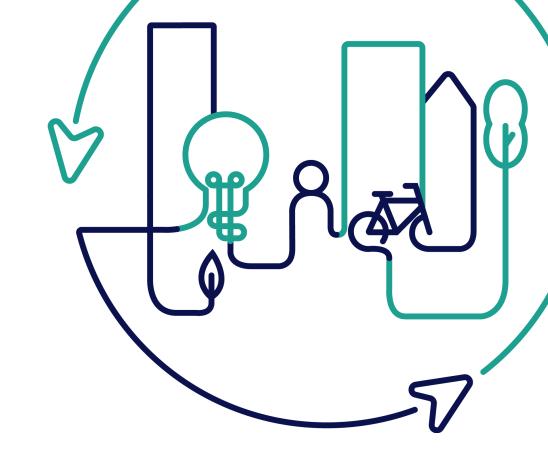
EUROPEAN URBAN INITIATIVE

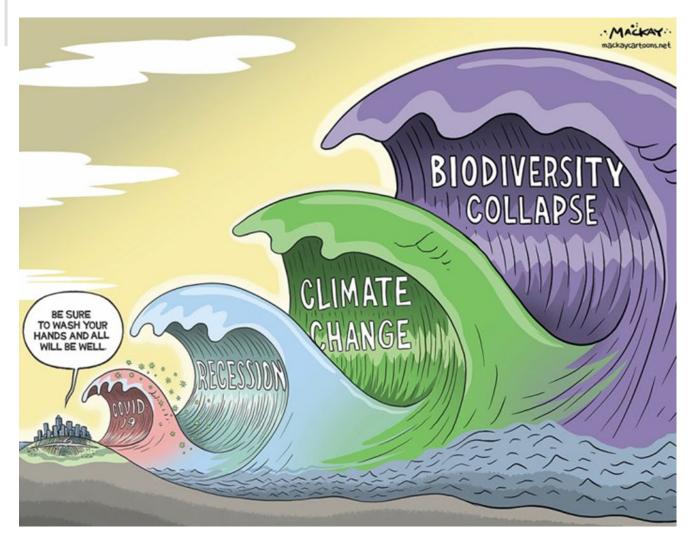
EUI-Innovative Actions Call 2 Topic 'Greening Cities'





Co-funded by the European Union

# **Cities at forefront of experiencing multiple challenges**



- Europe is facing intrinsically linked biodiversity, climate, pollution and resource crises
   cities are at forefront of experiencing impacts of multiple crises
- Climate change accelerates destruction of natural world through droughts, flooding and wildfires, while loss and unsustainable use of nature are in turn drivers of climate change
- Pollution affects our health and environment, and scarce resources are wasted in a linear economy

# Focus on green and blue infrastructure to address challenges

- Tackling jointly multiple challenges provides entry point on how
  'greening cities' supports ecosystems and builds resilience
  - Enhanced focus on green and blue infrastructure solutions offers an effective and efficient approach to address challenges in cities
- Integration of green and blue infrastructure in other sectors beyond protection of biodiversity and addressing climate challenge – is of high relevance
  - Theme requires integrated approach making connections to a wider set of policy areas, e.g. zero pollution of air, clean water and soil, sustainable mobility, sustainable renovation of buildings, green energy, circular economy and public health



# Definitions

### **Green infrastructure**

"Strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services" EU Green Infrastructure Strategy 2013

- Ecosystem services include and contribute e.g. to water purification, improving air quality, providing space for recreation, helping with climate mitigation and adaptation
- Network of green (land) and blue (water) spaces improves quality of environment, condition and connectivity of natural areas, citizens' health and quality of life
- Green infrastructure can support a green economy & create job opportunities and be enriched with nature-based solutions

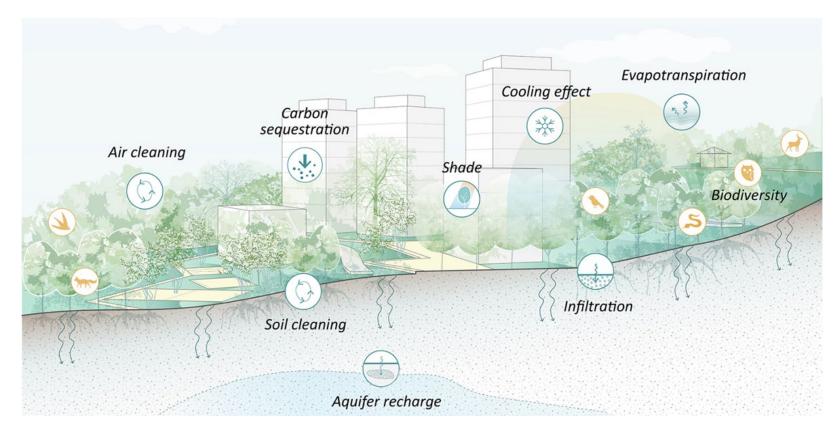
### Nature-based solutions

"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"

