPR, research data etc.). Where relevant, these will allow you, collectively and individually, to pursue market opportunities arising from the project.*

*If your project is selected, you must indicate the owner(s) of the results (results ownership list) in the final periodic report.*

# Before Project Start

## Exploitation and dissemination planning

- Draw a convincing outline of **exploitation strategies** at individual/consortium level
- IP exploitation issues are subject to evaluation regarding **impact and implementation**. Identifying **relevant bodies/competences** within the consortium should demonstrate the potential of addressing IP management properly
- Include relevant tasks/**deliverables**: PDEC, Innovation-related workshops, Market Analysis, Business Plans, Risk-Analysis, Freedom-to-Operate analysis, Specific contracts/agreements





# Grant Vs Consortium Agreement

| DOCUMENT                         | SIGNATURE<br><i>WHEN</i>                    | MEMBERS<br><i>WHO</i>                 | CONTENT<br><i>WHAT</i>   |
|----------------------------------|---|---------------------------------------|--|
| <b>Grant Agreement (GA)</b>      | <i>At the of GAP (GA preparation) phase</i> | Beneficiaries and European Commission | It establishes the rights and obligations of the beneficiaries towards the EU<br><i>IP rules are not negotiable</i>  |
| <b>Consortium Agreement (CA)</b> | <i>During GAP</i>                           | Project Coordinator and beneficiaries | It establishes the legal basis for the division of rights, obligations and responsibilities among the beneficiaries<br><i>IP rules must be agreed among the partners</i> |

IPR Helpdesk Fact Sheet

[https://www.iprhelpdesk.eu/sites/default/files/newsdocuments/FS\\_How\\_to\\_manage\\_IP\\_in\\_H2020\\_grant\\_preparation\\_0.pdf](https://www.iprhelpdesk.eu/sites/default/files/newsdocuments/FS_How_to_manage_IP_in_H2020_grant_preparation_0.pdf)

## Summary 2.3

- Provide a summary of this section by presenting in the **canvas** below the **key elements of your project impact pathway** and of the measures to maximise its impact.
- KEY ELEMENT OF THE IMPACT SECTION!**







| SPECIFIC NEEDS  | EXPECTED RESULTS   | D & E & C MEASURES  |
|---|--|---|
| <p><b><i>What are the specific needs that triggered this project?</i></b></p> <p>Example 1<br/>Most airports use process flow-oriented models based on static mathematical values limiting the optimal management of passenger flow and hampering the accurate use of the available resources to the actual demand of passengers.</p> <p>Example 2<br/>Electronic components need to get smaller and lighter to match the expectations of the end-users. At the same time there is a problem of sourcing of raw materials that has an environmental impact.</p> | <p><b><i>What do you expect to generate by the end of the project?</i></b></p> <p>Example 1<br/><b>Successful large-scale demonstrator:</b> Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.<br/><b>Algorithmic model:</b> Novel algorithmic model for proactive airport passenger flow management.</p> <p>Example 2<br/>Publication of a <b>scientific discovery on transparent electronics.</b><br/><b>New product:</b> More sustainable electronic circuits.<br/><b>Three PhD students trained.</b></p> | <p><b><i>What dissemination, exploitation and communication measures will you apply to the results?</i></b></p> <p>Example 1<br/><b>Exploitation:</b> Patenting the algorithmic model.<br/><b>Dissemination towards the scientific community and airports:</b> Scientific publication with the results of the large-scale demonstration.<br/><b>Communication towards citizens:</b> An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.</p> <p>Example 2<br/><b>Exploitation of the new product:</b> Patenting the new product; Licencing to major electronic companies.<br/><b>Dissemination towards the scientific community and industry:</b> Participating at conferences; Developing a platform of material compositions for industry; Participation at EC project portfolios to disseminate the results as part of a group and maximise the visibility vis-à-vis companies</p> |





| TARGET GROUPS   | OUTCOMES  | IMPACTS  |
|---|---|--|
| <p><i>Who will use or further up-take the results of the project? Who will benefit from the results of the project?</i></p> <p>Example 1<br/><b>9 European airports:</b><br/>Schiphol, Brussels airport, etc.<br/><b>The European Union aviation safety agency.</b><br/><b>Air passengers (indirect).</b></p> <p>Example 2<br/><b>End-users:</b> consumers of electronic devices.<br/><b>Major electronic companies:</b> Samsung, Apple, etc.<br/><b>Scientific community</b> (field of transparent electronics).</p> | <p><i>What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?</i></p> <p>Example 1<br/><b>Up-take by airports:</b> 9 European airports adopt the advanced forecasting system demonstrated during the project.</p> <p>Example 2<br/><b>High use of the scientific discovery published</b> (measured with the relative rate of citation index of project publications).<br/><b>A major electronic company</b> (Samsung or Apple) <b>exploits/uses the new product</b> in their manufacturing.</p> | <p><i>What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?</i></p> <p>Example 1<br/><b>Scientific:</b> New breakthrough scientific discovery on passenger forecast modelling.<br/><b>Economic:</b> Increased airport efficiency<br/>Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs.</p> <p>Example 2<br/><b>Scientific:</b> New breakthrough scientific discovery on transparent electronics.<br/><b>Economic/Technological:</b> A new market for touch enabled electronic devices.<br/><b>Societal:</b> Lower climate impact of electronics manufacturing (including through material sourcing and waste management).</p> |



| SPECIFIC NEEDS  | EXPECTED RESULTS   | D & E & C MEASURES   |
|---|--|--|
| <ul style="list-style-type: none"> <li>- Skin cancer patients treated with current therapy lack a predictive biomarker.</li> <li>- Biomarker XY, the currently approved one, has many limits. It does not precisely address the current therapy in a tailor way leading to a reduced survival, undue toxicity and costly therapy</li> </ul> | <p><b>Platform:</b> A big EU and beyond data storage platform for providing to physicians AI models for co-decision making, patients empowerment and researchers will be developed and validated in a retro and prospective clinical study.</p> <p><b>Algorithms:</b> a set of novel models for data extraction and prediction will be crafted for skin cancer prediction.</p> | <p><b>Dissemination:</b> scientific publication with results on our platform and AI models</p> <p><b>Exploitation:</b> Patent for medical device</p> <p><b>Communication:</b> a dedicated project website will be available in order to share with all the target groups the data</p>                                      |
| TARGET GROUPS   | OUTCOMES   | IMPACTS  |
| <ul style="list-style-type: none"> <li>Skin cancer patients</li> <li>Healthcare professionals</li> <li>Researchers in skin cancer field</li> <li>Healthcare authorities and policy makers</li> <li>General Public</li> <li>SME</li> </ul>   | <ul style="list-style-type: none"> <li>- Use of the co-decision making AI tool provided by the our app to patients and physicians.</li> <li>- Lung cancer community will use the new platform to share and exchange ideas and novel results.</li> <li>- Creation of a strong connection among EU and US for policy on data sharing.</li> </ul>                                 | <ul style="list-style-type: none"> <li>- Improving Overall Survival and Quality of Life in skin cancer patient.</li> <li>- Reduce toxicity burden for skin cancer patients</li> <li>- Reduce costs for healthcare</li> <li>- Improving physician-patient relationship</li> <li>- Boost the EU Extra-EU exchange</li> </ul> |



# Proposal template Part B: technical description

## 1. Excellence

1.1 Objectives and ambition *[e.g. 4 pages]*

1.2 Methodology *[e.g. 15 pages]*

## 2. Impact

2.1 Project's pathways towards impact *[e.g. 4 pages]*

2.2 Measures to maximise impact - Dissemination, exploitation and communication *[e.g. 5 pages]*

2.3 Summary (Canvas table)

## 3. Quality and efficiency of the implementation

3.1 Work plan and resources *[e.g. 14 pages – including tables]*

3.2 Capacity of participants and consortium as a whole *[e.g. 3 pages]*



## Part B - Section 3

3. Quality and efficiency of the implementation

3.1 Work plan and resources [*e.g. 14 pages – including tables*]

3.2 Capacity of participants and consortium as a whole [*e.g. 3 pages*]



## 3.1 Work plan and resources [e.g. 14 pages – including tables]

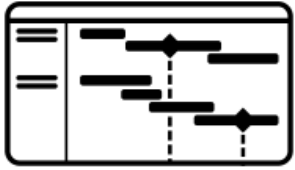
▣ Please provide the following:

- brief presentation of the overall structure of the work plan;
- timing of the different work packages and their components (Gantt chart or similar);
- graphical presentation of the components showing how they inter-relate (Pert chart or similar).



## Work Breakdown Structure (WBS)

- ▣ A deliverable-oriented breakdown of a project into smaller components
- ▣ WBS is a hierarchical and incremental decomposition of the project into phases, deliverables, and work packages
- ▣ It is a tree structure, which shows a subdivision of effort required to achieve an objective



## Gantt and Pert Charts

- ❏ A **Gantt** chart is a type of bar chart that illustrates a project schedule. This chart lists the tasks to be performed on the vertical axis, and time intervals on the horizontal axis. The width of the horizontal bars in the graph shows the duration of each activity.
- ❏ A **Pert** chart works by visually representing a project's tasks and the dependencies connected to each one.



