

Public Engagement in Nature-Based Solutions



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#NatureBasedSolutions

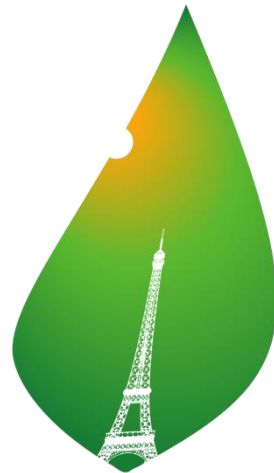
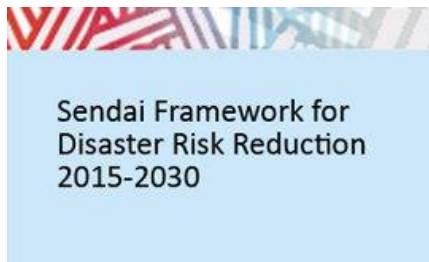


Nature-based solutions are living solutions, inspired and supported by nature, which provide **environmental, social and economic benefits** and help build **resilience**. Such solutions bring more nature into cities, landscapes and seascapes, through local, resource-efficient and **systemic** interventions.





Current policy context for EU R&I → Global context



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11





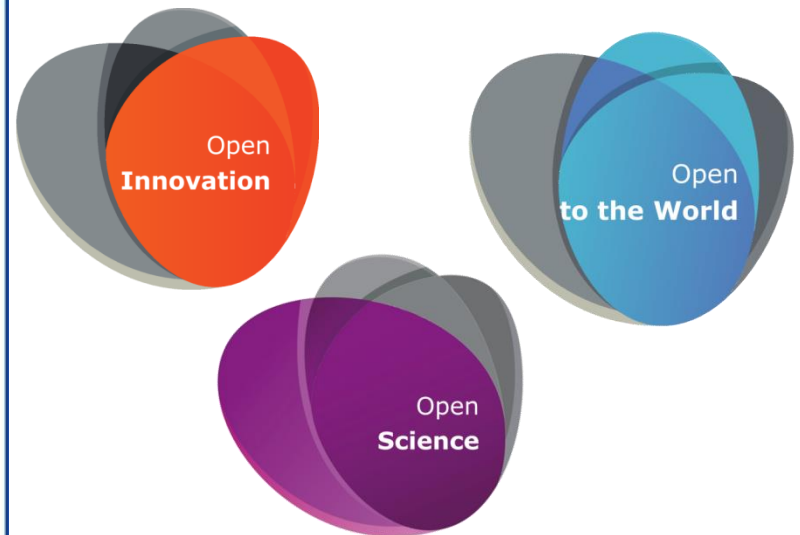
#NewUrbanAgenda
#InnovatingCities

“We will support science, research, and innovation, including a focus on social, technological, digital and **nature-based innovation, robust science-policy interfaces in urban and territorial planning and policy formulation” [...]**

Quito Declaration on sustainable cities and human settlements for all - New Urban Agenda

United Nations Conference on Housing and Sustainable Urban Development - Habitat III - October 2016