### European Commission definition

 Nature-based solutions must therefore benefit biodiversity and support delivery of a range of ecosystem services

# **Greening cities – some facts and figures**



Impact of greening cities on ecosystem services provides **a wide** range of benefits for improving well-being in cites:

- CO2 sequestration and storage: parks and (semi) natural urban green areas can store 32,6 kg CO2/m2
- Climate regulation: a 10% increase in tree canopy cover may result in a 3 – 4,8 °C decrease in ambient temperature
- Energy consumption reduction: green roofs can reduce heat penetration by up to 80%, reducing energy consumption by 2–17%
- Flood mitigation: 26 52 % of runoff retention for rainfall events
- **Source:** The World Bank, 2019; Raymond et al., 2017; Croci and Lucchitta, Bocconi University 2022

### **EUI-INNOVATIVE ACTIONS CALL 2 Testing innovative solutions for greening cities - essentials**

- Projects expected to experiment and deliver tangible innovative solutions on green and/or blue infrastructure across European cities, for better addressing biodiversity, pollution, resource and climate challenges, including synergy development with other key policy areas
- Innovative solutions tested are expected to contribute to Cohesion Policy investments related to green and just transition and will embrace issue of being affordable to all
- Topic contributes to several EU strategies, policies and initiatives, Urban Agenda for EU (Thematic Partnership Greening Cities) and New Leipzig Charter
- Projects expected to be embedded in existing strategic and systematic approaches towards greening and/or climate-neutrality of a city (e.g. Article 11 sustainable urban development strategies of Cohesion Policy, strategic plans of EU Missions on Cities and on Adaptation to Climate Change, etc.)

# **EUI-INNOVATIVE ACTIONS CALL 2 Testing innovative solutions for greening cities**

### **Prompts for urban authorities:**

- **Developing and enhancing urban green spaces** by focusing on projects that contribute to halting biodiversity loss, to verifiably and significantly reducing air pollution and to combatting heat waves, and at the same time, to achieving climate objectives and improving health and well-being of citizens.
- Constructing green mobility corridors with the help of green infrastructure within urban areas and between urban centres and peri-urban areas that contribute to reducing air and soil pollution and noise, using artificial intelligence for traffic management systems, promoting sustainable multimodal urban mobility including active mobility modes such as cycling, and at the same time, to achieving climate objectives and improving health and well-being of citizens.

# **EUI-INNOVATIVE ACTIONS CALL 2 Testing innovative solutions for greening cities**

### **Prompts for urban authorities (continued):**

- Preventing droughts and flooding via projects that focus on sustainable water management, including rainwater, in urban areas, with the help of green and/or blue infrastructure that contribute to preventing droughts and flooding as well as to improving water quality, and at the same time, to reducing disaster risks and land take.
- **Designing and renovating buildings and their surrounding areas**, particularly in socially deprived quarters by integrating green infrastructure and nature-based solutions in design and/or renovation of buildings and in their surrounding areas, including efficient resource management, also by using recycled construction material. Such solutions should improve energy efficiency and reduce greenhouse gas and air pollutant emissions of buildings, further contribute to achieving climate objectives through e.g. provision of climate adaptation and carbon storage and sequestration opportunities.

### **EUI-INNOVATIVE ACTIONS CALL 2** Testing innovative solutions for greening cities – horizontal

### When addressing above prompts:

 Projects expected to create multiple economic, social and environmental benefits, for example, by developing

> Healthier and more resilient urban environments, new business models and practices, novel approaches and tools for capacity building towards greener and more sustainable cities, for citizen engagement, and for greening city financing/budgeting practices

- Projects expected to integrate in their concepts measures that advance green energy transition and lead to a reduced dependency on fuel imports
- Projects expected to introduce measures that promote the transition to a circular and resource efficient economy



# **EUI-INNOVATIVE ACTIONS CALL 2 Testing innovative solutions for greening cities**

### **Bridging with Cohesion Policy:**

- Specific objective **2.1** for a greener Europe by "promoting energy efficiency and reducing greenhouse gas emissions",
- Specific objective 2.4 for a greener Europe by "adaptation to climate change promoting climate change adaptation and disaster risk prevention and resilience, taking into account eco-system based approaches"
- Specific objective **2.5.** for a greener Europe by "promoting access to water and sustainable water management"
- Specific objective 2.7 for a greener Europe by "Enhancing nature protection and biodiversity, green infrastructure in particular in the urban environment, and reducing pollution"
- Specific objective **2.8** for a greener Europe by "promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy"
- Specific objective **5.1** for a Europe closer to citizens by "fostering the integrated and inclusive social, economic and environmental development, culture, natural heritage, sustainable tourism and security in urban areas"