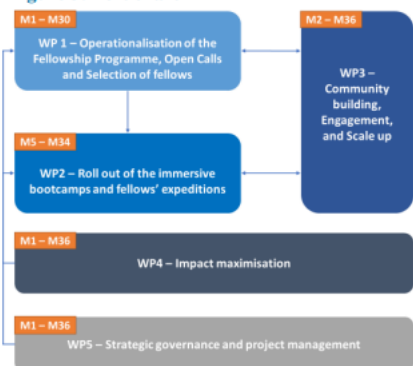


# Overall structure of the work plan

# Example

## 3 Implementation 3.1 Work Plan and resources 3.1.1 Overall work plan structure

Figure 3: Pert chart



**WP1** is about ensuring that modalities of the Fellowship programme are in place to be able to kick start the open calls for fellows' applications and select the fellows that will go on expeditions in the U.S. and Canada. WP1 will also be about setting up the support services that will be provided to the fellows during their expeditions in order to boost their collaboration with organisations. **WP2** includes pre-departure training and preparation of fellows, the actual rollout of fellows' expeditions to the U.S. and Canada, the follow up of fellows' and hosts collaboration during expeditions, the provisions of on-demand support services to boost their collaborative projects and the organisation of competitions and award ceremonies. **WP3** consists in expanding and reinforcing partnerships with former hosts organisations in the U.S. and Canada.

**WP4** consists of all outreach, dissemination, communication activities promoting the project and building its visibility among the project relevant stakeholders. Promotion opportunities to the EU, US and CA will be undertaken in this WP, public events and other activities enhance the community. An initial Exploitation and Sustainability Plan will be created at an early stage and implemented, and updated enduring the course of the project, in line with the strategy and governance. **WP5** defines the structure, architecture of the NGI Enrichers' entity and defines its strategy, ensuring its sustainability. By creating the optimal strategic environment and its governing structure, setting up an Advisory Board, enabling a sound collaboration with stakeholders from all regions as well as relevant structures during the project. Project management activities will ensure the efficient implementation of the support activities and outcomes as well as synergy across the consortium and expert groups and with the US and Canada associated with this call. Project management will include managing smooth information and communication, ongoing coordination and quality management, and preparing the project management reports, cost state reviews, including internal reporting. The following Gantt chart presents the planned timeline for all WP

### Overall structure of the work plan

Based on the overall approach and research strategy formulated in section 1.3.2 the CSA is structured into six work packages (Figure 3):

**WP 1 –Methodology and mapping:** The methodological tools and approaches will be designed in order to carry out a comprehensive mapping of initiatives, structures, instruments and key gaps for and across the relevant sectors and macro-regions, covering geographical levels from regions to EU. Methods and mapping will be fine-tuned according to stakeholders' information needs.

**WP 2 - Analysis:** The information base elaborated in WP1 will be analysed in order to identify key starting points and best-practices how to improve the functioning of the innovation-ecosystems. In a co-creation process with multi-stakeholder groups these analytic results will be transformed into practical, implementation-oriented guidelines.

**WP 3 –Implementation:** Good practices and guidelines resulting from WP 2 will be implemented, tested and validated in practice. This includes various networking and matchmaking events in order to promote the dialogue and collaboration among different stakeholders and across the different sectors of the bioeconomy and food-systems and validation the findings from good practices.

**WP 4 – Recommendations:** The consortium will deduce recommendations for policy actions, guidelines good-practices for financing, collaboration, technology transfer and other issues concerning the deployment of innovations in the bioeconomy, and co-creatively refine them with all relevant stakeholder groups. Follow-up events will be conducted, to ensure that the recommendations are understood, actively reflected and implemented into stakeholders' activities and action plans.

**WP 5 – Communication and dissemination:** The consortium will provide stakeholders at European, macro-regional, national and regional level, with the information about the ShapingBio project's activities, events, achievements and recommendations. It will also collaborate with other projects. ShapingBio will also define a strategy on how the project results can be exploited by stakeholders in the medium to long term.

**WP 6 – Project management:** WP 6 will coordinate, support and facilitate the consortium interactions for the smooth implementation of the project activities including liaison with the Commission and stakeholder advisory group.



# Gantt chart

Example

|          | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |  |  |  |
|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|
| <b>1</b> | <b>Specification of methodological approach and mapping</b>           |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 1.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 1.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 1.3      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 1.4      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 1.5      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| <b>2</b> | <b>Analysis of mapped information and involvement of stakeholders</b> |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 2.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 2.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 2.3      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 2.4      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| <b>3</b> | <b>Testing and Implementation</b>                                     |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 3.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 3.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 3.3      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| <b>4</b> | <b>Recommendations and Impacts</b>                                    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 4.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 4.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| <b>5</b> | <b>Communication, Dissemination and Exploitation</b>                  |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 5.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 5.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 5.3      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 5.4      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| <b>6</b> | <b>Management</b>   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 6.1      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 6.2      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
| 6.3      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |

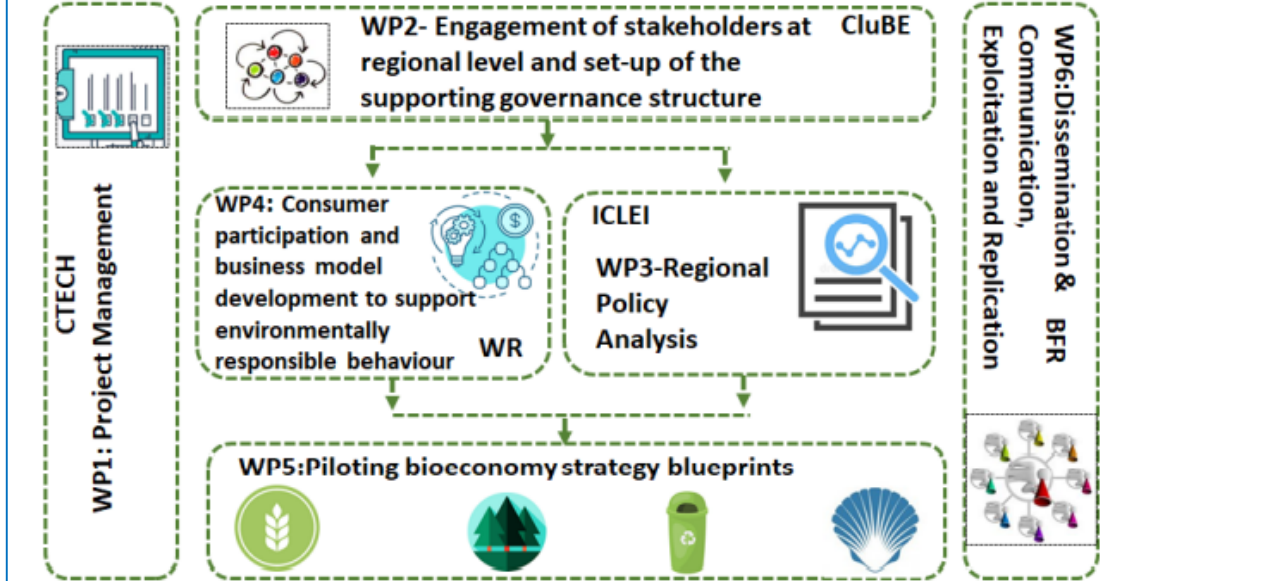
## 3.1.2 Gantt Chart

★ Milestone; D: Deliverable.

| WP No | Title WP  | Year 1 |   |   |   |   |   |   |   |   |    |    |    | Year 2 |    |    |    |    |    |    |    |    |    |    |    | Year 3 |    |    |    |    |    |    |    |    |    |    |    |  |
|-------|---|--------|---|---|---|---|---|---|---|---|----|----|----|--------|----|----|----|----|----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----|----|----|----|----|--|
|       |   | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13     | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25     | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |  |
| WP1   | Project Management  | ★      |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.1  | Set-up of management structure and procedures   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.2  | Set-up of communication rules and tools   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.3  | Project administration and resource monitoring  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.4  | Sex/Gender Analysis   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.5  | Data Management Plan  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T1.6  | Coordination/synergies with relevant EU projects and other initiatives  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| WP2   | Engagement of stakeholders at regional level and set-up of the supporting governance structure  |        | ★ |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T2.1  | Set up of the Governance structure  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T2.2  | Stakeholders mobilization   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T2.3  | Online workshops to collect needs from stakeholders involved in the 6 pilot regions   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| WP3   | Regional Policy Analysis  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T3.1  | Understanding regional bioeconomy governance  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T3.2  | Extending existing monitoring system with regional based-bioeconomy policies and key performance indicators to allow replication across Europe  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T3.3  | Analysing the governance system and related policy-mix in pilot regions   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| WP4   | Consumer participation and business model development to support environmentally responsible behaviour  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T4.1  | Determine consumers' needs, barriers and transform these to potentialities to enable the transition towards environmental responsible behaviour |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T4.2  | Enabling biobased business models at the regional level and the development of new ones   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T4.3  | Business model analysis on the pilot regions  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| WP5   | Piloting bioeconomy strategy blueprints   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T5.1  | Regional bioeconomy strategy blueprints   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T5.2  | Showcase the pilot regions through webinars and workshops   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| WP6   | Dissemination & Communication, Exploitation and Replication   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.1  | Dissemination & Communication Plan  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.2  | Dissemination and Communication Activities  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.3  | Dissemination among cluster members   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.4  | Clustering with other projects and initiatives  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.5  | Lobbying at regional and national level for the promotion of Bioeconomy   |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |
| T6.6  | Exploitation, replicability actions and strategy -  |        |   |   |   |   |   |   |   |   |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |    |    |    |    |  |