Current policy context for EU R&I → Commission level



Unit 1.3 – Sustainable Management of Natural Resources

Objectives & Policies

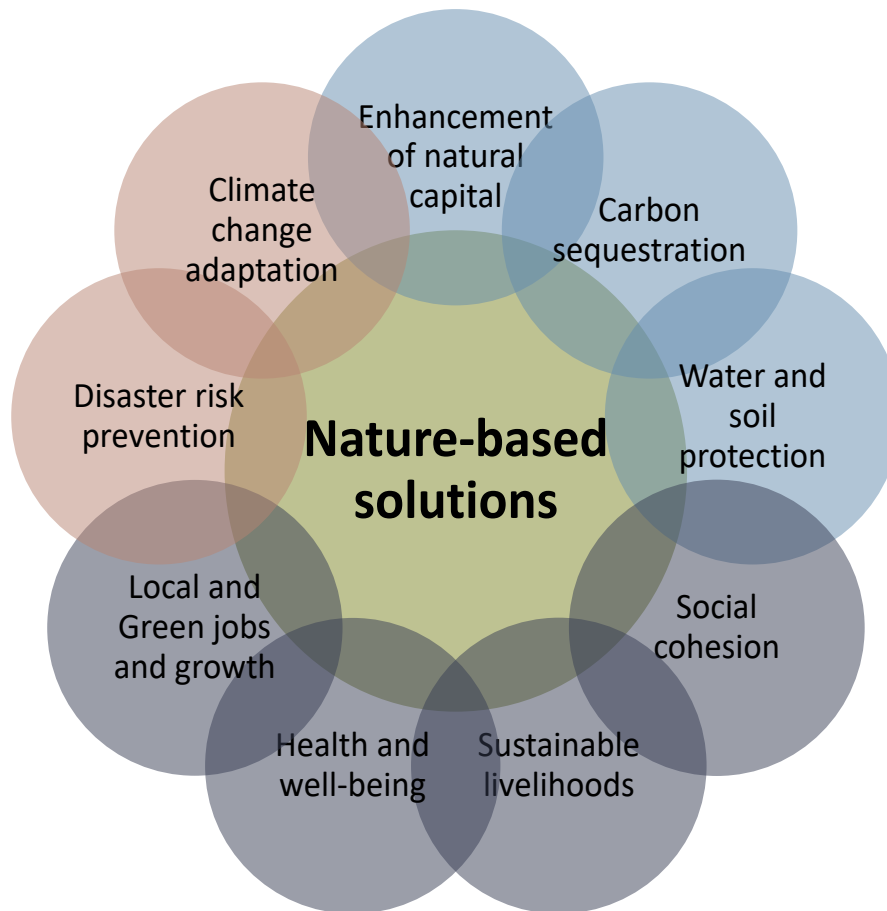
Medium-term objective (2020):

- To demonstrate that **innovating with nature and culture** is essential for the transition towards a sustainable Europe.
- To position the EU:
 - (i) as a driving force worldwide **in the R&I and in the market of innovation with nature**
 - (ii) as a global reference in **research on biodiversity and ecosystems services**.

Main R&I Policy Areas:

- **Innovating Cities**
- **Nature-Based Solutions**

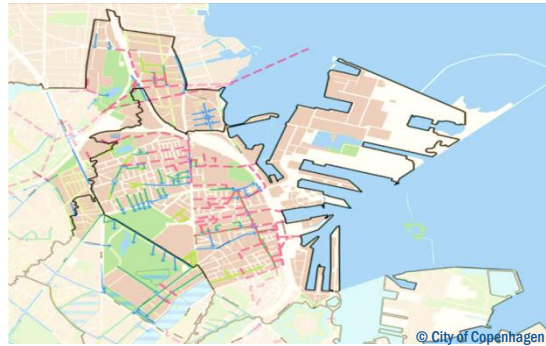
Nature-Based Solutions: economic, social and environmental benefits



Case Study:

Copenhagen

NBS for Flood Risk Reduction



Cloudburst management projects in Østerbro.



Challenge:

- Increase of heavy stormwater events

Nature-Based Solutions:

- **Cloudburst roads, retention boulevards, central delays, green roads** – infiltration and rainwater management;
- **Sustainable urban drainage systems (SUDS)** - reduce the pressure on the sewage system and the
- risk of combined sewer overflows;
- **Green roofs** – enhance water retention, slow down water excess in the sewage system and provide energy savings.

Examples of multiple benefits:

- The climate-resilient neighbourhood of Østerbro is Copenhagen's first one adapted to climate change and the greenest inner city neighbourhood, able to withstand the torrential downpours occurred in recent years.
- Integration of urban design and wastewater management contributed to the restoration of the harbour, now suitable for swimming. Property values increased up to 100% in the harbour area, in addition to other environmental and social benefits.
- In 2009, the Green Growth sector accounted for a turnover of € 6.8 billion and 24,674 jobs created, being an important wealth generator and growth engine in the greater Copenhagen.




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Barcelona: Nature-based Solutions (NBS) Enhancing Resilience to Climate Change



- Technical innovation
- Social and governance innovation
- Land-management & planning innovation
- Regulatory innovation
- Business and finance innovation

Nature-Based...

