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WHY WE TALK ABOUT SSH INTEGRATION

Policy and legal reasons

"Horizon Europe shall ensure a **multidisciplinary approach** and shall foresee, where appropriate, the **integration of social sciences and humanities** **across all clusters and activities** developed under the Programme, **including specific calls on SSH related topics**."

Horizon Europe Regulation, Art. 7 "Principles of the Problem", para. 2

"The **effective integration** of **social sciences and humanities (SSH) in all clusters**, including all **missions and partnerships**, is a principle through the Programme cycle.
SSH are a **key constituent of research and innovation**, especially regarding the twin green and digital transitions."

Horizon Europe Strategic Plan 2021-24

The topics

The topics asking for the including SSH aspects could take different forms and address SSH in different ways and intensity.

1. Clear explanation in the topic text
2. Only long Standard sentence
3. Only short Standard sentence

Excerpt from a topic

The proposals should […] lead to the development of an integrated modelling capacity allowing to **capture the economics and behavioural aspects** of demand, production and trade of materials, as well as techno-economic trajectories of the industrial sectors identified. That would include […] concepts from system dynamics modelling (for materials flows and stocks), techno-economic modelling (for the **economics of production costs**, elasticity of demand or trade effects), macro-economic modelling (**socioeconomics impacts**), as well as agent-based modelling (choices of materials or technologies).

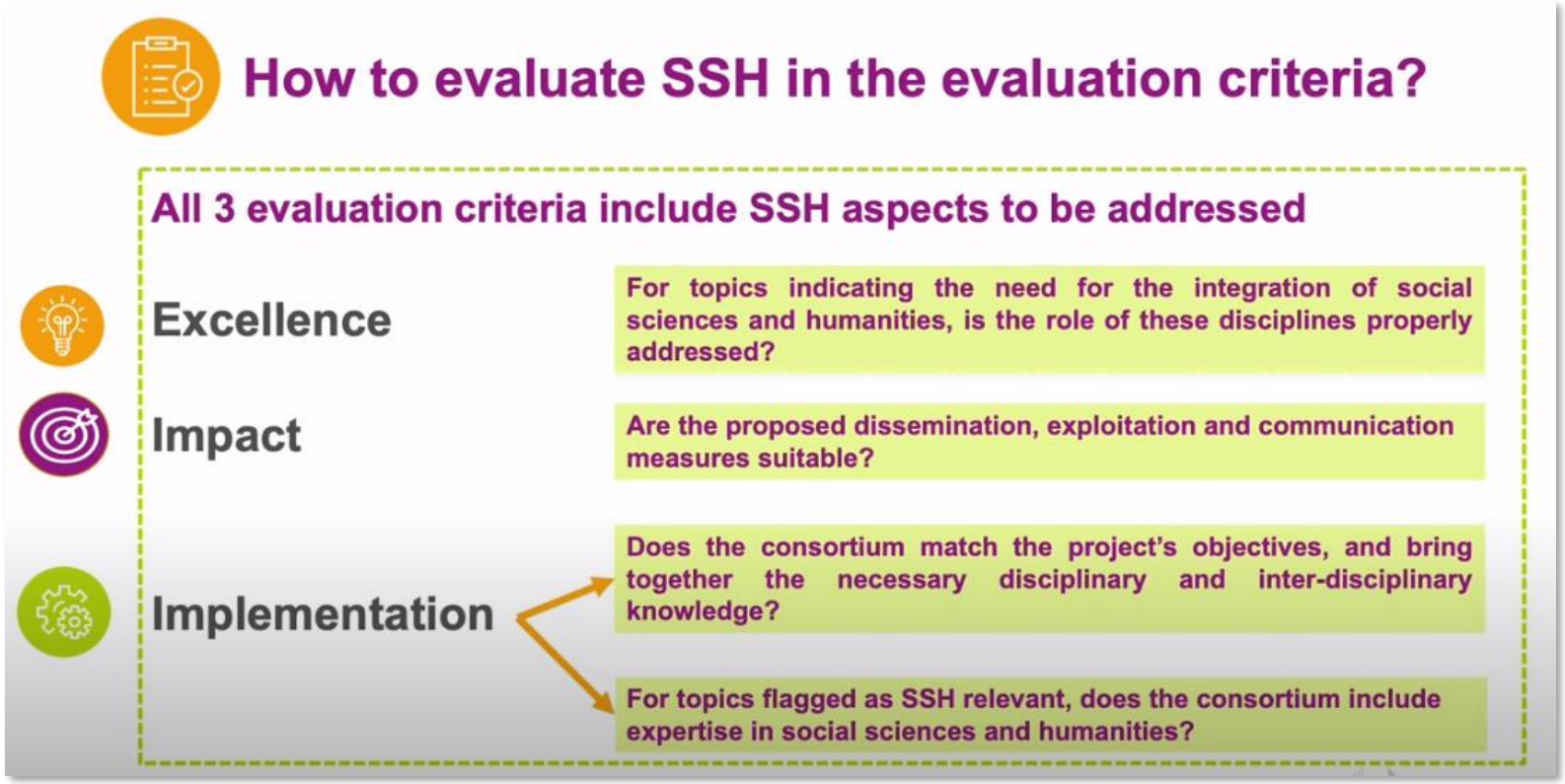
Standard sentence (long)

"This topic requires the effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant impact".

