



Nature based solutions to societal challenges

Nature conference: EU Biodiversity strategy implementation

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Nature-based solutions – What are they?

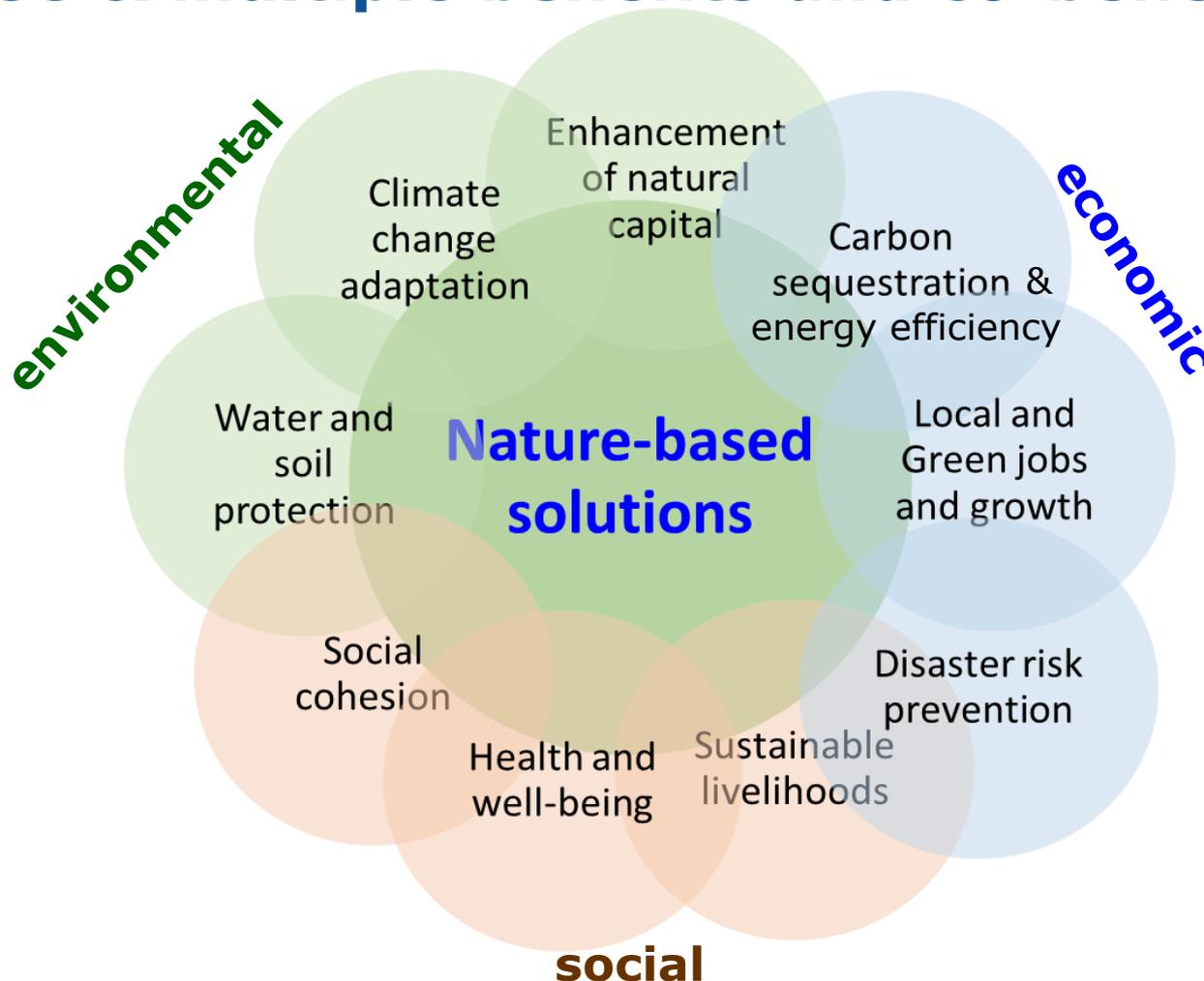
- **Solutions inspired or supported by nature that simultaneously provide environmental, social and economic benefits and help build resilience**
- **Solutions that bring more nature, natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions**
- **A cost-effective response to today's major societal challenges, including climate change and ecosystem degradation**





European
Commission

Diverse & multiple benefits and co-benefits



Research and
Innovation

Biodiversity Strategy & nature-based solutions

Direct contribution:

- **Better protection for ecosystems, and more use of green infrastructure** (Target 2)
- **More sustainable agriculture and forestry** (Target 3)