- Education
- Agriculture
- Health & Rehabilitation
- Circular Economy
- Social integration
- Climate Adaptation
- Disaster Risk Reduction
- Leisure & Tourism
- Urban Regeneration

Main objectives for EU R&I on Nature-Based Solutions



- Create awareness and engagement
- Promote all types of systemic innovation
- Provide systemic, scalable and integrated nature-based solutions
- Promote co-design, co-development, co-implementation of solutions
- Leverage of investment (public & private sector)
- Support replicable solutions close to the market in Europe and beyond

Implementation of Nature-based solutions:



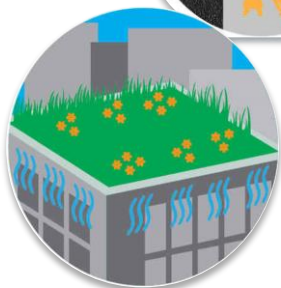
- **Large scale demonstration projects** on the effectiveness, applicability and replicability of Nature-Based Solutions
- **Testing of new means of collaboration**, financing and governance (PPPs, innovative financing, business and organisational models and public procurement, social innovation, citizen engagement)
- **Establishment of dialogue platforms** for diverse stakeholders
- **Networking of existing initiatives** on Nature-Based Solutions
- **Cooperation** within Europe and internationally

CITIZENS' ENGAGEMENT IN NATURE-BASED SOLUTIONS

WP 2014-2015

Citizens' Engagement in EU Research and Innovation policy-making on Nature-Based Solutions

This action aims to introduce the 'citizen dimension' in EU Research and Innovation policy-making on Nature-Based Solutions, notably for re-naturing cities, and actively engaging citizens by collecting their concerns, ideas and preferences for the future. This action should facilitate public engagement through face-to-face group gatherings whilst ensuring sufficient representation of the population in each of the 28 EU Member States.



Cities: Innovative by Nature

Research and Innovation

EXAMPLES OF NATURE BASED SOLUTIONS IN CITIES AND EVALUATION OF THEIR ATTRACTIVENESS

The following examples were used:



A: Renaturalisation of a river
(Arnsberg, DE)



B: Urban river restoration with highway removal
(Seoul, Korea)



C: Restoration of a post-industrial area
(Lisbon, PT)



D: Vertical Forest
(Milano, IT)




E: Green roofs
(UK, US)

Participants were shown pictures of different nature-based solutions* and discussed their reactions and evaluations of the projects and concepts shown.

*The examples were rotated (shown in a different order) in the different groups in order to ensure fair coverage of the different examples and prevent possible participant fatigue impacting on any specific example.

Public opinion on nature-based solutions in cities, Qualitative Eurobarometer study. ©European Commission,

VERTICAL FOREST



Of all the examples this one led to the most mixed initial reactions.

General consensus among most participants that vertical forests would not be appropriate or acceptable in their city.

In almost a quarter of the cities the majority view was mostly negative and for these participants the advantages could not outweigh the disadvantages.

Aspects liked:

- *having nature in such close proximity;*
- *some liked the appearance of the buildings and the strong visual impact;*
- *environmental benefits of clean air and noise reduction;*
- *space saving - not offering up space to nature at ground level.*

Disliked:

- *lack of natural light;*
- *insects or birds coming into the flats;*
- *amount of maintenance required;*
- *potential structural damage to the building;*
- *exclusivity as greenery only available to a few;*
- *high costs to build and to maintain.*

BENEFITS OF RENATURING CITIES

Participants had throughout the discussions mentioned many benefits related to integrating nature into cities.

Most important related to wellbeing, mental and physical health.

Social, environmental and economic benefits were also acknowledged.

Types of changes needed to make the transition to a re-natured city:

*obtaining **finance** for such initiatives;*

educating people on the benefits of nature in cities and thereby influencing attitudes;

political will and government's willingness to implement such projects.

Some uncertainty about how renaturing cities results in improved water quality.


Obtaining planning permission is the least understood.

Property prices / land value most controversial – benefits owners, but not those renting or potential buyers. Could potentially increase social inequality.

Many benefits on the list were already spontaneously mentioned.



WILLINGNESS TO PARTICIPATE IN THE PROCESS OF INNOVATING CITIES WITH NATURE



A majority would like nature-based solutions to be introduced into their cities.

