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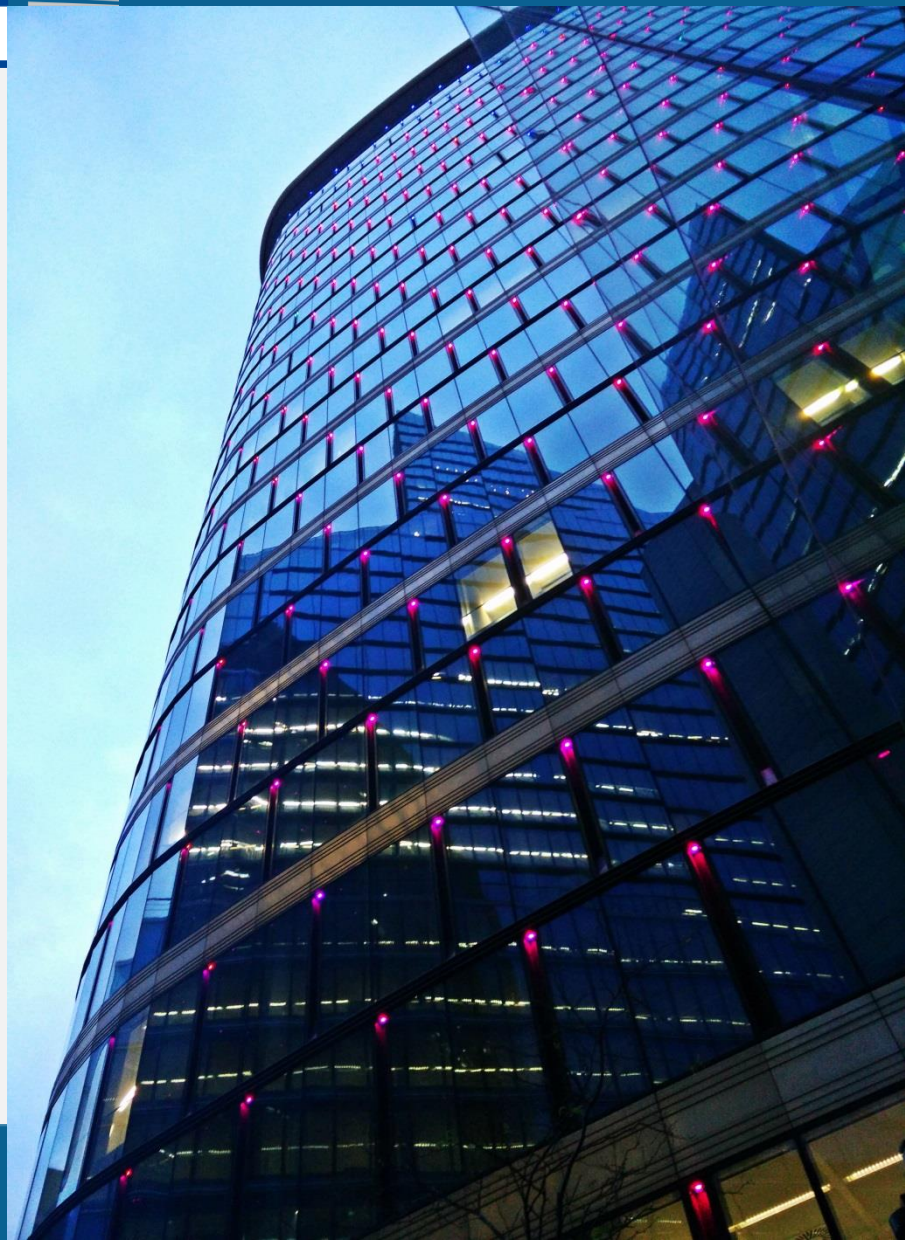
EASME

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A view from H2020, Nature-based solutions