# Pert chart

## 3.1.1 Brief presentation of the overall structure of the work plan (Pert Chart)



## Example

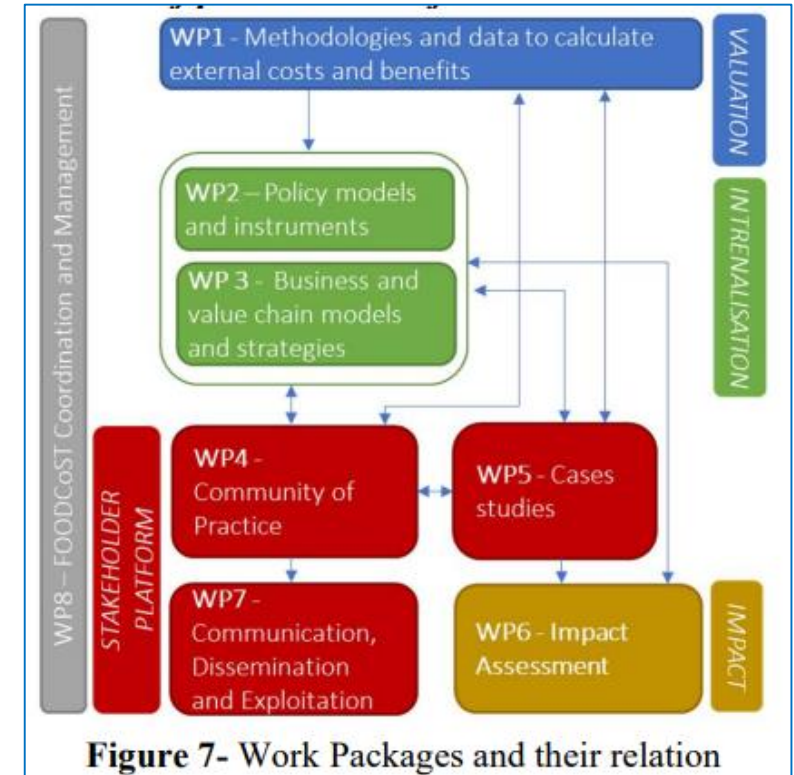


Figure 7- Work Packages and their relation



- detailed work description, i.e.:
  - o a list of work packages (table 3.1a);
  - o a description of each work package (table 3.1b);
  - o a list of deliverables (table 3.1c);
- a list of milestones (table 3.1d);
- a list of critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. You will be able to update the list of critical risks and mitigation measures as the project progresses (table 3.1e);
- a table showing number of person months required (table 3.1f);
- a table showing description and justification of subcontracting costs for each participant (table 3.1g);
- a table showing justifications for 'purchase costs' (table 3.1h) for participants where those costs exceed 15% of the personnel costs (according to the budget table in proposal part A);
- if applicable, a table showing justifications for 'other costs categories' (table 3.1i).





Table 3.1a: List of work packages

| Work package No | Work Package Title | Lead Participant No | Lead Participant Short Name | Person-Months       | Start Month | End month |
|-----------------|--------------------|---------------------|-----------------------------|---------------------|-------------|-----------|
|                 |                    |                     |                             |                     |             |           |
|                 |                    |                     |                             |                     |             |           |
|                 |                    |                     |                             |                     |             |           |
|                 |                    |                     |                             |                     |             |           |
|                 |                    |                     |                             | Total person-months |             |           |

Example

3.1.5. List of Work packages

| WP No               | Work Package Title   | Lead Part. No | Lead Part. Short Name | Person-months | Start Month | End Month |
|---------------------|--|---------------|-----------------------|---------------|-------------|-----------|
| 1                   | Creation of awareness, communication and education toolkits  | 8             | UNIBO                 | 19,15         | 1           | 24        |
| 2                   | Awareness and public engagement activities   | 5             | PEDAL                 | 33,9          | 3           | 24        |
| 3                   | Support Member States and Regions in awareness, communication and education activities in bioeconomy | 6             | QPLAN                 | 21,75         | 3           | 24        |
| 4                   | Strengthen the European Bioeconomy Network   | 2             | FVA                   | 18,25         | 1           | 24        |
| 5                   | Communication, Dissemination, Exploitation, Impact and Sustainability                                | 4             | LOBA                  | 19            | 1           | 24        |
| 6                   | Project Management   | 1             | APRE                  | 17,25         | 1           | 24        |
| <b>Total Months</b> |  |               |                       | <b>129,3</b>  |             |           |



Table 3.1b: Work package description

For each work package:

|                     |  |
|---------------------|--|
| Work package number |  |
| Work package title  |  |

⚠ Participants involved in each WP and their efforts are shown in table 3.1f. Lead participant and starting and end date of each WP are shown in table 3.1a.)

Objectives

Description of work (where appropriate, broken down into tasks), lead partner and role of participants. Deliverables linked to each WP are listed in table 3.1c (no need to repeat the information here).

# Example

## Work package 2

|                     |  |    |       |       |      |      |      |           |     |      |                  |     |
|---------------------|--|----|-------|-------|------|------|------|-----------|-----|------|------------------|-----|
| Work package No.    | 2  |    |       |       |      |      |      |           |     |      | Lead beneficiary | TPB |
| Work package title  | Optimisation, demonstration and application of sustainable, animal-free protein production |    |       |       |      |      |      |           |     |      |                  |     |
| Participant number  | 1  | 2  | 3     | 4     | 5    | 6    | 7    | 8         | 9   | 10   | 11               |     |
| Short name          | BBEPP  | IN | NUTRL | TPB   | LDF  | SE   | RISE | DTU       | TLU | APRE | ITB              |     |
| pm per participant: | 146  | 0  | 0     | 207.5 | 86.5 | 35.4 | 0    | 26.5      | 0   | 0    | 0                |     |
| Start month         | 1  |    |       |       |      |      |      | End month |     |      |                  | 48  |

The **general objective** of this WP is to successfully demonstrate the sustainable production of different types of MPs at scale from agro-food side streams and prove their downstream application potential for the European and/or Indian market.

The **specific objectives** are:

- Improvement of the productivity and robustness of the producing strains
- Validation of the use of waste streams for egg white replacer, Fermotein™ and milk protein production
- Optimisation of fermentation, extraction or downstream purification processes to improve overall efficiency
- Performing pilot-scale fermentation runs to provide end-users with sufficient protein amounts for further product development, functionality testing and integration in consumer applications in Europe and India
- Performing consumer trials to analyse taste/texture and/or health/nutritional effect, and integrating consumer feedback in the next iteration round
- Delivery of process data to be used as input for refined LCA, nutritional assessment and TEA in WP4-5, and post-production technology development, production for in-market studies and industrial scale commercialisation

### Description of work, lead partner and role of participants

#### Task 2.1: Development and application of a Fermotein™ product for developing countries (TPB, SE, M1-36)

The iron content of Fermotein™ (Table 1.1) can help fighting anaemia in developing countries. TPB and SE combined to develop Fermotein™ products for developing countries, depending on local streams available (e.g., Rwanda, APPETITE will focus on an Indian case study).

#### Subtask 2.1.1 Production of Fermotein™ from potato waste and sugar cane side products from India (TPB, M1-18)

The aerobic fermentation process developed by TPB for Fermotein™ (food grade, production under ISO22000 system free of mycotoxins, heavy metals and pathogenic organisms) applies a proprietary fungus (more details of the fungus cannot be disclosed yet as Novel Food dossier is prepared and is evaluated at this moment by EFSA and FDA) that can grow on different carbon sources such as starch, hemicellulose and pectin. Therefore, it can grow also on agro-food residues, such as potato waste and sugar cane molasses, two highly abundant crops in India. Cutting wastes, peels, washing waters (rich in starch)



|                                      |                    |     |      |                  |     |     |      |        |     |      |
|--------------------------------------|--------------------|-----|------|------------------|-----|-----|------|--------|-----|------|
| <b>Work package number</b>           | <b>6</b>           |     |      |                  |     |     |      |        |     |      |
| <b>Work package title</b>            | Project management |     |      |                  |     |     |      |        |     |      |
| <b>Participant number</b>            | <b>1</b>           | 2   | 3    | 4                | 5   | 6   | 7    | 8      | 9   | 10   |
| <b>Short name of participant</b>     | <b>APRE</b>        | BTG | LOBA | PEDAL            | EUN | ZSI | AIJU | Q-PLAN | FVA | HSPN |
| <b>Person months per participant</b> | <b>16</b>          | 0.5 | 0.5  | 0.5              | 0.5 | 0.5 | 0.5  | 0.5    | 0.5 | 0.5  |
| <b>Start month</b>                   | 1                  |     |      | <b>End month</b> |     |     |      | 30     |     |      |

# Example

- Objectives**
- To ensure an appropriate and efficient coordination as well as project management according to the description of action, the Grant Agreement and the Consortium Agreement (T6.1)
  - To ensure compliance General Data Protection Regulation and other ethics issues (T6.2)

**Description of work**

**Task 6.1 Project Management** (Leader: APRE; Contributors: all) (M1 – M30)

APRE, as Coordinator, will be responsible for all the contractual obligations as defined in the *Grant Agreement* (GA) and *Consortium Agreement* (CA), including: (i) day-to-day administrative management, (ii) control of work progress, including quality assurance and timely delivery of project results (deliverables, milestones, reports, events, etc.) (iii) overseeing budget status, including settlement of all financial aspects with the EC; (iv) refinement and updating of the work plan, including verification of critical risks for implementation and mitigation measures (v) ensuring smooth communication and exchanges within the consortium and with the project officer (EC). The CA will define procedures for administrative, financial and legal management, including IPR. All beneficiaries will sign the CA before the signature of the Grant Agreement. APRE will organise the kick-off meeting at the beginning of the project (M1) in order to build work team for an effective and smooth project implementation. Additional

meetings will be organized in M12 and M30 (possibly in conjunction with other events of the project). The coordinator will organize teleconference meetings with all partners once per month. In each dimension of the consortium, all partners will be invited to attend all meetings. When necessary, the coordinator will organise ad-hock calls and meetings with partners or groups of partners to solve operational issues. APRE will elaborate the agendas (agreed with the WP and task leaders), send the agendas to the meetings and compile and distribute meeting reports. The coordinator will maintain the communication among the partners based on emails exchange and will share the working documents and systems. The coordinator will submit the periodic reports (M18 and M30) to the EC with

Innovative governance, environmental observations and digital solutions in support of the Green Deal (HORIZON-CL6-2021-GOVERNANCE-01)

and task leaders. The reports will include the updated details of the data management plan if necessary. The final periodic report will also indicate the owner(s) of the results (results ownership list), if any.