Standard sentence (short)

"This topic should include the effective contribution of social sciences and humanities disciplines."

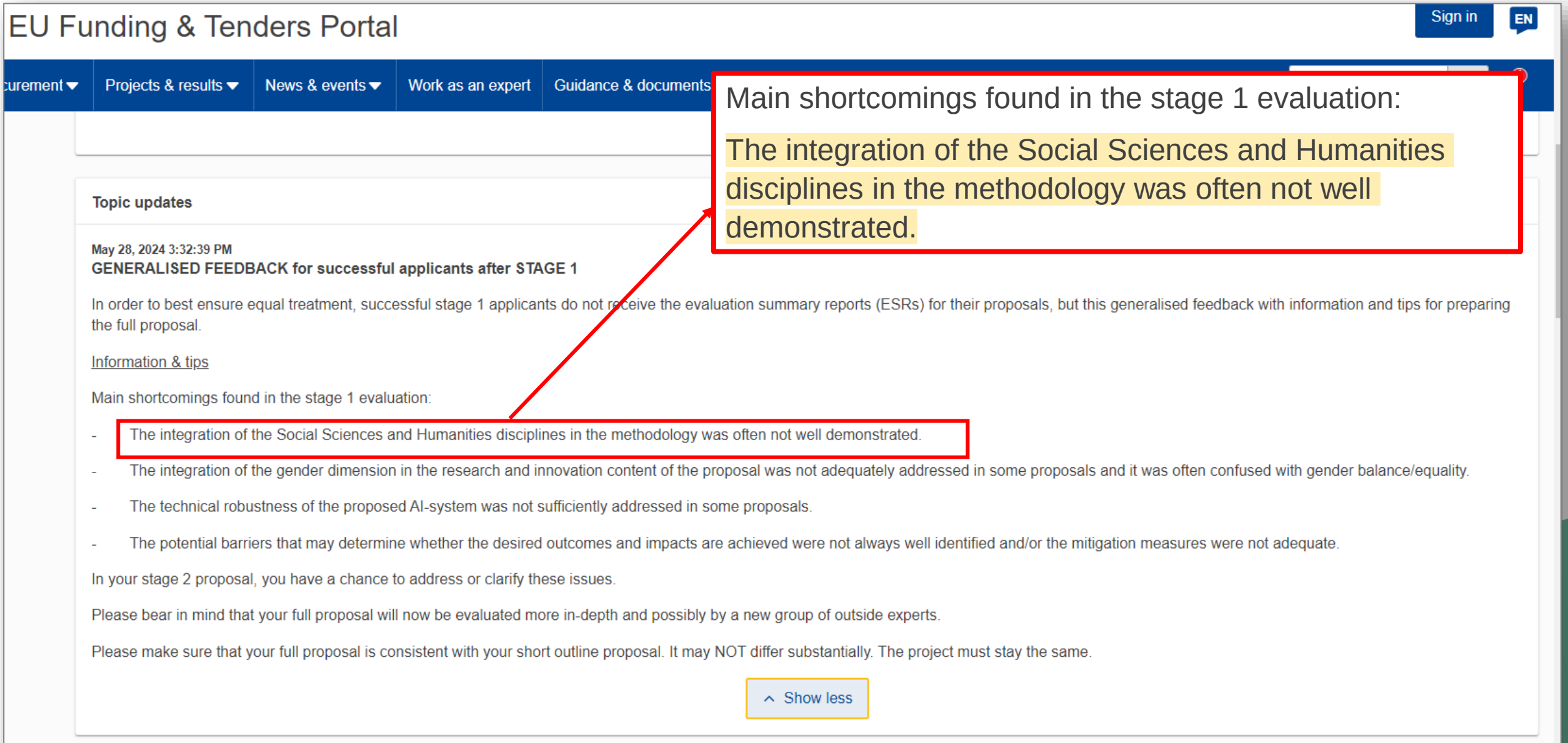
Evaluation criteria



«When the integration of SSH is required, applicants have to show the roles of these disciplines or provide a justification if they consider that it is not relevant for their project. A proposal without a sufficient contribution/integration of SSH research and competences will receive a lower evaluation score» (Horizon Europe proposal evaluation: Standard briefing).