## **EUI-INNOVATIVE ACTIONS CALL 2 Testing innovative solutions for greening cities Indicators inspired from Cohesion policy to capture some of the multiple dimensions of greening cities**

### **Output indicators** (examples):

- Green infrastructure built for adaptation to climate change (*measurement unit:* hectares)
- Coastal strip, riverbanks and lakeshores, and landslide protection newly built or consolidated to protect people, assets and natural environment (*measurement unit:* hectares)
- People supported (trained, upskilled, accompanied or assisted) (*measurement unit:* persons)

### **Result indicators** (examples):

- Estimated greenhouse emissions (*measurement unit:* tonnes of CO2eq/year)
- Rehabilitated land used for green areas and protected biodiversity (*measurement unit:* hectares)
- Jobs created in supported entities (*measurement unit:* annual FTEs)

...NOT binding but <u>to be used when relevant to complete</u> your project proposals' specific indicators

# **Transforming our cities to green cities**

ARUP

Designing for planetary boundary cities



"Planetary boundaries signify the Earth's capacity to tolerate change and set out the science-based limits that must not be surpassed if the Earth is to remain hospitable for future generations"

https://www.arup.com/perspectives/publication s/research/section/planetary-boundaries

- Green city provides a good quality life of life for people, stays within limits of the planet and helps keep global warming well below 2°C threshold
- Transformation is a challenge that requires systemic change, bold leadership and strong commitment of action
- Greening cities offers enormous
  opportunities to create better future for everyone

Source: Prof. Lučka Kajfež Bogataj, University of Ljubljana – Conference on Green Cities in Malmö 14-15 June 2023 <u>https://swedish-</u> presidency.consilium.europa.eu/en/events/conferen <u>ce-on-green-cities-14-156/</u>

### **Examples of relevant knowledge sources**

### Urban Innovative Actions 2014-2020 projects on sustainable use of land and nature-based solutions

https://www.uia-initiative.eu/en/uia-cities

**Urban Innovative Actions 2014-2020 – Just Urban Transitions capitalisation activity – published reports** <u>https://uia-initiative.eu/en/just-urban-transitions</u>

#### Five ways URBACT makes cities greener

https://urbact.eu/whats-new/stories/five-ways-urbact-makes-cities-greener

Supporting sustainability transitions under the European Green Deal with Cohesion policy - toolkit for national and regional decision-makers (available in all EU languages)

https://ec.europa.eu/regional\_policy/information-sources/publications/guidelines/2020/supporting-sustainability-transitions-under-the-european-green-deal-with-cohesion-policy-toolkit-for-national-and-regional-decision-makers\_en

#### Urban Agenda for the EU – Thematic Partnership Greening Cities

https://www.urbanagenda.urban-initiative.eu/partnerships/greening-cities

#### **Recent!** Cities Forum 15-16 March 2023 in Turin – recording of sessions

(session 'Greening cities in the European Union: strategic approaches to address climate and environmental challenges') <a href="https://www.citiesforum2023.eu/en/recording">https://www.citiesforum2023.eu/en/recording</a>

#### Recent! EU Green Week 6 June 2023 – recording of sessions

https://webcast.ec.europa.eu/eu-green-week-2023-06-06/6480

### **Urban Greening Platform**

https://environment.ec.europa.eu/topics/urban-environment/urban-greening-platform\_en

#### **Knowledge Centre for Biodiversity**

https://knowledge4policy.ec.europa.eu/biodiversity\_en

#### Urban Sustainability at European Environmental Agency

https://www.eea.europa.eu/en/topics/in-depth/urban-sustainability

### **European Climate Adaptation Portal**

climate-adapt.eea.europa.eu

### **New!** Urban Governance Atlas - interactive online database of over 250 good practice policy instruments supporting nature-based solutions and ecosystem restoration

https://interlace-hub.com/urban-governance-atlas

### URBANGREENUP displaying dozens of nature-based solutions <a href="https://www.urbangreenup.eu/solutions/">https://www.urbangreenup.eu/solutions/</a>

**Oppla - EU Repository of Nature-Based Solutions** https://oppla.eu **EU Mission on Climate-neutral and Smart Cities – mission platform** <u>https://netzerocities.eu/</u>

**EU Mission on Adaptation to Climate Change – portal** <u>https://climate-adapt.eea.europa.eu/en/mission</u>



New! https://www.eib.org/en/publications/all/

# Thank you for your attention! More information at:

*urban-initiative.eu/innovative-actions-greening-cities* 