**Task 6.2 Data Management Plan and Ethics** (Leader: APRE; Support: all) (M1 – M30)

The Coordinator will ensure compliance to EU Commission requirements in accordance with the Regulation (EU) 2016/6791, the European Union's new General Data Protection Regulation ('GDPR'), regulating the processing by an individual, a company or an organisation of personal data relating to individuals in the EU. GenB activities are mostly targeting minors, therefore all the ethics issues related will carefully considered, providing strict guidelines for the partners (D6.2). APRE, with the contribution of all partners, will prepare and submit the Data Management Plan (DMP) following the recommendation provided in the "Guidelines on FAIR Data Management in Horizon 2020", ensuring that research data can be findable, accessible, interoperable and re-usable (FAIR) and it will be updated in time with the periodic evaluation/assessment of the project (period report) and in case significant changes arise (e.g. new data, changes in consortium policies, changes in consortium composition). During the preparation of the DMP, APRE will verify the possible contributions to the open research data, open EC database and possible contributions to open knowledge repositories. Transparency, legal and social implications of information and knowledge will be considered (D6.3).

**Deliverables: D6.1** Quality Management Plan (APRE, M3); **D6.2** Ethical issues Report (APRE, M4); **D6.3** Data Management Plan (APRE, M6)





## Project Management Work package

### ▣ Possible tasks:

- Project governance, coordination and strategic decision making
- Legal, scientific, administrative and financial Management and Reporting
- Data management
- Ethical issues
- Advisory Board Management (optional)

### ▣ Possible deliverables:

- Data Management Plan (M6)
- Project Management Plan (M4)
- Ethical requirements (M4)

▣ *Don't add as deliverable: technical and financial reports*



## Advisory Board

- ❏ An advisory board is a body that provides non-binding strategic advice to the management of the project
- ❏ The informal nature of an advisory board gives greater flexibility in structure and management
- ❏ Provide the mission, the process (meetings) and foreseen a budget
- ❏ List the members



### **Task 6.2 Advisory Board Management (Leader: APRE; Support: all partners) (M1 – M36)**

APRE will inform the Advisory Board (AB) members about the meetings (all WPs) organised and will invite them to attend the workshops. The AB members will provide their expert opinions in form of inputs, feedback and recommendations and will support the outreach project results through their professional networks: **Elena De Luca, ENEA - Italy**: analysis, assessment and evaluation of technologies with particular reference to the degree of technological readiness, the potential for industrial development and the environmental and social impacts. She is responsible for the ENEA participation in WinWind, COME RES! and ENTRANCES H2020 projects. Member of the Gender Advisory Council at the International Energy agency (IEA). **Asst. Prof. Dr. Komninos G. Komnios, Member of the Governing Board of the Regulatory Authority for Energy – Greece**: Attorney at law, LL.M., Accredited Mediator, School of Economics, Business Administration & Legal Studies, International Hellenic University. **Mauro Randone, WWF - Italy**: Regional Manager WWF Mediterranean Marine Initiative, Marine Biologist and Sociologist with long-term experience in international cooperation and natural resource management. Mauro is Regional Manager at WWF Mediterranean where he coordinates the Sustainable Blue Economy Programme. **Professor Ben Wilson - UK**: (Scottish Association of Marine Science) an ecologist working to understand the interactions between marine vertebrates (mammals and fish) and industrial activities such as offshore renewable energy extraction, fish farming and oil and gas decommissioning. I am particularly interested in how we impact the acoustic world of these animals. **Dr Andrew Gill PRINCIPAL SCIENTIST & LEAD – OFFSHORE & MARINE RENEWABLE ENERGY (OMRE) – UK**: is member of the Advice and Assessment team to support and develop the scientific evidence base. The current focus is as strategic lead for offshore and marine renewable energy (OMRE) and further developing Cefas-wide initiatives into the decarbonisation agenda primarily through offshore renewables. He is also a member of the Centre for Environment, Fisheries, and Aquaculture Science. **Arthur Hinsch** works at ICLEI European Secretariat as Officer in the Sustainable Resources, Climate and Resilience team. He focuses on mainstreaming prosumerism of renewable energies and on enhancing their socially inclusive uptake with a particular emphasis on the role of local governments. This includes policy addressing energy poverty and integrated climate & energy planning. Arthur also works on promoting climate neutrality planning/commitments in cities as part of the UN Race to Zero Campaign. He is part of the EU Covenant of Mayors Office.

Example



## Dissemination, Communication and Exploitation Work package

### Possible tasks:

- Dissemination and communication plan (or strategy) and materials
- Dissemination and communication activities
- Exploitation of the project results (Replicability, Sustainability: optional)
- Ecosystem building: clustering with other projects and initiatives (optional)

### Possible deliverables:

- Dissemination & Communication Plan (M6)
- Interim Dissemination & Communication activities Report (M18, M36)
- Exploitation Plan (M6, M36)



Table 3.1d: List of milestones

| Milestone number | Milestone name | Related work package(s) | Due date (in month) | Means of verification |
|------------------|----------------|-------------------------|---------------------|-----------------------|
|                  |                |                         |                     |                       |
|                  |                |                         |                     |                       |
|                  |                |                         |                     |                       |

- Due date measured in months from the project start date (month 1)

### Means of verification

Show how you will confirm that the milestone has been attained. Refer to indicators if appropriate.

*For example: a laboratory prototype that is 'up and running'; software released and validated by a user group; field survey complete and data quality validated.*

# Example

| N°.   | Milestone name   | WP | M  | Means of verification  |
|-------|--|----|----|--|
| M2.1  | Fermotein™ production on Indian waste streams is demonstrated  | 2  | 18 | Fermotein™ used in product application development for consumer trials in India  |
| M2.2  | Potato and sugar cane waste streams validated as feedstock for ovalbumin production                                  | 2  | 36 | Selected process transferred to BBEP for scale-up. D2.3 delivered  |
| M2.3  | Evaluation of Fermotein™ extracts as alternative egg white replacer  | 2  | 25 | Selected process ready for to BBEP for scale-up and to SE for further application development  |
| M2.4  | Validation of new feedstocks as fermentation substrate for production of two specific caseins and whey protein       | 2  | 12 | Feedstock screening and lab optimisation finished. First pilot scale trials at BBEP on selected protein and new feedstocks finished. Further optimisation ongoing towards D2.5 (M15) |
| M2.5  | Selection of the best performing strain candidates for production of whey protein and two caseins at 150 L scale     | 2  | 12 | Strain efficiency compared at 5 L scale. Tech transfer to BBEP for scale-up to 150 L scale of selected proteins  |
| M2.6  | Pilot scale validation of milk protein production from selected agro-food side stream                                | 2  | 24 | 150 L fermentation of selected milk protein with selected feedstock demonstrated. Titer and yield is similar to ones in lab scale and on sugar feedstock                             |
| M2.7  | Fresh vegan cheese recipes   | 2  | 32 | Recipes optimised and MVPs ready for consumer studies  |
| M2.8  | Ripened vegan cheese recipes   | 2  | 36 | Recipes optimised and MVPs ready for consumer studies  |
| M2.9  | Biosurfactant with best functional properties in synergy with egg white replacer determined and production upscaled  | 2  | 24 | Pilot scale production at BBEP finished. Several 100 g amounts handed over to SE for further application development   |
| M2.10 | Final application with Fermotein™, vegan cheese and egg white replacer(/biosurfactant) ready for factory scale trial | 2  | 48 | D2.12(M48) delivered. Recipe optimised based on results from consumer studies and all technical/analytical procedures and properties identified for further exploitation             |



## Milestones

- ❏ **Control points** in the project that help to chart progress. Milestones may correspond to the achievement of a key result, allowing the next phase of the work to begin
- ❏ They may also be needed at intermediary points so that, if problems have arisen, corrective measures can be taken
- ❏ A milestone may be a **critical decision point** in the project where, for example, the consortium must decide which of several technologies to adopt for further development
- ❏ The achievement of a milestone should be verifiable



**Table 3.1c: List of Deliverables<sup>2</sup>**

Only include deliverables that you consider essential for effective project monitoring.

| Deliverable (number) | Deliverable name | Work package number | Short name of lead participant | Type | Dissemination level | Delivery date (in months) |
|----------------------|------------------|---------------------|--------------------------------|------|---------------------|---------------------------|
|                      |                  |                     |                                |      |                     |                           |
|                      |                  |                     |                                |      |                     |                           |
|                      |                  |                     |                                |      |                     |                           |
|                      |                  |                     |                                |      |                     |                           |
|                      |                  |                     |                                |      |                     |                           |

- Deliverable numbers in order of delivery dates.
- Please use the numbering convention <WP number>.<number of deliverable within that WP>
- Delivery date measured in months from the project start date (month 1)

**Type:**

- R: Document, report (excluding the periodic and final reports)
- DEM: Demonstrator, pilot, prototype, plan designs
- DEC: Websites, patents filing, press & media actions, videos, etc.
- DATA: Data sets, microdata, etc.
- DMP: Data management plan
- ETHICS: Deliverables related to ethics issues.
- SECURITY: Deliverables related to security issues
- OTHER: Software, technical diagram, algorithms, models, etc.