The evaluation

HORIZON-**CL6**-2024-**FARM2FORK**-02-7-two-stage
Minimising climate impact on aquaculture: mitigation and adaptation solutions for future climate regimes



The increasing complexity of societal challenges

The increasing complexity of societal challenges has raised the **need**

to observe, analyse and formulate problems **through**  **lenses and**  **tools from different areas of knowledge,**

to build ideas and solutions where **assumptions and theoretical models from different disciplines cohabit** in a synergetic, comprehensive and complementary manner.

- One of the most immediate ways of activating this complementarity is to **unite the holistic and transversal perspective** of the social sciences humanities to the **technical-scientific knowledge** of the STEM sciences.

Margot Bezzi. (2021). Ricerca e innovazione aperta, partecipativa e responsabile: un glossario. Zenodo. https://doi.org/10.5281/zenodo.4497847

Interpretative bridges between technology and society

Science and technology have the power to **create scenarios and options** for the future, social sciences and humanities can

- comprehensively **analyse the implications** related to [emerging] technologies.
- ensuring that the **results** of research and innovation **can find their positive place** in the existing or changing social order.
- **capture rising social trends** or not yet established,
- **ensuring awareness** and
- **providing interpretative keys** to identify **under what conditions technology can act favourably** and supportive **to human needs** or realistically **generate vast positive impacts**
- **counterbalance** possible critical systemic effects
- and to **design** an adequate **social adaptation.**

Margot Bezzi. (2021). Ricerca e innovazione aperta, partecipativa e responsabile: un glossario. Zenodo. https://doi.org/10.5281/zenodo.4497847

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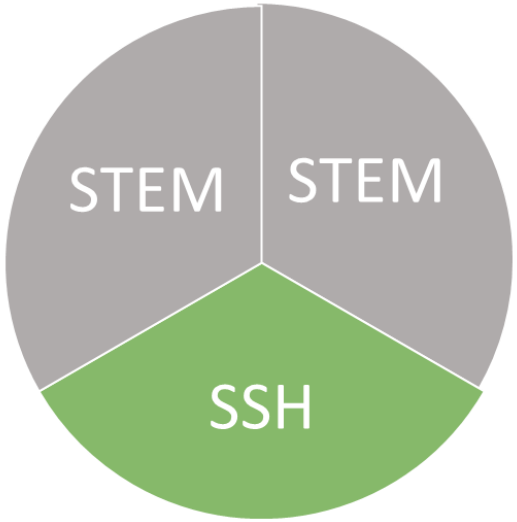
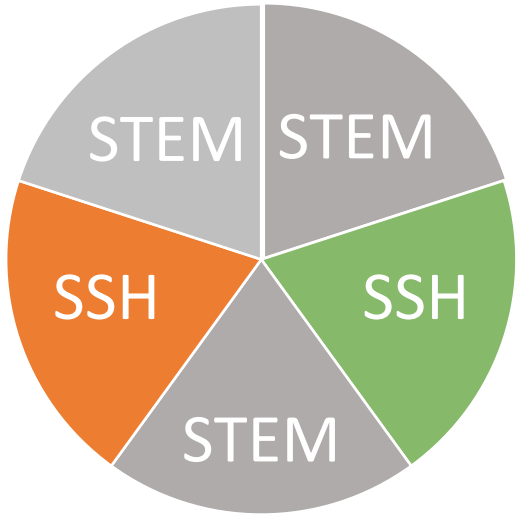
WHAT IS SSH INTEGRATION

What is SSH Integration in the context of Horizon Europe?

- The **"SSH integration" requirement / campaign** underlines the importance
  - to explore social aspects along with the technological aspects in some research projects
  - to involve researchers from Social sciences and Humanities in technology-oriented projects.
  - It refers to a **inter-/multi- disciplinary research** where both STEM and SSH researchers are involved.
- This needs to be reflected in the consortium/methodology/workplan





SSH disciplines

Social Sciences

sociology, psychology,
law, political science, human rights,
economics, public and business administration,
demography, anthropology (except physical anthropology),
geography (except physical geography),
peace and conflict studies,
education science,
journalism and communication,

Humanities

cultural studies,
Religion studies,
linguistics,
literature,
history, archaeology,
philosophy, ethics,
design, arts

STEM disciplines

Science, Technology, Engineering, Mathematics

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WHAT IS NOT SSH INTEGRATION

Do not confuse SSH Integration with:

Multi-actor approach (1)

- The multi-actor approach focuses on the specific involvement of various types of actors associated with a type of **reference chain** (such as farmers, breeders and end users in generally) over the entire spectrum and duration of project activities, to create a shared ownership (co-creation) of the (research or innovation) outcomes and maximise its acceptability.

The multi-actor approach should not be confused with the multidisciplinary approach.