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19 October 2017, Brussels

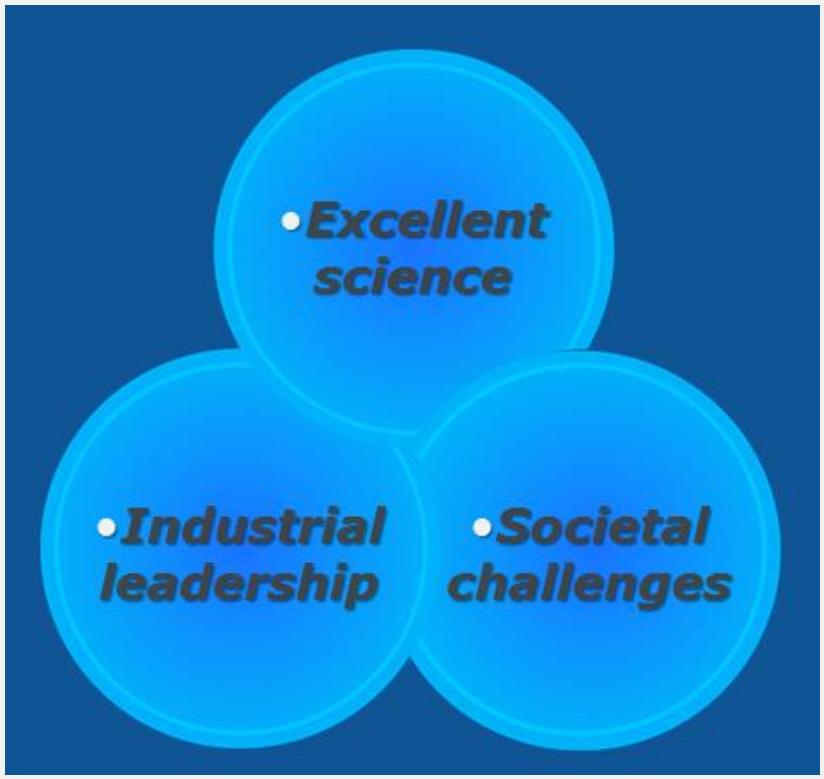


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Content

- **H2020**
- **Nature Based Solutions in Horizon 2020**

Horizon 2020



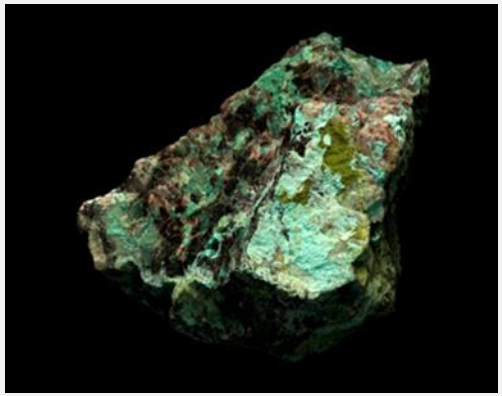
- **A single programme** of 7 years (80 billion € budget)
- **Coupling research to innovation to maximise impact**
  - Using stakeholders knowledge to maximize the uptake of project results
  - Stronger participation of SMEs (in collaborative projects and through the dedicated SME instrument)
- **Focus on societal challenges** facing EU society, e.g. health, clean energy and transport
- **Simplified access,** for all companies, universities, institutes in all EU countries and beyond
- **Time-to-grant** down to 8 months

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Societal Challenge 5: Climate Action, Environment, Resource Efficiency and Raw Materials

- 1) To achieve a **resource – incl. water - efficient and climate change resilient** economy and society,
- 2) The protection and sustainable management of **natural resources and ecosystems**,
- 3) A sustainable supply and use **of raw materials**, in order to meet the needs of a growing global population within the sustainable limits of the planet's natural resources and eco-systems
- 4) Harnessing **Earth observation data** (GEO)





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Defining Nature-based solutions

- ✓ Solutions **inspired and supported by nature** that simultaneously provide environmental, social and economic benefits and help to build resilience

- ✓ Solutions that **bring more nature and natural features and processes** into cities, landscapes and seascapes, through locally adapted and **systemic interventions**

→ Living solutions → Engineered solutions → NO bio-mimicry; NO bio-materials







- **Green Infrastructure (GI) [the spatial structure]**

Green Infrastructure is defined as a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas. On land, GI is present in rural and urban settings.