**Dissemination level:**

- PU – Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project’s page)
- SEN – Sensitive, limited under the conditions of the Grant Agreement
- Classified R-UE/EU-R –EU RESTRICTED under the Commission Decision No2015/444
- Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444
- Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444





## Deliverables

- A report that is sent to the Commission or Agency providing information to ensure effective monitoring of the project. There are different types of deliverables (e.g. a report on specific activities or results, data management plans, ethics or security requirements)
- A deliverable is an element of output within the scope of a project. It is the result of objective-focused work completed within the project process



3.1.4 List of deliverables (table 3.1c);

| Del. | Deliverable name  | WP N° | Lead part. | Type  | Diss. level | Date     |
|------|---|-------|------------|-------|-------------|----------|
| D1.1 | Harmonised methodology for the calculation of the externalities   | WP1   |            | R     | SEN         | M40      |
| D1.2 | Overview and documentation of relevant data for the calculation of the externalities of food              | WP1   |            | R     | SEN         | M40      |
| D1.3 | EU-global database on externality costs including an open-source dataset of national external cost values | WP1   |            | DATA  | PU          | M36      |
| D1.4 | FOODCoST VALUATION Guide  | WP1   |            | R     | PU          | M40      |
| D1.5 | Measuring degrees of internalisation of externalities   | WP1   |            | R     | SEN         | M42      |
| D2.1 | Report on policies with internalised externalities at the EU, national and regional levels                | WP2   |            | R     | SEN         | M18      |
| D2.2 | FOODCoST Policy modelling framework for internalisation   | WP2   |            | OTHER | PU          | M30      |
| D2.3 | Report on policy recommendations  | WP2   |            | R     | PU          | M48      |
| D3.1 | Overview of innovative value chain and business models and strategies to internalise externalities        | WP3   |            | R     | SEN         | M12      |
| D3.2 | Mapping of the barriers   | WP3   | U          | R     | SEN         | M12      |
| D3.3 | FOODCoST Business and Value chain INTERNALISATION tools   | WP3   |            | OTHER | PU          | M30      |
| D3.4 | Report on recommendations for primary producers and businesses in the food sector                         | WP3   | U          | R     | PU          | M48      |
| D4.1 | Map of stakeholders   | WP4   |            | R     | SEN         | M10      |
| D4.2 | CoP Engagement Strategy   | WP4   |            | R     | SEN         | M10      |
| D4.3 | Lessons learnt, recommendations and action points   | WP4   |            | R     | SEN         | M24, M48 |

Example



## Note from Template

*Give full details. Base your account on the **logical structure of the project** and the stages in which it is to be carried out. The number of work packages should be proportionate to the scale and complexity of the project.*

*You should give **enough detail** in each work package to justify the proposed resources to be allocated and also quantified information so that progress can be monitored, including by the Commission*

*Resources assigned to work packages should be in line with their objectives and deliverables. You are advised to include a **distinct work package on 'project management'**, and to give due visibility in the work plan to 'data management' 'dissemination and exploitation' and 'communication activities', either with distinct tasks or distinct work packages.*

*You will be required to update the 'plan for the dissemination and exploitation of results including communication activities', and a 'data management plan', (this does not apply to topics where a plan was not required.) This should include a record of activities related to dissemination and exploitation that have been undertaken and those still planned.*

*Please make sure the information in this section matches the costs as stated in the budget table in section 3 of the application forms, and the number of person months, shown in the detailed work package descriptions.*

**Table 3.1e: Critical risks for implementation**

| Description of risk (indicate level of (i) likelihood, and (ii) severity: Low/Medium/High) | Work package(s) involved | Proposed risk-mitigation measures |
|--|--------------------------|-----------------------------------|
|  |                          |                                   |
|  |                          |                                   |
|  |                          |                                   |
|  |                          |                                   |

**Definition critical risk:** A critical risk is a plausible event or issue that could have a high adverse impact on the ability of the project to achieve its objectives.

**Level of likelihood to occur:** Low/medium/high

The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place.

**Level of severity:** Low/medium/high

The relative seriousness of the risk and the significance of its effect

| Ref.                         | Risk   | Likelihood | Severity | Contingency action  | Responsibility |
|------------------------------|--|------------|----------|---|----------------|
| HCPV Cell, WP1, WP5          | The final cell efficiency being much lower than 45%                  | low        | medium   | Stress the efficiency of the optical part to recover the cell's performance loss respect to the target  | BECAR, OEC     |
| Optics design, WP1           | The optical system doesn't meet the angular performance requirements | low        | low      | Work harder on the pilot module's assembly line to guarantee a higher precision in the optics and receivers assembly process. Stress the tracker's accuracy | BECAR          |
| Primary optical element, WP4 | The plastic injected reflector does not meet the                     | low        | high     | Try different materials and injecting machines. Make a second mould with  | BECAR, PLAMTEX |

| # | Description of risk (likelihood/impact on project)   | Related WPs       | Proposed mitigation measures  |
|---|--|-------------------|---|
| 1 | Difficulty in accessing EU-wide data on health literacy and the related landscape. (low/middle)                                  | WP1<br>WP5        | Efforts will be deployed to gather data on all relevant aspects of the health literacy and landscape on different levels. The consortium will involve its direct networks and other initiatives to gather data from different sources.  |
| 2 | Failure to mobilize and include a broad range of stakeholders in the co-creation processes. (low/high)                           | WP2<br>WP3<br>WP4 | WIDE-UP consortium has made sure during the development of this proposal that relevant initiatives are addressed by taking on available outputs and integrating trusted communities. The consortium will leverage on the partners' networks and on the Advisory Board contacts.   |
| 3 | Delay due to ethical approval, low response rate to recruitment for co-design (low/medium)                                       | WP4               | WIDE-UP will establish early cooperation with partners and networks to identify requirements and timeline for ethical approval in the respective countries to spark interest and secure the timely delivery of the results.   |
| 4 | Public awareness about the WIDE-UP action and results remains low, the sustainability of the outcomes is not granted. (low/high) | WP6               | By M5, WIDE-UP will draft and deliver the initial Impact Master plan covering strategies for stakeholder engagement, communication & dissemination, as well as sustainability of the project. These strategies will be implemented, fine-tuned and monitored throughout the project, with evidence in 4 related interim / final action reports. |
| 5 | Volume of work needed beyond the budget and additional work not planned, performed "on demand" (medium/medium)                   | All               | Consortium has a good capacity to plan and monitor project activities and introduce mitigation measures. The monitoring framework will be introduced early to spot the mismatch in the work plan and delivery. The Advisory Board will monitor the quality of the results.  |

Table 3e - Critical risks for implementation



## Risks Management

- ⌘ A critical risk is a plausible event or issue that could have a high adverse impact on the ability of the project to achieve its objectives
- ⌘ Level of likelihood to occur (Low/medium/high): The likelihood is the estimated probability that the risk will materialise even after taking account of the mitigating measures put in place
- ⌘ Level of severity (Low/medium/high): The relative seriousness of the risk and the significance of its effect



**Table 3.1f: Summary of staff effort**

Please indicate the number of person/months over the whole duration of the planned work, for each work package, for each participant. Identify the work-package leader for each WP by showing the relevant person-month figure in bold.

# Example

|                               | WPn | WPn+1 | WPn+2 | Total Person-Months per Participant |
|-------------------------------|-----|-------|-------|-------------------------------------|
| Participant Number/Short Name |     |       |       |                                     |
| Participant Number/Short Name |     |       |       |                                     |
| Participant Number/Short Name |     |       |       |                                     |
| <b>Total Person Months</b>    |     |       |       |                                     |

| Partic. No - Short Name | WP1 | WP2 | WP3  | WP4  | WP5  | WP6 | WP7 | WP8 | WP9 | WP10 | WP11 | Total P/M    |
|-------------------------|-----|-----|------|------|------|-----|-----|-----|-----|------|------|--------------|
| n.1 - UTH               | 0   | 0   | 59.5 | 0    | 0    | 0   | 5   | 5   | 7   | 9    | 48   | <b>133.5</b> |
| n.2 - DIL               | 2   | 0   | 15   | 0    | 2    | 22  | 37  | 4   | 10  | 1    | 11   | <b>104</b>   |
| n.3 - UNIBO             | 31  | 12  | 8    | 36   | 34.3 | 0   | 2   | 1   | 3   | 1    | 2    | <b>130.3</b> |
| n.4 - UNIPR             | 0   | 15  | 15   | 28.5 | 6    | 6   | 0.5 | 3   | 5   | 5    | 1    | <b>85</b>    |
| n.5 - IFF               | 0   | 0   | 14   | 0    | 0    | 0   | 8   | 1   | 6   | 1    | 1    | <b>31</b>    |
| n.6 - VITO              | 0   | 5   | 18.5 | 2    | 0    | 0   | 1   | 1   | 2   | 1    | 1.5  | <b>32</b>    |
| n.7 - MATIS             | 1   | 12  | 6.5  | 1    | 6.5  | 6   | 0.5 | 1   | 4   | 1    | 0.5  | <b>40</b>    |
| n.8 - NS                | 2   | 0   | 0    | 12   | 31   | 0   | 2   | 2   | 2   | 2    | 4    | <b>57</b>    |