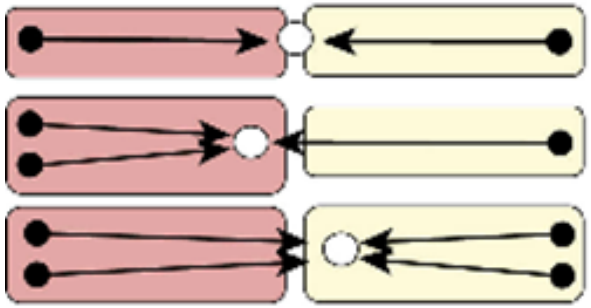
Margot Bezzi. (2021). Ricerca e innovazione aperta, partecipativa e responsabile: un glossario. Zenodo. https://doi.org/10.5281/zenodo.4497847

Do not confuse SSH Integration with:

Stakeholder engagement

- Stakeholder engagement refers to the use of processes aimed at **involving different social actors** - bearers of different interests, different stakeholders - in activities of dialogue and exchange of ideas, in order to better understand and integrate the different perspectives, needs and interests at stake in a given solution.

Margot Bezzi. (2021). Ricerca e innovazione aperta, partecipativa e responsabile: un glossario. Zenodo. https://doi.org/10.5281/zenodo.4497847



Participatory

- Academic and nonacademic participants
- Knowledge exchange without integration

Source: Architectures of adaptive integration in large collaborative projects (Wright Morton, Eigenbrode and Martin, 2015[2])

Do not confuse SSH Integration with:

Communication activities in the project

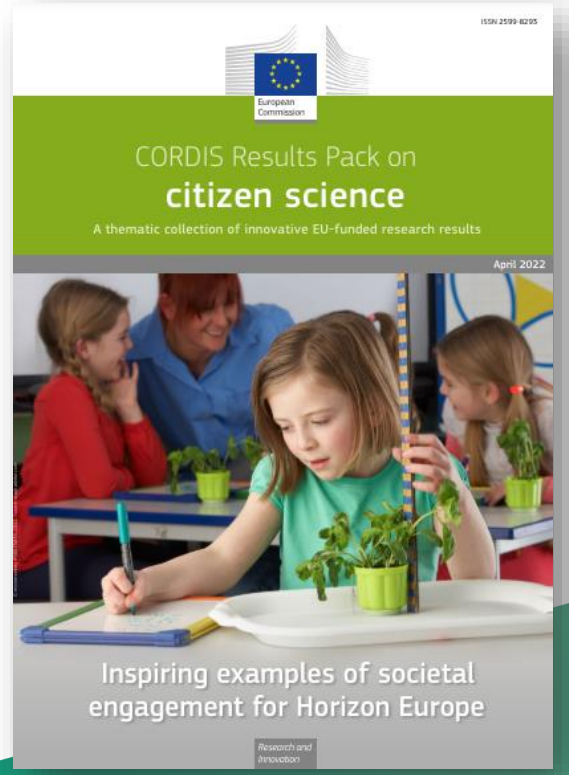
Context: a research project where STEM researchers are involved

- If people with a background/education in social sciences is in charge of communication activities in the project (writing newsletters, blogs, etc.), it **is not** a case of SSH integration.
- If people with a education/specialization in social sciences (for example Communications/Media Studies) is doing research on communication related behaviours, **it is** a case of SSH integration.

Do not confuse SSH Integration with:

Citizen science

- Citizen science is any activity that involves the public in scientific research, where **citizens collaborate with scientists**
- Through citizen science, all people can participate in **many stages of the scientific process,**
  - from the design of the research question,
  - to data collection and volunteer mapping, data interpretation and analysis,
  - and to publication and dissemination of results.
- Citizen science is also an approach of scientific work that may be used as a part of a broader scientific activity.
- If the Scientists have a SSH or STEM specialization is pointless.



https://cordis.europa.eu/article/id/435872-citizen-science-inspiring-examples-of-societal-engagement-for-horizon-europe
https://eu-citizen.science/

Do not confuse SSH Integration with:

Gender dimension

GENDER SENSITITIVE RESEARCH: in this research, the gender scale **is not the core** of the project but it needs to be taken into account throughout its cycle, from concept to implementation.

GENDER-SPECIFIC RESEARCH: a project where «gender» **is the core** of the research.

" Integrating this gender dimension is now a mandatory requirement in all research and innovation projects across Horizon Europe, unless a topic explicitly specifies otherwise"

https://rea.ec.europa.eu/gender-eu-research-and-innovation_en#additional-resources

Gender Dimension corresponds to SSH integration only if the gender issue is a content of the research activity and if it requires the collaboration between STEM and SSH researchers.