- http://ec.europa.eu/environment/nature/ecosystems/index_en.htm

Nature-Based Solutions (NBS) [the innovative approach]

Nature-based solutions to societal challenges are solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.

https://ec.europa.eu/research/environment/index_en.cfm?pg=nature-based-solutions








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Moving Nature-Based Solutions forward



- **Solid evidence base** to compare and combine with traditional, engineering (grey) solutions:
  - *Timeframes for performance (**long term solutions**)*
  - *Cost-effectiveness, co-benefits (awareness of **multi-functionality**)*
  - *Design standards, operational and technical guidelines for 'engineering' nature-based solutions*

- Develop, test, demonstrate and upscale functionalities of NBS
- **Innovative decision-making processes** involving co-design, co-development & co-implementation
- Contribute to creation of a **global market** for NBS and position Europe as a world leader in innovation through NBS
- **Creation of 'communities of practice'**
- **International cooperation on NBS to global challenges**

What is expected from SCC02-2016 projects?

- Contribute to the creation of an European reference framework and the establishment of **EU leadership for NBS**, new economic opportunities, new products, services, protocols etc.
- Contribute to increased awareness of the **benefits of re-naturing cities,** creation of communities of practice, more effective policy making and better informed decision making.
- Enhanced stakeholder and **citizen ownership** of the NBS.
- Increased **international cooperation** and global market opportunities in non-EU countries, i.e. EU-China platform.
- Implementation of **EU environmental policies***.