Table 3.1g: 'Subcontracting costs' items

For each participant describe and justify the tasks to be subcontracted (please note that core tasks of the project should not be sub-contracted).

| Participant Number/Short Name |          |  |
|-------------------------------|----------|--|
|                               | Cost (€) | Description of tasks and justification |
| Subcontracting                |          |  |

Examples

| Participant | Cost (€) | Description of tasks and justification  |
|-------------|----------|---|
| #2 / GAC    | 15000€   | Subcontracting part of the technical development of the health literacy landscape visualisation tool in line with the rule of best service for value. |

Table 3g - subcontracting justification

### 3.1.8 Subcontracting costs (table 3.1g)

|                       |         |  |
|-----------------------|---------|--|
| <b>2/AKI</b>          |         |  |
| <b>Subcontracting</b> | €40,500 | AKI will subcontract to the Hungarian Soybean Producers the following activities: 1) In situ collection of soybean samples (600-800 in total) and of production and technical data, conduction of NIR measurements: € 31,500; 2) Professional assistance in developing and validating a pricing model for locally grown non-GM soybeans: € 6000; 3) Professional assistance in developing a certification scheme and IP label proposal: € 3000.                  |
| <b>7/ECO</b>          |         |  |
| <b>Subcontracting</b> | €30,000 | ECO will subcontract 30k€ to Tollwood (Germany), 10k€ to GutEssen (Austria): the subcontracts will analyse the national diet recommendations, make proposals for alternative diets, choose participating local canteens, support local canteens in providing information on value chains (purchase analysis) and in executing surveys (canteen responsible as well as consumers). In addition, Tollwood adapts its menu manager to the local requirements in the |





**Table 3.1h: 'Purchase costs' items (travel and subsistence, equipment and other goods, works and services)**

Please complete the table below for each participant if the purchase costs (i.e. the sum of the costs for 'travel and subsistence', 'equipment', and 'other goods, works and services') exceeds 15% of the personnel costs for that participant (according to the budget table in proposal part A). The record must list cost items in order of costs and starting with the largest cost item, up to the level that the remaining costs are below 15% of personnel costs.

| Participant Number/Short Name                  |          |               |
|--|----------|---------------|
|  | Cost (€) | Justification |
| Travel and subsistence                         |          |               |
| Equipment                                      |          |               |
| Other goods, works and services                |          |               |
| Remaining purchase costs (<15% of pers. Costs) |          |               |
| Total  |          |               |

← New

# Example

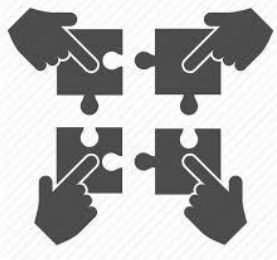
|   |                 |   |
|---|-----------------|---|
| Total                                     | 76,000          |   |
| <b>9/PX</b>                               | <b>Cost (€)</b> | <b>Justification</b>  |
| Travel                                    | 12,000          | Travel to regular project meetings, workshops and trade fairs.  |
| Oth good ser                              | 20,000          | Consumables and spare parts for pilot scale processing setup.   |
| Total                                     | 32,000          |   |
| Subcon/cting                              | 1,000           | Microbial analysis of live and processed insects (at external lab)  |
| <b>11/IO</b>                              | <b>Cost (€)</b> | <b>Justification</b>  |
| Travel                                    | 12,400          | Travels to project meetings, visits to other partners and 4 congresses presences.   |
| Other goods and services                  | 40,600          | Insect production boxes and pallets, consumables (juvenile insect feed and other products, publishing in open access, workshops organization in Santarem  |
| Total                                     | 53,000          |   |
| <b>12/TALOS</b>                           | <b>Cost (€)</b> | <b>Justification</b>  |
| Travel                                    |                 |   |
| Oth good ser                              |                 |   |
| Total                                     |                 |   |
| <b>11. FG (including the third party)</b> | <b>Cost (€)</b> | <b>Justification</b>  |
| Travel                                    | 10400           | Travel of 1 person to 5 project meetings (T8.2), travel of 1 person to 4 workshops (T2.2), travel of 1 person to workshops/events (T2.3), travel of 1 person to awareness raising events (T5.2)   |
| Equipment                                 | 0               |   |
| Other goods and services                  | 38200           | Organization of 1 workshop and travel reimbursement for 15 stakeholders (T1.2), reimbursement for 2 stakeholders (T2.2), logistics of 2 visits (T2.3), organization of 2 workshops and travel reimbursement for 20 stakeholders (T5.1), logistic of 1 workshop (T5.3) |
| Total                                     | 48600           |   |
| <b>12. LUKE</b>                           | <b>Cost (€)</b> | <b>Justification</b>  |
| Travel                                    | 10400           | Travel of 1 person to 5 project meetings (T8.2), travel of 1 person to 4 workshops (T2.2), travel of 1 person to workshops/events (T2.3), travel of 1 person to awareness raising events (T5.2)   |
| Equipment                                 | 0               |   |
| Other goods and services                  | 90800           | Organization of 1 workshop and travel reimbursement for 15 stakeholders (T1.3), reimbursement for 4 stakeholders (T2.2), logistics of 2 visits (T2.3), implementation of actions at Piloting Site (T4.5), logistic of 1 workshop (T5.3)                               |
| Total                                     | 101200          |   |



## 3.2 Capacity of participants and consortium as a whole [e.g. 3 pages]

*Note: The individual members of the consortium are described in a separate section under Part A. There is no need to repeat that information here.*

- Describe the consortium. How does it match the project's objectives, and bring together the necessary **disciplinary and inter-disciplinary knowledge**. Show how this includes expertise in social sciences and humanities, open science practices, and gender aspects of R&I, as appropriate.
- Show how the partners will have access to critical **infrastructure** needed to carry out the project activities.
- Describe how the members **complement** one another (and cover the value chain, where appropriate)
- In what way does each of them contribute to the project? Show that each has a valid role, and adequate resources in the project to fulfil that role.
- If applicable, describe the **industrial/commercial** involvement in the project to ensure exploitation of the results and explain why this is consistent with and will help to achieve the specific measures which are proposed for exploitation of the results of the project (see section 2.2).
- Other countries and international organisations: If one or more of the participants **requesting EU funding** is based in a country or is an international organisation that is not automatically eligible for such funding (entities from Member States of the EU, from Associated Countries and from one of the countries in the exhaustive list included in the Work Programme General Annexes B are automatically eligible for EU funding), explain why the participation of the entity in question is essential to successfully carry out the project.



## Consortium Building

- ❏ A consortium is at the heart of any Horizon Europe project
- ❏ Don't bring your friends
- ❏ Do understand the project's specific needs, then bring the relevant partners
- ❏ Always look for Competence, Balance, Complementarity, Excellence, Commitment
- ❏ **KEEP CONSORTIUM MOTIVATED!!**





### 3.2 Capacity of participants and consortium as a whole



Figure 8 -FOODCoST Consortium

The FOODCoST Consortium consists in **23 beneficiaries** from **13 EU countries** (NL, HU, IT, BE, FR, DE, PT, DK, SK, SE, ES, UK and RO) and **1 associated partner** (DE) (Figure 8). The consortium was formed to have all the necessary skills, experience and resources for the project, available in a coherent and complementary manner. Consequently, the multidisciplinary team covers all expertise required to professionally implement a programme for developing harmonised methods to valuate the externalities along the food chain,

# Example

to gain insight in possible policy and business models that can foster the transition towards a sustainable food system and to evaluate the impacts of these measures. In the following, a brief description of the organisations and the expertise they bring in the consortium for the successful execution of FOODCoST is reported:

| FOODCoST partners profile and key competences |  |
|---|--|
| WR  | WR has as an internationally proven experience in policy analyses, including social cost/benefit analyses, impact evaluations, as well as market and chain research and consumer research. WR will bring in its expertise on internalisation of externalities (WP1), experience with data (e.g. Farm Accountancy Data Network) (WP1). WR is leading the EU hub within The Sustainability Consortium (TSC) for impact assessments for consumer products, it delivers knowledge on large scale quantitative macro-economic models (owner of the MAGNET model and leader of the MAGNET consortium and almost 25-year consortium member of the GTAP consortium) to be applied for assessing the effects in the market (WP2 and WP6). |
| AKI   | AKI is a government scientific institute supervised by the Hungarian Ministry of Agriculture carrying out research and policy support activities in connection with the production of soybeans and other protein crops, including analysis of the economics of soybean production and value chain. AKI operates the Hungarian Farm Accountancy Data Network (FADN).  |
|   | APRE is a no-profit research organization created as a joint initiative of the Italian Ministry of Education   |



### 2.3 Consortium as a whole

The consortium of the proposed **NeStoRe** collaborative project is made up of 9 European participants, coming from 6 different Member States of the European Union.

**NeStoRe** project requires a consortium team whose size is at least at European level dimensions. The consortium team and the role of each participant are illustrated in *Table 6*.