To summarise

- SSH integration is about the **content** of the research.
- SSH integration is about the **team** made of SSH researchers and STEM researchers.
- SSH is about the **collaboration** between SSH researchers and STEM researchers

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What aspects can Social Sciences and Humanities (SSH) explore in a Cluster 6 proposal

Biodiversity and ecosystem services

- Understanding and Addressing Human-Nature Interactions
- Governance and Policy Analysis
- Economic Valuation of Ecosystem Services
- Ethics, Social Justice, and Environmental Equity
- Social Impact Assessment

Fair, healthy and environment-friendly food systems from primary production to consumption

- Understanding Consumer Behaviour and Food Choices
- Equity and Social Justice in Food Systems Frameworks
- Governance and Policy Development
- Cultural Dimensions of Food
- Economic Impact and Value Chains

Circular economy and bioeconomy sectors

- Cultural and Educational Aspects
- Economic and Business Model Innovation
- Life-Cycle Assessment and Social Impact Analysis
- Public Perception and Acceptance
- Understanding Socio-Economic and Behavioural Dynamics

Clean environment and zero pollution

- Understanding Societal Attitudes and Behavior Toward Pollution
- Ethical and Social Impact Assessments
- Policy Analysis and Governance Innovation
- Social Justice and Environmental Equity
- Cultural and Educational Dimensions
- Economic and Business Model Innovation

Land, ocean and water for climate action

- Understanding Human-Environment Interactions
- Governance and Policy Development
- Economic and Social Resilience
- Ethics, Environmental Justice, and Equity
- Behavioural Change and Adaptation
- Cultural and Educational Aspects

Resilient, inclusive, healthy and green rural, coastal and urban communities

- Social Resilience and Inclusion
- Governance, Policy, and Decision-Making
- Social and Environmental Justice
- Cultural and Local Knowledge Integration
- Economic and Livelihood Sustainability

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

- Innovative Governance and Policy Development
- Ethics and Environmental Justice
- Social Acceptance and Behavioural Change
- Integration of Digital Solutions and Environmental Observations
- Economic and Social Resilience

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Some Examples

NATURELAB- Nature based interventions for improving health and well-being

Call topic: HORIZON-CL6-2022-COMMUNITIES-02-two-stage : Developing nature-based therapy for health and well-being

Nature Lab

Short project description (1/2)

NATURELAB aims to increase the recognition and promotion of natural spaces emphasising their importance for public health, environmental sustainability and resilience to extreme climate events. It will investigate the **benefits of nature-based therapies** (NBT) **for people** with different health needs in various geographical contexts.

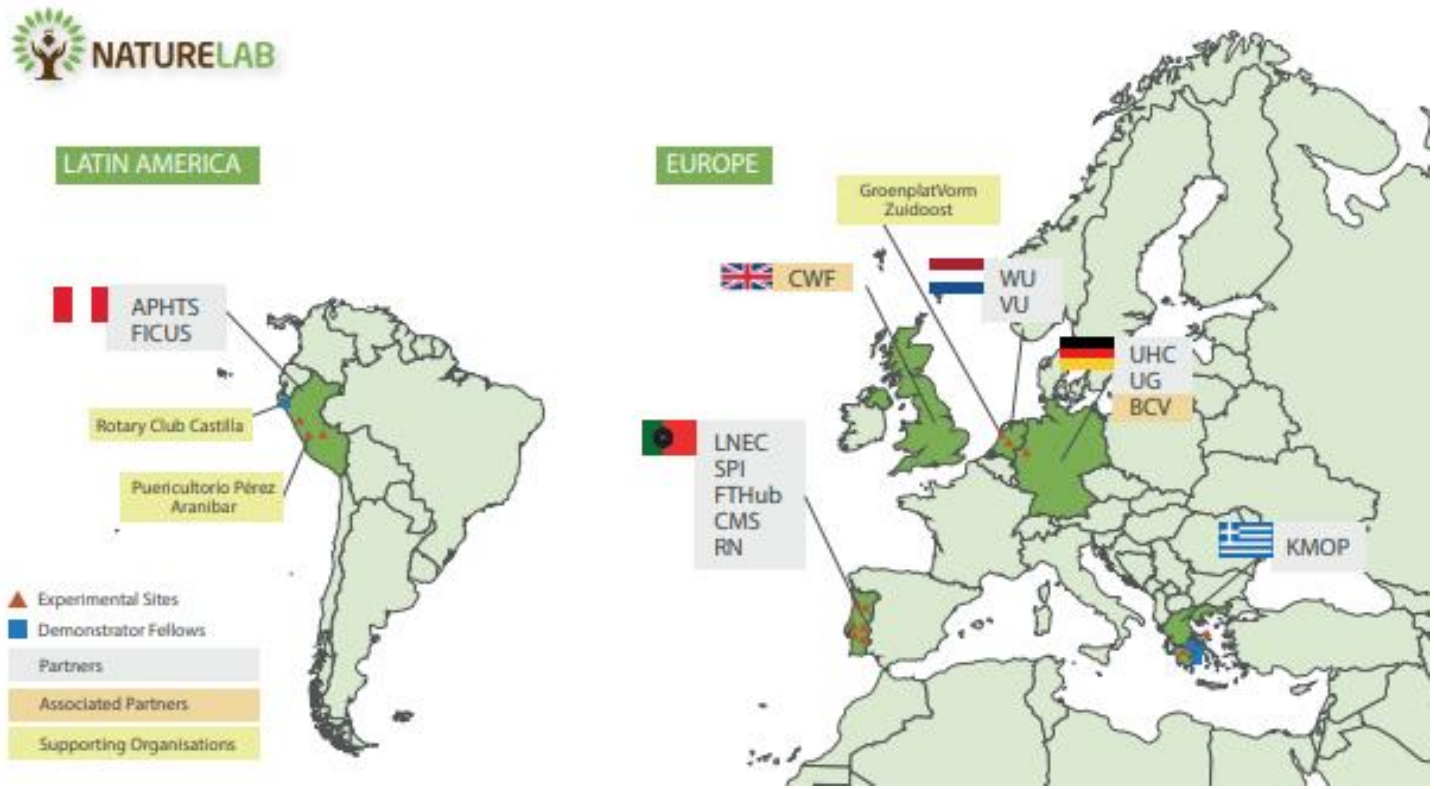
Short project description (2/2)