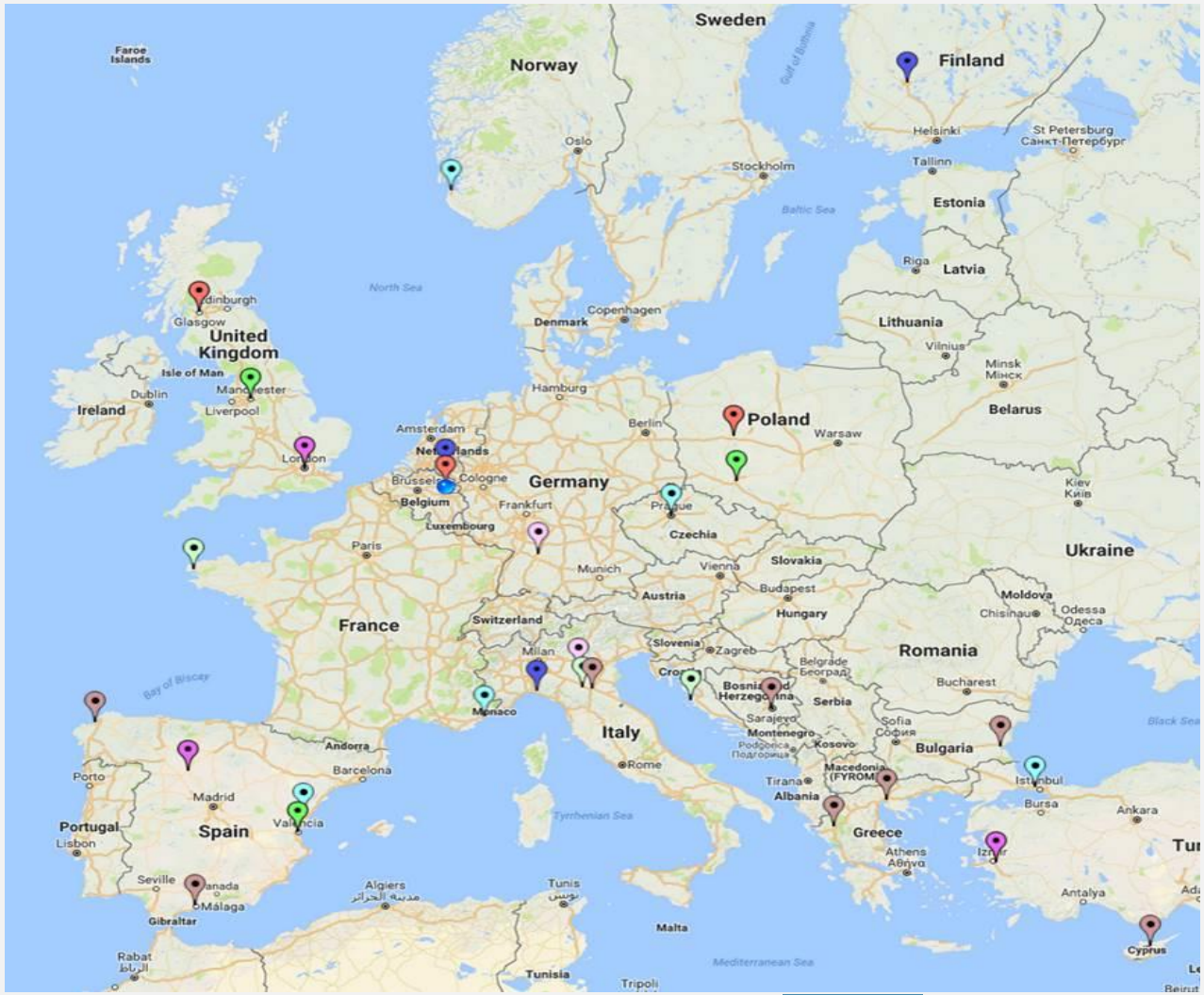

SCC-02a-2016: Demonstrating innovative nature-based solutions for climate and water resilience in cities (40 MEUR)

Actions aiming to improve urban resilience to climate change (mitigation and adaptation)and enhance water resources management,

through deployment of nature-based solutions, or an optimal combination of nature-based solutions and other technologies,

and through transdisciplinary and community-based approaches including social sciences and humanities.

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- **CONNECTING**: Front runner (red), follower (light red)
- **GROWGREEN**: Front runner (green), follower (light green)
- **UNALAB:** Front runner (blue), follower (light blue)
- **URBAN GREEN UP**: Front runner (purple), follower (light purple)

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Clustering and synergies: topics

- **SCC-02- 2016 SCC-02–2016: Demonstrating innovative nature-based solutions in cities**
- To provide a robust, EU-wide evidence base and develop a European reference framework on nature-based solutions: CONNECTING, URBAN GREEN UP, UNALAB
- **SCC-03–2016: New governance, business, financing models and economic impact assessment tools for sustainable cities with NBS (urban re-naturing)**
  - Enable the systemic integration of NBS into a sustainable urban planning, new governance, business, financing models and partnerships
    - NATURVATION and Nature4Cities
- **SC5-09–2016: Operationalising insurance value of ecosystems**
  - Promote the uptake of ecosystem-based approaches for disaster risk reduction and climate change and the exploration of the concept of the insurance value of ecosystems - NAIAD
- **SC5-10–2016: Multi-stakeholder dialogue platform to promote innovation with nature to address societal challenges**
  - Establish science-policy-business-society interfaces to allow for continuous dialogue and interaction - Think Nature

SCC-02-2017: Nature-based solutions for inclusive urban regeneration (44 MEUR)

- Projects should address NBS for regeneration of deprived districts, neglected or abandoned areas.
- Important role of social innovation and the participation of social sciences and humanities (SSH), i.e.: law, economics, political science, architecture or design studies in order to properly address the complex challenges.





Scope: essential points

SCC–02-2016-2017

'Front-runner' and 'Follower' cities approach

- **2 'front-runner' cities:**
  - → cities as 'living laboratories' for the development, deployment, testing and demonstration of replicable and locally attuned NBS,
  - → will mentor, assist and advise 'follower' cities,
  - → will network with cities beyond the consortium
- **3 'follower' cities:**
  - → proactively seek advice, expertise, assistance, capacity building and mentoring from 'front-runner' cities,
  - → committed to develop an urban re-naturing plan within the duration of the project (NBS replicated but 'customized' to their context)
  - → have access to the know-how and outcomes of the project and participate in the definition of user requirements and the design of the methodology for replicating and transferring solutions, data, etc…

* Cities from different Member States and/or Associated Countries (5 at least)

What is an Innovation Action?

INNOVATION understood as the successful exploitation of new ideas to produce **tangible benefits,** satisfying **needs** and **wants**



exploitation



Invention
IS NOT Innovation

Invention **Innovation**

Slide from Dr. Eugene Sweeney
Impact&Innovation in H2020

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25% new experts



Read excellent proposals



Network with fellows

- ✓ Academia (in particular eastern Europe)
- ✓ Private sector / innovation agencies
- ✓ Local / national authorities / agencies

Call for experts:
http://ec.europa.eu/easme/en/call-experts-climate-action-environment-resources-management

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THANK YOU
FOR YOUR ATTENTION

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