Multisolving polycrises in cities through partnerships for urban nature

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Session 9: Means of implementation and the global partnership

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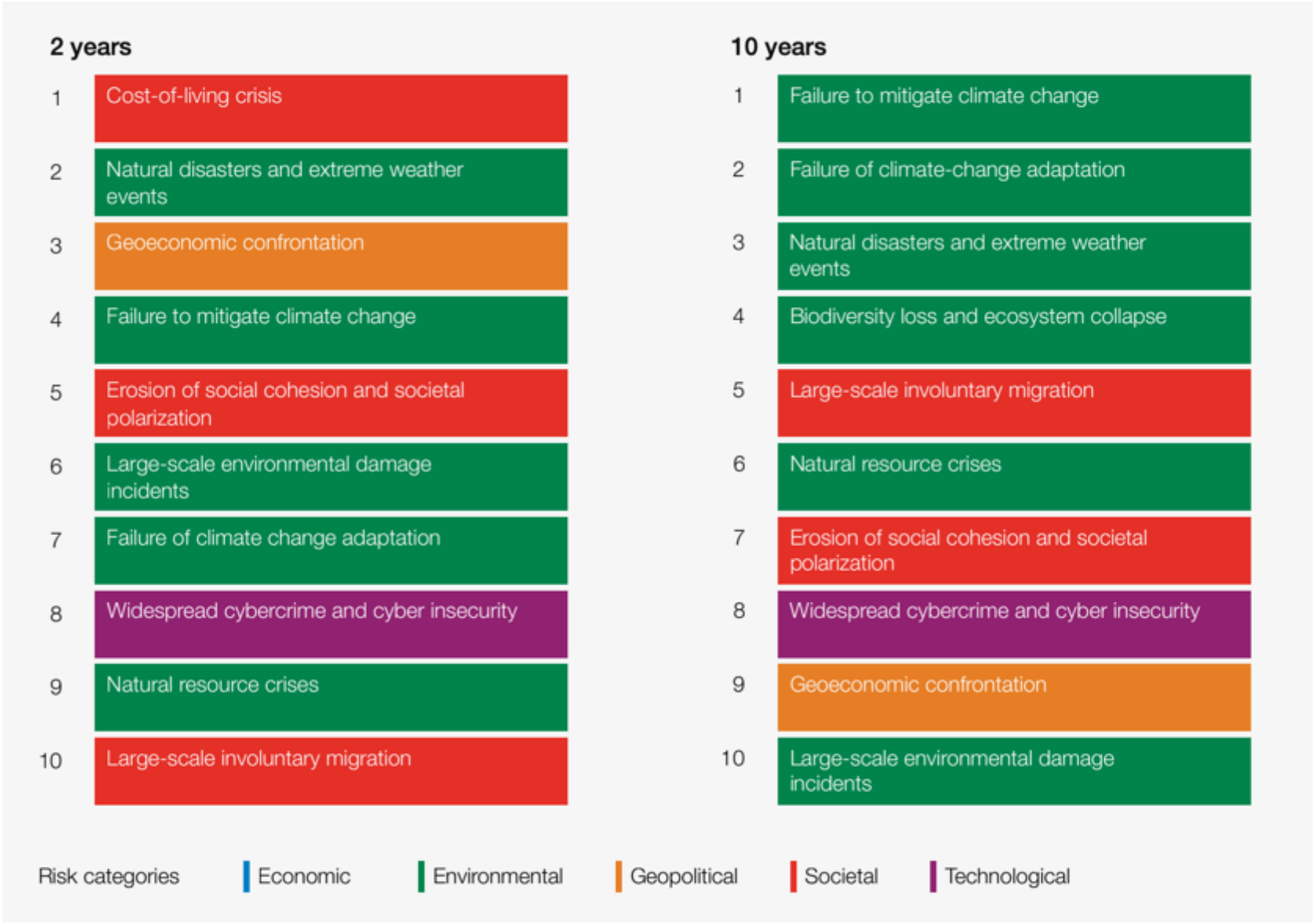
Outline

- The global risk landscape – the larger context of MoI in cities
- What is a polycrisis and how it applies to cities?
- What is multisolving and why is it relevant?
- How can nature based solutions help?
- How can partnerships contribute to implementation?
- Example from the Urban Nature Atlas
- Urban Nature Explorer – scenarios for multisolving with NBS

