

Towards a new policy agenda for EU Research and Innovation: Linking Natural and Cultural Capital

Conference on Natural and Cultural Capital: the Future of Europe

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Commission Priorities

- A New Boost for Jobs, Growth and Investment
- A Connected Digital Single Market
- A Resilient Energy Union with a Forward-Looking Climate Change Policy
- A Deeper and Fairer Internal Market with a Strengthened Industrial Base
- A Deeper and Fairer Economic and Monetary Union
- A Reasonable and Balanced Free Trade Agreement with the U.S.
- An Area of Justice and Fundamental Rights Based on Mutual Trust
- Towards a New Policy on migration
- A Stronger Global Actor
- A Union of Democratic Change





EU R&I policy and the Charter of Rome

EU objectives

- Define and implement EU R&I objectives and priorities for promoting nature-based solutions which increase economic, social and environmental resilience and improve risk management.
- Demonstrate that innovating with nature provides sustainable and cost-effective solutions, notably for re-naturing and greening cities, climate change adaptation, biodiversity and ecosystems restoration, cultural heritage and human health and well-being.
- Promote and structure environmental research at EU and international levels to increase its impact.

Linking to the Charter of Rome ...





'Know the Natural Capital'

'Natural Capital'

Natural assets that provide humans with a flow of ecosystem services, non-renewable resource stocks (eg. fossil fuels, minerals) and renewable natural resource flows (e.g. solar and wind energy).

EU FP RESEARCH ON BIODIVERSITY AND ECOSYSTEMS and R&I POLICY ON OPEN ACCESS

Example: Pollinators (STEP www.step-project.net)

- Food security >50% E crops depend or benefit from insect pollination
- Pollination service worth ~22 B € / year in Europe (crops only) with major contribution from wild pollinators
- Pollinate and ensure survival of emblemic species of natural landscape





'Invest in Natural Capital'

R&I POLICY ON NATURE-BASED SOLUTIONS AND RENATURING CITIES

- To promote positive, innovative responses to societal challenges, that are inspired and supported by nature, maintain or enhance natural capital and simultaneously meet environmental, social, and economic objectives
- To position Europe as a world leader both in R&I on nature-based solutions and in the global market for nature-based solutions by adopting a systemic approach to applying nature-based solutions to societal challenges, transforming challenges into innovation opportunities
- H2020 Expert Group priorities
 - Sustainable Urbanisation
 - Improved Risk Management and Resilience
 - Restoration of Degraded Ecosystems
 - Climate Change Adaptation and Mitigation





'Secure the functionality of ecosystems'

- > FP RESEARCH
 - OPERATIONALIZATION OF NATURAL CAPITAL AND ECOSYSTEM SERVICES (OPERAS & OPENNESS)

CULTURAL LANDSCAPES OF MONTADO (PORTUGAL)

Using the ecosystem services and natural capital concepts to combine practice, productive, ecological and cultural aspects of socio-ecological systems to promote improved management of cork trees. Key issues are the effects of climate change, land management and pollution in pushing Montado landscapes toward economic and ecological tipping points.

WILD FOOD AS CULTURAL ECOSYSTEM SERVICE

Wild plants and animals consumed as food provide an important ecosystem service that need more policy attention due to the significance of wild food to European traditions, cultural identity and recreation.

- SC5-7-2015: More Effective Ecosystem Restoration in the EU
- NATURE-BASED SOLUTIONS AND RENATURING CITIES





'Link Natural and Cultural Capital'

'Cultural Capital'

Intangible (people, beliefs, music, cultural ecosystems and cultural diversity etc.) or tangible (historic buildings, artefacts etc.) assets.

EU FP RESEARCH ON CULTURAL HERITAGE (Examples)

- cultural capital per se: MEMORI <u>www.memori-project.eu</u>
- Dosimeter to indoor climate and light, oxidizing acidic air pollutants
- Prototype of a portable reader for in-situ measurements and analysis
- Cultural landscapes
 - HERCULES (www.hercules-landscapes.eu)
 - Community-based hub for good Landscape Stewardship, roadbook for management of heritage values, typology and map/crowd sourcing
 - MEMOLA (www.memolaproject.eu)
 - Contextual strategies of preservation, diffusion and valorisation of cultural heritage and the environment, new participatory methods





Developing a dynamic EU R&I agenda on Cultural Heritage

- To move from a more conservation based agenda to a dynamic policy for cultural heritage with focus on development opportunities co-designed by all stakeholders, giving value to our Cultural Heritage, attract investment, new economic activities and enterprises - Horizon 2020 Expert Group:
- To promote innovative use of cultural heritage for economic growth and jobs, social cohesion and environmental sustainability, through
- innovative finance, investment, governance and business models to enable cultural heritage to be a successful production factor
- innovative use of cultural heritage to encourage integration, inclusiveness, cohesion and participation;
- innovative combined (re)use of cultural and natural heritage





'Link Natural and Cultural Capital'

'Synergies between Natural and Cultural Capital' -

Goal: to generate economic assets, employment opportunities, support to key sectors (e.g. tourism) and contribute to the well-being of society and citizens.

- Innovative combined (re)use of cultural and natural heritage
- Cultural heritage in European landscapes and environments
- More effective way of integrating the management of natural and cultural heritage
- New methods of planning and designs to help integrate ecological and cultural-historical strategies





'Create synergies among green infrastructure, urban and rural areas'

NATURE-BASED SOLUTIONS AND RENATURING CITIES

Renaturing Cities: Addressing Environmental Challenges and the Effects of the Economic Crisis through Nature-based Solutions (Brussels, 13-14 May)

European Conference on Renaturing Cities: Systemic Urban Governance for Social Cohesion (Milan, 1-2 December)

Nature-Based Solutions to Environmental, Health and Societal Challenges – (Brussels, 18-20 May 2015) co-organised ALTER-NET/EC

Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy (FP7 GREENSURGE - http://greensurge.eu/) Biocultural diversity and governance in urban contexts





For more information

- on HORIZON 2020: http://ec.europa.eu/programmes/horizon2020/
- on the European Research Area
 http://ec.europa.eu/research/era/index_en.htm
- on EU research on biodiversity and ecosystems and on cultural heritage:

http://ec.europa.eu/research/environment/index_en.cfm?pg=cultural

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