*Table 6. Consortium partners with description of major roles in the NeStoRe project*

| Organisation | Type       | Country | Major roles in the <i>NeStoRe</i> project   |
|--------------|------------|---------|---|
| 1. ■■■       | Research   | IT      | <ul style="list-style-type: none"> <li>– project coordinator (<b>WP0</b>);</li> <li>– member of <b>TTB</b> for project exploitation of results;</li> <li>– leader partner in the development of <i>mCHP and Energy Efficient burner (WP1)</i>;</li> <li>– role in the development and integration of the proper technology for pollution reduction (<b>WP2</b>);</li> <li>– leading role in the demonstration activities (<b>WP3</b>);</li> <li>– leading role in exploitation (<b>WP6</b>).</li> </ul> |
| 2. ■■■       | University | A       | <ul style="list-style-type: none"> <li>– leader partner in the demonstration activities (<b>WP3</b>);</li> <li>– role in the activities for the pollution limitation and retrofitting of the system (<b>WP2</b>);</li> <li>– role in the economical analysis (<b>WP4</b>).</li> </ul>   |
| 3. ■■■       | University | N       | <ul style="list-style-type: none"> <li>– leader partner in boilers and stoves' POLICIES and development of a European Legal Framework (<b>WP5</b>);</li> </ul>  |

Example



The [redacted] consortium has been set up with expert partners in all relevant key topics (health literacy, mapping, stakeholder engagement, co-creation, capacity building, impact assessment) and are, thanks to these **complementary competences, ideally prepared to tackle the overall challenge and implement the project in line with the objectives set and with impactful results.** All partners have a proven track record in collaborative projects, related to ICT and health/e-health as well as health literacy and digital empowerment (eg. Gravitate Heath, Beamer, CAPABLE, GOT-IT). The specific competences of the partners are presented in the Matrix below:

|                              | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] |
|------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Health literacy              | ++         | +          | ++         | +          | +++        | +          | ++         | +++        | +++        | +++        | +++        | +++        | +++        |
| Mapping                      | +          | +++        | +          | ++         | +++        | +++        | +++        | +++        | ++         | ++         | ++         | +++        | +          |
| Stakeholder engagement       | +++        | +++        | +++        | +++        | ++         | ++         | ++         | ++         | +++        | ++         | +++        | ++         | +++        |
| Co-creation                  | ++         | +++        | +++        | +++        | ++         | ++         | +++        | ++         | ++         | +++        | ++         | +          | +          |
| Capacity building            | +          | +          | +++        | ++         | ++         | +          | +          | ++         | ++         | ++         | +++        | ++         | ++         |
| Impact assessment            | ++         | ++         | +          | ++         | +          | +++        | +          | +++        | +          | +          | +          | +          | +          |
| Awareness raising & outreach | +++        | +++        | +++        | +++        | ++         | +          | ++         | ++         | +++        | ++         | +++        | +          | ++         |
| Data management              | +++        | ++         | +          | ++         | +          | ++         | ++         | +          | +          | +          | +          | +          | +          |

Example

Table 5 Complementary competences of the project consortium

The logo for ESR (Environmental Sustainability Review) is displayed in a stylized, green, outlined font.

Score: **4.00** (Threshold: 3/5.00 , Weight: -)

**The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme:**

- **Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.**
- **Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.**

*The work plan comprises well-designed and well-described work packages. The overall implementation structure and flow between the work packages is appropriate and well presented.*

*The tasks are generally clear, logical and inter-related. However, some of the tasks are not well described. For example, case study 4 indicates that the consortium will use modelling developed in WP2 to assess the impact of taxes, yet it is unclear how the models to be applied will be chosen. This is a shortcoming.*

*The proposed deliverables, milestones, and their timing are generally appropriate to reach the project's objectives and will enable the progress of the work to be successfully monitored. However, some of the Deliverables and the means of verification of the Milestones are not differentiated from each other. For instance, Deliverable 6.2 is the same as the means of verification of Milestone 9. This is a minor shortcoming.*

*On the whole, critical risks are well considered and the proposed mitigation measures are well elaborated and appropriate. However, the proposal does not sufficiently consider the risk of the case studies not being completed on time or challenges to their being carried out in the field. This is a shortcoming.*

*The risks related to training farmers and the human resources of production companies have not been adequately considered. This is a minor shortcoming.*

*The resources assigned to work packages are in line with the WP objectives and deliverables. The uneven budget allocation among partners is well justified, as it allows the participation of partners with different roles (conducting research, providing input from industry, providing input from farming associations, and so on). However, the number of months allocated to the leader of WP5 is too low given the complexity and ambition of this work package. This is a minor shortcoming.*

*Subcontracting costs are generally well justified. However, the costs incurred by Partner 17 are not well aligned with case study 10. This is a minor shortcoming.*

*The consortium brings together highly qualified partners, whose expertise and past experience are highly relevant for the proposed work and are well documented.*

*The role of each partner is well defined and logical. However, the role of the advisory board and the responsibilities of the scientific coordinator are not well explained. This is a minor shortcoming.*

*In addition, the potential involvement of the JRC is unclear and its contribution to the success of the project is therefore questionable. This is a shortcoming.*

*The consortium brings together partners with different profiles and key competences: academic, industry, growers associations and consumer knowledge, which have complementary expertise and target markets.*



The logo for ESR (Environmental Sustainability Review) is displayed in a stylized, green, outlined font.

Score: **3.50** (Threshold: 3/5.00 , Weight: -)

The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme:

- **Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.**
- **Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.**

*The arrangement of work packages and their tasks is broadly logical and potentially effective. The arrangement reflects the proposal's stated objectives and methodology well.*

*In general, work packages are suitably specified and detailed, clearly identifying work package leaders, task leaders and key contributors. However, several important tasks are not adequately defined or sufficiently clear, for example, the practicalities of creating and animating the community of practice, and the justification for placing related tasks in different work packages without sufficiently clear linkages between them. Also, the work to create the stated Living Labs is not sufficiently specified. Together these are a shortcoming.*

*The initial milestones are appropriate for the overall direction and management of the project. However, the absence of milestones after month 36 leaves a gap for project management. Also, some of the milestones are poorly defined, e.g., MS4 in month 36. This is a minor shortcoming.*

*The risk assessment table identifies relevant risks, although some of them are internal risks, amenable to managing and planning. Risk mitigation measures often describe how the risk is minimised (rather than mitigated) and many suggested mitigations are unconvincing (e.g., partners with sufficient experience). Many identified risks are rated as 'low likelihood', which is unrealistic, especially with stakeholder engagement at Micro level. Together, this is a shortcoming.*

*The allocation of resources across the work packages is mostly appropriate to the efforts planned within each work package. However, the resources for WP4 are insufficient for the scale of the task. The time allocations for project management, particularly for Work Package leaders is too low, particularly as they have the same allocation as any other partner. The resource plan makes no obvious provision for compensating external participants, e.g., for their attendance at meetings. These are shortcomings.*

*The expertise of the consortium is mostly adequate and clear, with relevant information provided for most partners. The consortium has most of the necessary expertise for the proposed workplan, and the partners are complementary, encompassing the different levels of stakeholders (policy, intermediaries, public, private, businesses/industry representatives), and the various themes, such as agriculture, forestry, and rural development.*

*However, the allocation of roles is insufficiently justified for a small number of the partners and the work packages. For example, in WP4 the proposal does not demonstrate clearly that the relevant expertise in leadership will be deployed. This is a minor shortcoming.*

**Criterion 3 - Quality and efficiency of the implementation**

Score: **5.00** (Threshold: 3/5.00 , Weight: -)

**The following aspects will be taken into account, to the extent that the proposed work corresponds to the description in the work programme:**

- **Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.**
- **Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.**

*Overall, the proposal successfully addresses all relevant aspects of the criterion. In particular:*

- *The work plan is structured logically it will credibly deliver the project objectives. It is appropriately broken down into consistent work packages and tasks that are clearly defined and interrelated to each other in a logical sequence and flow of activities. Milestones are appropriately set along the project and they will allow for efficient project monitoring. Deliverables are well defined and appropriate to track project progress.*
- *The effort assigned to the various work packages in terms of person-months and budget is in line with the activities to be undertaken. Overall, each participant has the necessary resources to fulfil its role in the project.*
- *Each of the individual participants possesses the required operational capacities and will cover a well-identified role in the project.*
- *The consortium as a whole brings together all the experience and expertise necessary to execute the project. It is made up by a complementary mix of academic institutions covering SSH topics, public bodies, agricultural sector representatives, and associations of end users from the countries where the case studies are planned. The consortium convincingly draws upon a broad range of social sciences, e.g. anthropology, sociology, political science, political philosophy, geography, history and languages.*

*Nevertheless, a minor shortcoming is present, namely:*

- *The mitigation measures for some critical risks are insufficiently substantiated. For example, the mitigation measure proposed for the risk of "Change of pivotal partners" is not convincingly effective.*



## Useful documents

- EU Grants: HE Programme Guide: V1.2 – 04.10.2021

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide\\_horizon\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf)

- EU Funding & Tenders Portal: Online Manual: V1.0 – 08.02.2021

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/om\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/om_en.pdf)

- List of Eligible countries

[https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation\\_horizon- Euratom\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon- Euratom_en.pdf)