The project proposes an **integrative approach** involving stakeholders from various fields of expertise to use these resources as the base to investigate the potential of nature-based therapies (NBT) in promoting health and well-being through a multidisciplinary perspective.

Nature-based therapeutic programmes are being designed, implemented, and tested on **15 Experimental Sites** located in five countries, including Peru, Portugal, Greece, Germany, and the Netherlands.

The project will provide NBT to participants of all ages, distinct socio-economic backgrounds and health and well-being care needs, including prevention and support for physical (e.g. hypertension) and for mental health conditions (e.g. depression)

Consortium

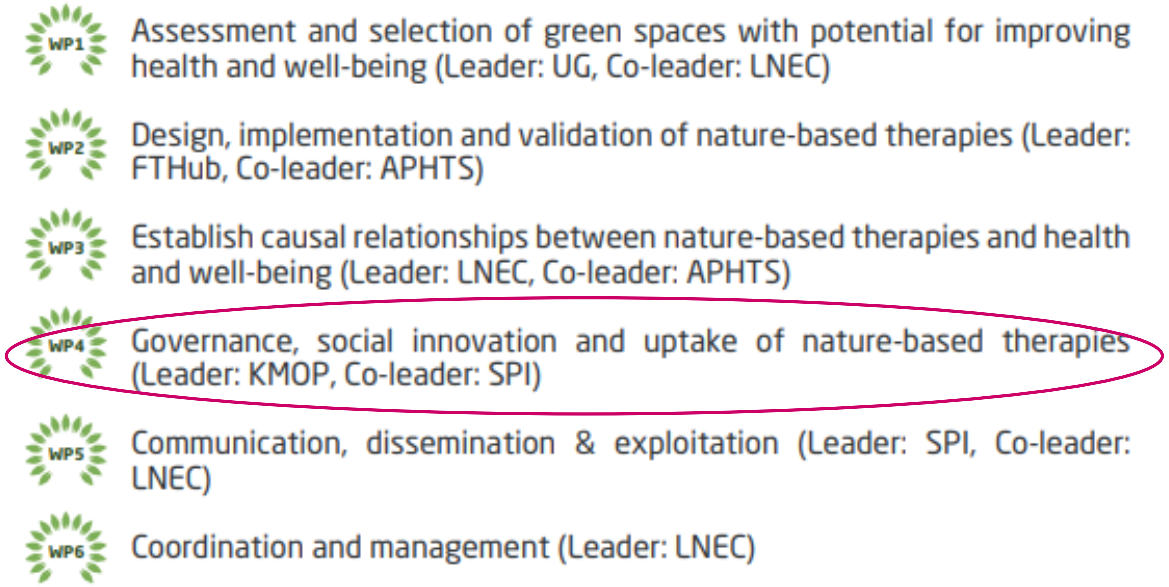


14 partners across Europe and Latin America covering academic and research institutions, environmental NGOs, SME, and public bodies.

Coordinator: LNEC

[Nature Lab]

Work Packages



- WP dedicated to **« Governance, Social Innovation and uptake of nature-based therapies»** (leader KMOP; co-leader SPI)
    - Social Experimentation through real-life conditions
        - to ensure the sustainability of the project methodology
        - to engage local communities and stakeholders in co-shaping NBT adoption
        - to propose sustainable and realistic policy changes

GeneBEcon - Capturing the potential of Gene editing for a sustainable BioEconomy

Call Topic : HORIZON-CL6-2021-ZEROPOLLUTION-01-08- New genomic techniques (NGT): understanding benefits and risks – focus on bio-based innovation

Consortium

18 partner organisations from 11 European Countries

- characterised by an interdisciplinary and multi-actor systems approach
- SLU; coordinator

Short project description(1/2)

GeneBEcon aims at harnessing the potential of New Genomic Techniques (NGTs) to enable energy-saving, low-input, and improved agricultural production and industrial processing for a sustainable bioeconomy.