Participants would like to take part in local projects that affect and benefit them directly (e.g. their homes or neighbourhood), or elsewhere in their municipality.

Their primary role is being involved in decision-making and being consulted with before large projects are being taken on, as well as during implementation.

Not all know how to contribute – they would like to be led.

WILLINGNESS TO PARTICIPATE IN THE PROCESS OF INNOVATING CITIES WITH NATURE



Willingness to participate
can take different forms:

- Some participants saw their role as **information gathering or sharing** and offering their opinions.
- Some would like to **give more of their time** and contribute through manual labour.
- Some are willing to **contribute financially**.



Willing to invest
under certain circumstances:

- If it is a **small amount**;
- People should be able to contribute **based on their means**;
- For interventions that they would **personally benefit** from;
- **Support from government**, such as tax incentives, or support in setting up green roofs.

4. **WILLINGNESS TO PARTICIPATE** IN THE PROCESS OF INNOVATING CITIES WITH NATURE (3/3)

Desired investment at city/national/EU level



- Majority appreciated EU involvement in research and innovation.
- EU has important role to play in providing financial support.
- EU should cooperate closely with local level, where decisions should be taken – local knows problems and solutions best.
- National acts as bridge between the two.

*"It's fantastic that the EU has initiated this research, because there really are some financial resources there to make something happen."
(Copenhagen, group 2)*

"It's an investment into the city, so it should be implemented within the boundaries of the city...The European Commission may make suggestions and indicate the direction and help, for example financially." (Cracow, group 1)

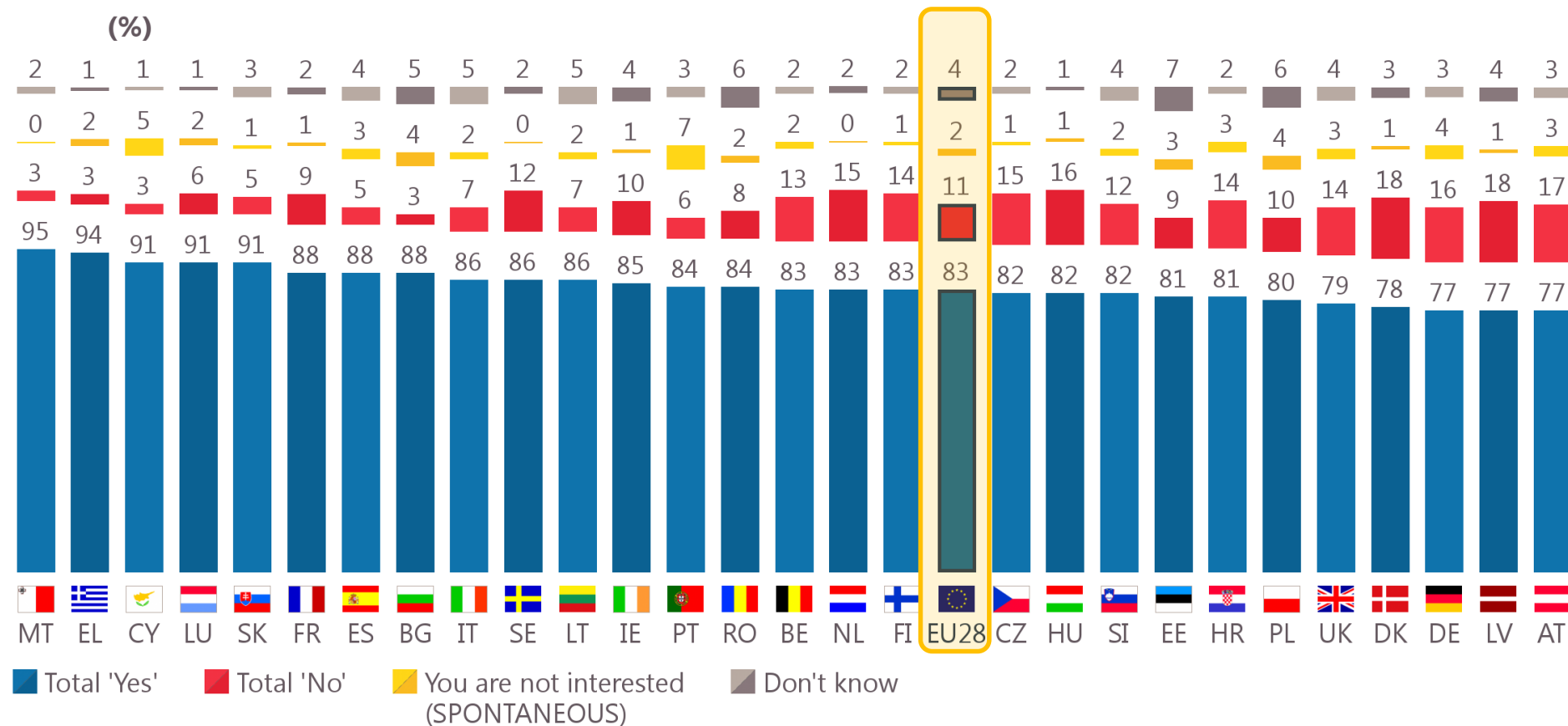
"The EU has knowledge and experience from the other continental countries; they have seen it work in other countries." (Cork, group 1)