# Proposal Part A Section 4 'Ethics Issues Table' – 10 Questions:

| 1. HUMAN EMBRYONIC STEM CELLS AND HUMAN EMBRYOS  |   | Page   |
|--|---|--|
| Does this activity involve Human Embryonic Stem Cells (hESCs)?   |   | <input type="radio"/> Yes <input type="radio"/> No |
| If YES:  | Will they be directly derived from embryos within this project?                             | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they previously established cells lines?  | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are the cell lines registered in the European registry for human embryonic stem cell lines? | <input type="radio"/> Yes <input type="radio"/> No |
| Does this activity involve the use of human embryos?   |   | <input type="radio"/> Yes <input type="radio"/> No |
| If YES:  | Will the activity lead to their destruction?  | <input type="radio"/> Yes <input type="radio"/> No |
| 2. HUMANS  |   | Page   |
| Does this activity involve human participants?   |   | <input type="radio"/> Yes <input type="radio"/> No |
| If YES:  | Are they volunteers for nonmedical studies (e.g. social or human sciences research)?        | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they healthy volunteers for medical studies?  | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they patients for medical studies?  | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they potentially vulnerable individuals or groups?                                      | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they children/minors?   | <input type="radio"/> Yes <input type="radio"/> No |
|  | Are they other persons unable to give informed consent?                                     | <input type="radio"/> Yes <input type="radio"/> No |
| Does this activity involve interventions (physical also including imaging technology, behavioural treatments, etc.) on the study participants?   |   | <input type="radio"/> Yes <input type="radio"/> No |
| If YES:  | Does it involve invasive techniques?  | <input type="radio"/> Yes <input type="radio"/> No |
|  | Does it involve collection of biological samples?   | <input type="radio"/> Yes <input type="radio"/> No |
| Does this activity involve conducting a clinical study as defined by the Clinical Trial Regulation (EU 536/2014)? (using pharmaceuticals, biologicals, radiopharmaceuticals, or advanced therapy medicinal products) |   | <input type="radio"/> Yes <input type="radio"/> No |

If 'yes' for any questions, ethic-self assessment to be completed in Part A (next slide)





# Proposal Part A Section 4 'Ethics Issues Table' – Explanation:

## ETHICS SELF-ASSESSMENT

If you have entered any issues in the ethics issue table, you must perform an ethics self-assessment in accordance with the guidelines "[How to Complete your Ethics Self-Assessment](#)" and complete the table below.

| Ethical dimension of the objectives, methodology and likely impact  |
|---|
| <p>Explain in detail the identified issues in relation to:</p> <ul style="list-style-type: none"><li>– objectives of the activities (e.g. study of vulnerable populations, etc.)</li><li>– methodology (e.g. clinical trials, involvement of children, protection of personal data, etc.)</li><li>– the potential impact of the activities (e.g. environmental damage, stigmatisation of particular social groups, political or financial adverse consequences, misuse, etc.)</li></ul> |
| Compliance with ethical principles and relevant legislations  |
| <p>Describe how the issue(s) identified in the ethics issues table above will be addressed in order to adhere to the ethical principles and what will be done to ensure that the activities are compliant with the EU / national legal and ethical requirements of the country or countries where the tasks are to be carried out. It is reminded that for <b>activities performed in a non-EU countries</b>, they should also be allowed in at least one EU Member State.</p>          |

### Explanation about how you will deal with your Ethics issues in the proposal



Provide appropriate documents as evidence

If not, timeframe for approvals/ authorizations





## Proposal Part A

### Section 4 'Ethics Issues Table' – 10 Questions:

1. **Human embryo\*/foetuses**

2. **Humans\***

3. **Human cells/tissues\***

4. **Protection of personal data** (collection, recording, storage, deleting)

5. **Animals** (favour alternative methods – 3 R's: Replacement, Reduction, Refinement)

6. **Non-EU countries\*** (prohibited in EU, exploitation, risks)

7. **Environment, Health, Safety** (fauna/flora, humans, research staff)

8. **Dual-use** (military application!?)

9. **Exclusive focus on civil applications**

10. **Misuse** (malevolent use of research results)

11. **Other ethics issues**

In Horizon Europe ,substituted by section:  
*Human embryonic stem cells (hESCs) and human embryos (hEs)*

\* **Informed consent/Information sheet**

In Horizon Europe ,substituted by section:  
*Artificial intelligence*

[How to complete your Ethics self-assessment](#)

Partenariati Vincenti e perdenti in  
Horizon 2020: Quali  
Caratteristiche?





## Dalla prospettiva del Valutatore

| Criterion         | DO  | DON'T  |
|-------------------|---|--|
| <b>Excellence</b> | <p>Define objectives clearly.</p> <p>Be ambitious, but stay realistic.</p> <p>Choose appropriate methodology.</p> <p>Choose relevant partners and reliable coordinator.</p> <p>Put effort on describing the state-of-art and proof of concept.</p> <p>Create links with previous networks/projects and relevant policies.</p> <p>Engage interdisciplinary expertise.</p> <p>Stay accurate, concise throughout the proposal<br/>Bring out the innovation potential.</p> <p>If something stays unclear, contact your NCP.</p> | <p>Don't rush; poorly prepared proposal ruins even the most excellent plans.</p> <p>Don't repeat something what is already done.</p> <p>Don't forget to include partners from different regions, disciplines, stakeholder groups to compose a balanced consortium.</p> <p>Don't forget to show the credibility of your consortium.</p> <p>Don't hesitate to provide detailed description about your methodology, technical solution, etc. Superficial description of the processes is often brought out as a major shortcoming.</p> <p>If you have a novel approach – don't forget to describe it thoroughly and to support it with relevant references.</p> |

## Dalla prospettiva del Valutatore

|                           |   |  |
|---------------------------|---|--|
| <b>Impact</b>             | When planning be concrete and precise.  | Don't list irrelevant and unreal impacts.  |
|                           | Quantify as much as possible.   | Don't try to be very optimistic as it may cause the lack of credibility.                                     |
|                           | Use financial figures and develop a business model and/or business plan.                              | Don't use general descriptions, without any specific focus.  |
|                           | Elaborate a convincing commercialisation plan.  | Don't use a weak or general analysis of the market and competition.  |
|                           | Take into account all the expected impacts described in the topic.                                    | Don't miss concrete market details: potential market volumes, which markets, specific products, prices, etc. |
|                           | Expected impacts should be derived and justified on previous results.                                 | Don't copy proposal's parts (mainly IPR management) from your previous project proposals.                    |
|                           | Plan a good cooperation with end users from the beginning of the project.                             | Don't forget that the impact should be related to the particular concept, not to the call fiche.             |
|                           | Involve policy makers, SMEs and industry in the proposal or plan a sustainable cooperation with them. | Don't repeat (or copy) required impact from the call instead of development of your own proposal content.    |
|                           | Describe industrial uptake of research results in details.  | Don't confuse dissemination with communication or exploitation.  |
|                           | Develop an excellent dissemination plan (with diverse dissemination measures).                        | Don't forget to use concrete information about expected environmental savings.                               |
|                           | Address adequately and clearly explain dissemination of project results.                              |  |
|                           | Ask for evaluation of impacts (by professionals).   |  |
| Ask NCPs for cooperation. |   |  |

## Dalla prospettiva del Valutatore

|                       |   |   |
|-----------------------|---|---|
| <b>Implementation</b> | <p>Concrete and precise planning.</p> <p>Details and Quantification.<br/>Use Tables.</p> <p>Well-timed tasks and activities with well-balanced allocation to partners.</p> <p>Well-balanced and justified resources and budget.</p> <p>Consortium with partners who complement and synergize well in expertise and tasks.</p> <p>Consultation with NCP.</p> | <p>Don't use repetitions from within the text of the proposal.</p> <p>Don't do "copy-pastes" from other/ previous proposals.</p> <p>Don't forget the details - unsubstantiated/ unreferenced content/ figures/ numbers are causing a negative impression.</p> <p>Don't take beneficiaries/ Partners who are "joyriders" with no significant role and tasks.</p> <p>Don't plan vague Deliverables and Milestones.<br/>Lack of "Plan B" and contingency measures.</p> |
|-----------------------|---|---|



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## HORIZON EUROPE – LA GUIDA

COS'È, COSA FINANZIA, COME PARTECIPARE



APRE**brief**  
HORIZON EUROPE



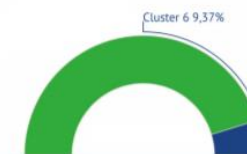
## CLUSTER 6: FOOD, BIOECONOMY NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

### CLUSTER 6

L'ambizione del Cluster 6 è quella di fornire opportunità per migliorare e bilanciare gli obiettivi ambientali, sociali ed economici e per impostare le attività economiche umane su un percorso verso la sostenibilità.

Il paradigma alla base del Cluster 6 è quindi la necessità di un cambiamento trasformativo dell'economia e della società dell'UE volto a ridurre il degrado ambientale, arrestare e investire il declino della biodiversità e gestire meglio le risorse naturali, al servizio degli obiettivi climatici dell'UE e garantire cibo e acqua in sicurezza.

BUDGET ASSEGNATO: 8,952 (MIO EUR)



### CLUSTERS

PILLAR 2  
Global Challenges and  
European Industrial  
Competitiveness

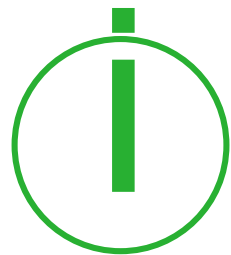
1. HEALTH
2. CULTURE, CREATIVITY AND INCLUSIVE SOCIETY
3. CIVIL SECURITY FOR SOCIETY
4. DIGITAL, INDUSTRY AND SPACE
5. CLIMATE, ENERGY AND MOBILITY
6. FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

<https://apre.it/2021horizoneurope>

<https://horizoneurope.apre.it/>



# CHIEDI SUPPORTO AI TEAM TEMATICI IN APRE



[www.horizon-europe.it](http://www.horizon-europe.it)



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**GRAZIE PER L'ATTENZIONE!**

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THANK YOU!

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