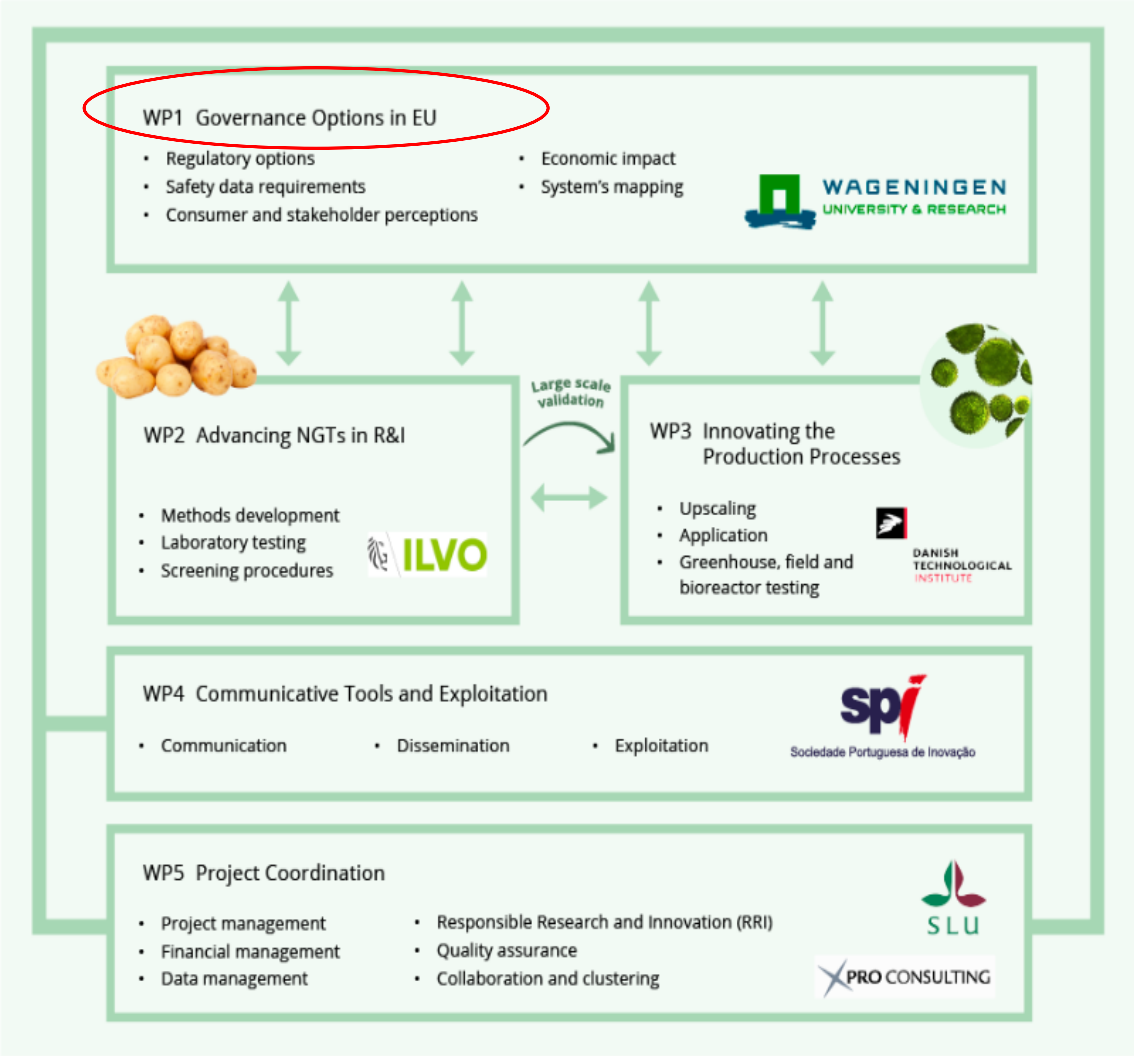
- Develop an **improved gene editing toolbox** using potato and microalgae as case studies toward developing beneficial traits including virus resistance, enhanced qualities, and production of high-value compounds.
- Study associated **economic** and **societal** issues and provide transparent information to all stakeholders.
- Assess the **regulatory options** of NGT products to account for benefits and risks and ensure a regulatory framework that is fit for purpose
- Engage stakeholders to **increase awareness** and to contribute to scientific evidence and NGTs innovations

Short project description (2/2)

The project methodology is mainly based on a **systemic approach** and the concept of **Responsible Research and Innovation (RRI).**

- **Systemic approach** to assess and improve the impact of NGT and biobased innovations
  - Workshops to map each of the two systems and identify how the proposed biobased innovations could affect these production systems.