"For me, it has to be something participatory and not just another directive." (Paris, group 1)

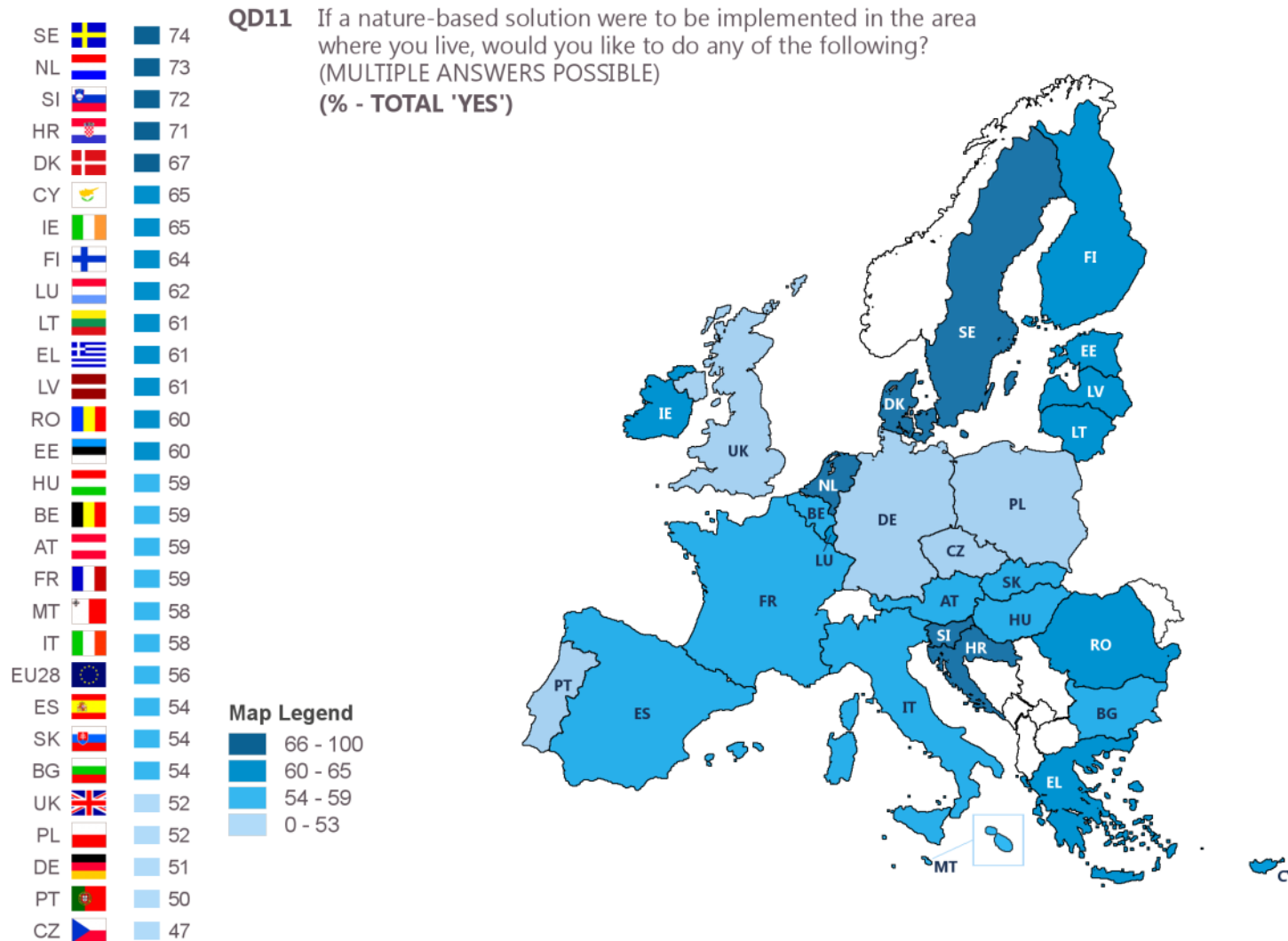
83 % of citizens are in favour of the EU promoting nature-based solutions throughout Europe