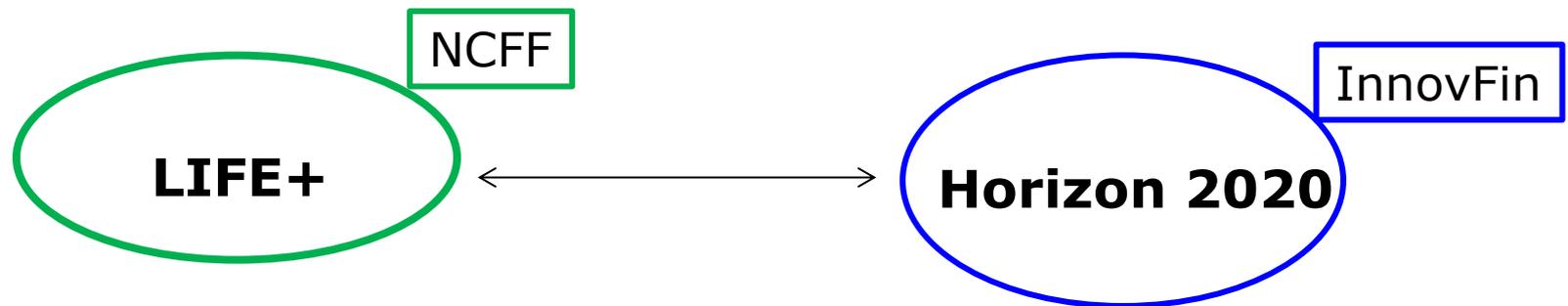
Indirect contribution:

- **Full implementation of EU nature legislation to protect biodiversity** (Target 1)
- **Better management of fish stocks** (Target 4)
- **Tighter controls on invasive alien species** (Target 5)
- **A bigger EU contribution to averting global biodiversity loss** (Target 6)

Green infrastructure & nature-based solutions

GI is a successfully **tested tool** for providing ecological, economic and social benefits through natural solutions.

Innovative nature-based solutions are **improved or new tools** for providing socio-economic and environmental benefits through natural solutions.



"**Working** with nature"

"**Innovating** with nature"

"**Working and innovating** with nature for people"

The past: a focus on urban challenges

ex.: floods, soil contamination, air pollution



The future: focus on solutions to challenges

Changed context and goals for EU R&I

- ***New European Commission priorities, notably 'A new boost for Jobs, Growth and Investment', 'A resilient Energy Union with a forward looking climate change policy' , 'EU as a global actor'***
- ***Horizon 2020, EU Research and Innovation Framework Programme 2014-2020***
- ***New orientation of EU R&I policy to promote the development and the markets for nature-based solutions to societal challenges***
- ***Solutions inspired or supported by nature that simultaneously provide environmental, social and economic benefits - "Innovating with Nature"/"Re-naturing cities".***
- ***Build on the outcomes of three Presidency events: EL, IT, LV***



Latvian Presidency
of the Council of the
European Union



Nature and Urban Wellbeing

Nature-Based Solutions to Societal Challenges

A two-day conference organized by ALTER-Net, in collaboration with the European Commission and under the auspices of the Latvian Presidency of the Council of the European Union

Objectives:

- Provide a forum for creative engagement and dialogue across fields of research, policy and practice
- Evaluate scientific and social conditions and options for up-scaling of nature-based solutions for health related issues
- Build on previous work, knowledge and experience to develop innovations in NBS



Key outcomes

- **The nature-based solutions' concept is easier to understand than other similar concepts but still requires to be better defined; define exclusion and inclusion criteria while preserving a broad definition.**
- **Different stakeholder communities support a solution-oriented and systemic approach through evidence-based large scale demonstrations.**
- **The proposed solutions should involve all relevant stakeholders and provide multiple benefits; this, along with long term monitoring is crucial for a long term sustainability of nature-based solutions.**
- **Achieve a proper balance between socio-economic and environmental benefits promoting trans-disciplinarity as well as long term programming and funding.**
- **Nature-based solutions have their potential for inclusiveness and hence involvement of all societal actors**

Other relevant outcomes:

The health dimension is essential to explain to communities the importance of nature-based solutions.

The challenge is to draw more attention to the benefit of such solutions for health prevention (primary health care); raise interest of health insurance companies in nature-based solutions.

Cities are in strong need of evidence on the cost-effectiveness of nature-based solutions. At city level, the value of nature is well understood but evidence is needed to justify new investments.

Impact on biodiversity should be taken into account (not all nature is good for diversity and can even negatively impact, e.g. invasive alien species).

Etc.