- **RRI** to achieve two overarching objectives:
  - Integrate RRI Principles in the GeneBEcon research and development activities
  - Foster Public Trust and Maximize Benefits



- Work Package dadicated to **«Governance Options in EU»**
  - study of governance aspects related to new genomic techniques (NGT) and their products in potato and microalgae production systems
  - comparison of the current legal regime with six alternative regulatory options to study the balance of NGTs with the protection of health, safety and environmental

- SSH and STEM joint publication «**Options for regulating new genomic techniques for plants in the European Union**» (link)

Practical tips

Some practical tips

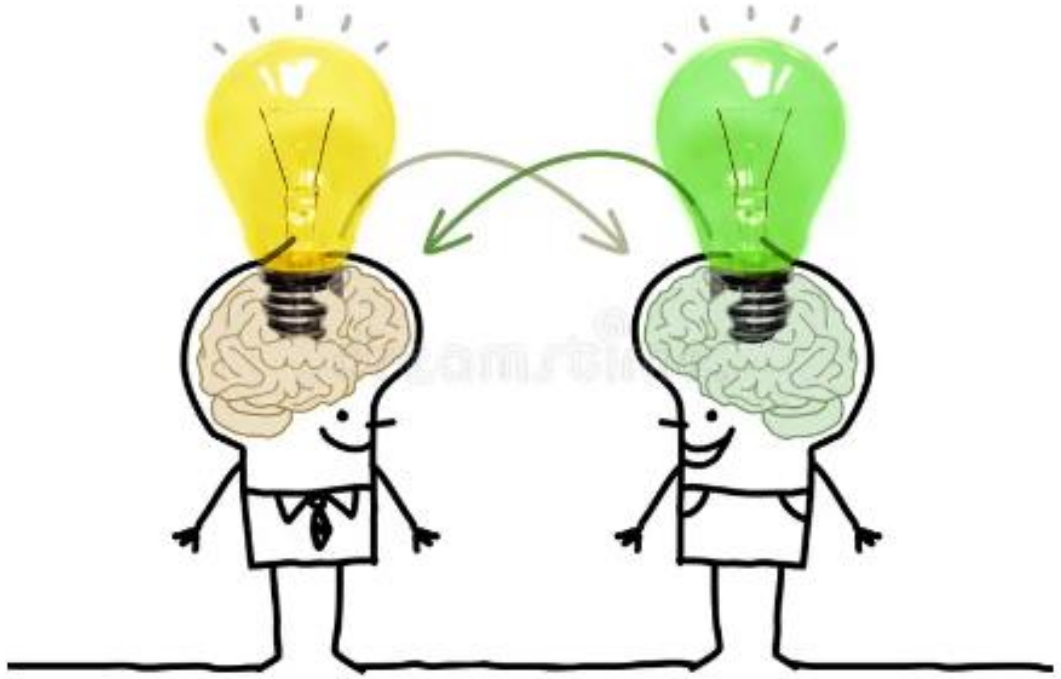
SSH should be involved since the beginning.

- A truly interdisciplinary project requires the involvement of SSH researchers already in the concept phase of the proposal through (ideally) a **co-creation process**
  - **Joint topic analysis/reading**
  - definition of **research questions** integrating both STEM and SSH perspective
- The consortium should bring **sufficient** SSH expertise to tackle the challenge in a holistic way.

Some practical tips

- The **objectives** of the proposal should be designed **to bring together the SSH and STEM domains**
  - Project objectives and results should reflect and integrate also the SSH perspective (e.g. social and cultural perspectives)

- **Integrating** SSH methodological knowledge (e.g. conduct and analyse interviews; narrative approach; case studies; participants observation; focus groups, etc.)
  - Robustness of the results



Some practical tips

- Reasonable **balance of contributions** from SSH and STEM disciplines
  - SSH experts/researchers should be involved **transversally** into the proposal (e.g. set of tasks across work packages associated with the R&I work)
  - avoid SSH work package isolated from the rest of the project
- Foresee strategy to build on **relationship** and to handle **possible difficulties** of interaction and communication between SSH and STEM researchers
  - Tailor-made strategies/tools to managing the interdisciplinary/multidisciplinary team
    - frequent face-to-face meetings/networking events
    - social events
- Plan sufficient & reasonable resources for SSH partners, tasks, & planned activities
  - Meaningful activities and resources distribution

Some useful tools

- Net4Society Partner Search Tool (link)
- Net4Society Opportunities document (link)
- SHAPE-ID Toolkit (link)

Thanks for your attention

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