QD13 Would you be in favour of the EU promoting nature-based solutions throughout Europe?

(%)



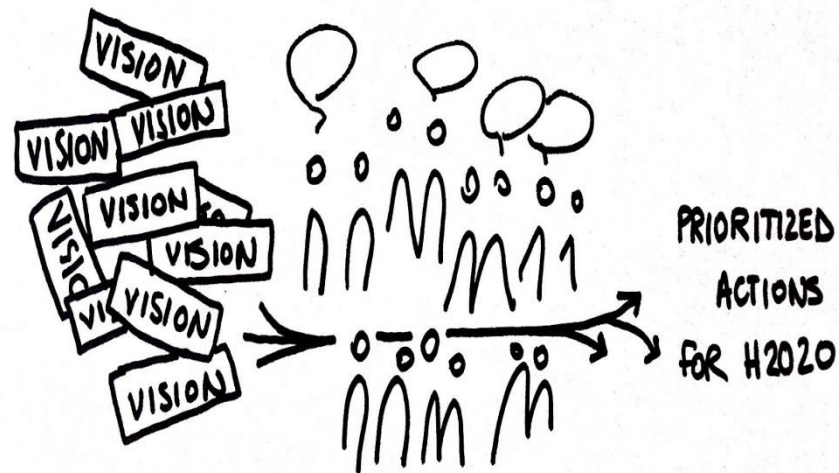
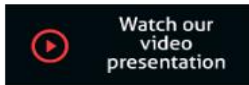
56% of Europeans would like to participate in some way if a nature-based solution were implemented in their area





CIMULACT

Citizen and Multi-Actor Consultation on Horizon 2020



[Full documentation 48 research scenarios](#)

[CIMULACT overview and info-guide](#)

[CIMULACT vision catalogue \(179 visions\)](#)

[CIMULACT SocialNeeds](#)

The visions were analysed and 48 social needs, in 12 clusters, were extracted. These provide more policy-oriented statements on the direction of the visions.

[CIMULACT – Social needs posters](#)

[CIMULACT Milan Social-Needs-and-Scenarios REVIEWED](#)

[CIMULACT Research Programme Scenarios Overview](#)
2-liners for each Research Scenario.

[CIMULACT Vision Navigator](#)



**CASI: Public Participation in Developing a Common Framework
for Assessment and Management of Sustainable Innovation**

THEME SiS.2013.1.2-1

Mobilisation and Mutual Learning (MML) Action Plans: Mainstreaming Science in Society Actions in Research

CASI

Grant Agreement no. 612113

Strategic Outline of Public Engagement in the Development of Sustainability Research Policies and Programmes

Findings of the CASI Project

Author(s):

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With contributions from

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Dr. Rafael Popper, Guillermo Velasco, The University of Manchester, UK