The Link with Ecosystem Types & Services

Terrestrial

Urban ecosystems
Inland wetlands

Freshwater

Rivers and lakes

Marine ecosystems

Coastal areas
Marine inlets and
transitional waters

**Innovating with
nature**

nature-based solutions

Cultural

Regulating

Supporting

Provisioning

Our main objectives...invest in solutions



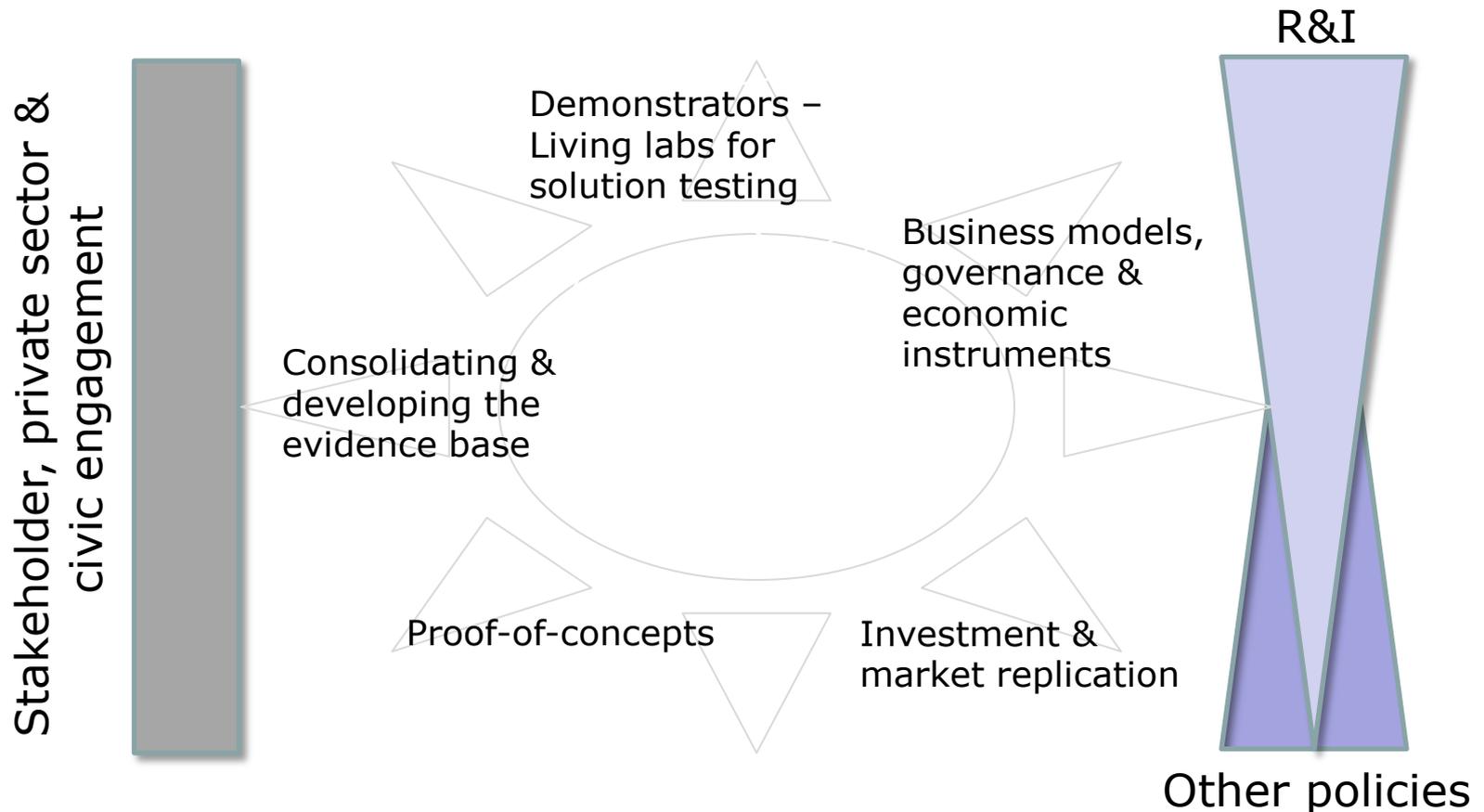
- **Widening the solutions portfolio beyond technological innovation → foster social innovation**
- **Providing systemic, scalable, integrated nature-based solutions at landscape & city level**
- **Fostering the co-design, co-development, co-implementation of solutions**
- **Leveraging of investment from public & private sector**
- **Supporting replicable solutions towards the market (performance, governance, incentives)**

... and our means of implementing them

- **Establishment of dialogue platforms for diverse stakeholders**
- **Mapping and networking of existing initiatives on nature-based solutions in Europe and beyond**
- **Set-up of large scale demonstration projects on the effectiveness, applicability and replicability of nature-based solutions**
- **Launch and testing of new means of collaboration, financing and governance (public private partnerships, innovative financing, business and organisational models, innovative public procurement, social innovation)**
- **Collaboration within Europe and internationally**

Systemic approach

- more than 'a traditional & linear' path



Large-scale demonstrators

Horizon 2020 – 2016-17 - Work programme and calls

- Renaturing cities:

- climate and water resilience
- urban regeneration

- Territorial resilience & hydro-meteorological risk reduction



Road Map on "Innovating with Nature"

- Develop the European Research and Innovation Area for nature-based solutions
- Provide the evidence for investment effectiveness of nature-based solutions
- Promote the development, uptake and upscale of marketable nature-based solutions
- Promote international cooperation and orient the international R&I agenda towards nature-based solutions

Find out more...

- **HORIZON 2020**
<http://ec.europa.eu/programmes/horizon2020/>
- **EU R&I on Nature-Based Solutions**
http://ec.europa.eu/research/environment/index_en.cfm?pg=nature-based-solutions
- **Functional mailbox:**
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