Citizens' vs. Experts' Priorities Rank

European Citizens' Rank	Name of research priority	Overall Expert Priority Evaluation
1	Supporting local/regional agricultural production, distribution and consumption system	=19
2	Holistic education for a sustainable future	=4
3	Supporting people to become producers of renewable energy	11
4	Sustainable construction of buildings	=14
5	Sustainable transformation of existing traffic infrastructure in cities	10
6	New working models – new economic models	13
7	Innovating agriculture: the sustainability option	=16
8	More green in cities	26
9	Understanding and implementing sustainable electronics	=16
10	Fair and participatory access to limited resources	=14

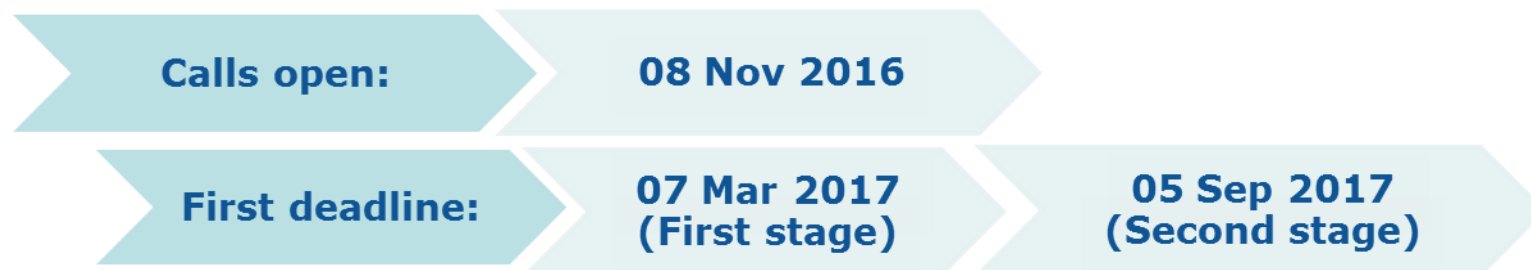


Topics on **Sustainable cities through nature-based solutions in cross-cutting call 'Smart and Sustainable Cities':**

SCC-02-2016-2017: **Nature-based solutions for inclusive urban regeneration** (IA), Total indicative budget in 2017: €44M

Topics on **Nature-based solutions for territorial resilience in SC5 call 'Greening the economy':**

SC5-08-2017: **Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction** (IA), Total indicative budget in 2017: €29M



Invitation

Info day on 8 December 2016, Brussels.

<https://www.b2match.eu/infodayh2020-nature-culture>



Welcome to the Horizon 2020 Info Day
Innovating with Nature and Culture

Info Day & Brokerage Event
Responding to Societal Challenges through
Nature-Based Solutions and Cultural Heritage

2016
8th December
Brussels

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DG Research and Innovation with the support of the EU-funded project **NCPs CaRE** is organising an Information and Brokerage Event for the 2017 Horizon 2020 calls on demonstration projects related to :

- Nature-based solutions for inclusive urban regeneration
- Heritage-led rural regeneration
- Nature-based solutions for hydro-meteorological risk reduction

This one-day event is organised in 2 parts:

Morning - Information on the calls

- Keynote speakers on topics relevant to 2017 calls
- Tips for 2017 calls
- Learn more on other financial instruments for leveraging

Afternoon - Brokerage Event

- Specific introduction to each topic
- Match up for future collaborations (bilateral meetings)
- Initiate cross-border contacts and co-operations

The brokerage event in the afternoon is part of the **Horizon 2020 Information Day** and is organised by the EU-funded project **NCPs CaRE**, the network of the National Contact Points for **Horizon 2020**, with the support of the **Sector Group Environment** of the **Enterprise Europe Network**.

☒ **Register for this event**
open until 21 Nov 2016.

ORGANISERS



SCHEDULE

Registration	28 Oct – 21 Nov
Meeting Selection	8 Nov – 5 Dec
Event	8 Dec

DETAILS

Language

English



#NatureBasedSolutions

Follow our R&I policies and events:

“Innovating with Nature and Culture in Europe and beyond”

Nature-Based Solutions: <http://europa.eu/!Jg99bW>

@NatureBasedSolu #NatureBasedSolutions

Innovating Cities: <http://europa.eu/!rq76WG>

@InnovatingCitie #InnovatingCities

Cultural Heritage: <http://europa.eu/!Jy84Pr>