The global risk landscape: Perception of short and long-term priorities

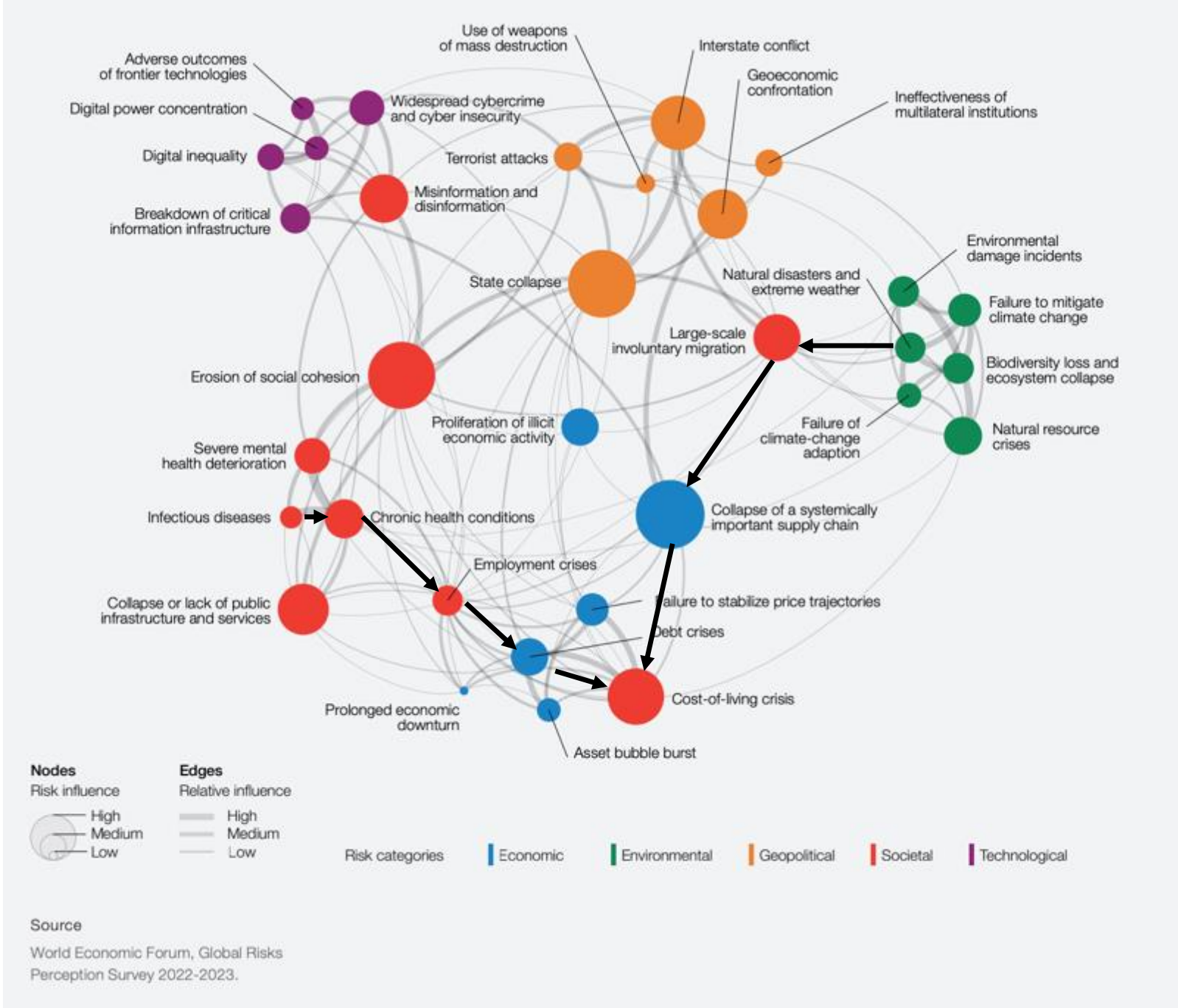


Source
World Economic Forum Global Risks Perception Survey 2022-2023.

Polycrisis criteria (LP)

- Sudden, unexpected
- Severe, significant impacts
- Diverse but coincidental pathways
- Complex, systemic interlinkages
- Beyond immediate adaptive capacity
- Potential for irreversible disruption
- Socio-cultural/psychological and political repercussions
- …?

The global risk landscape: Interconnections



Source

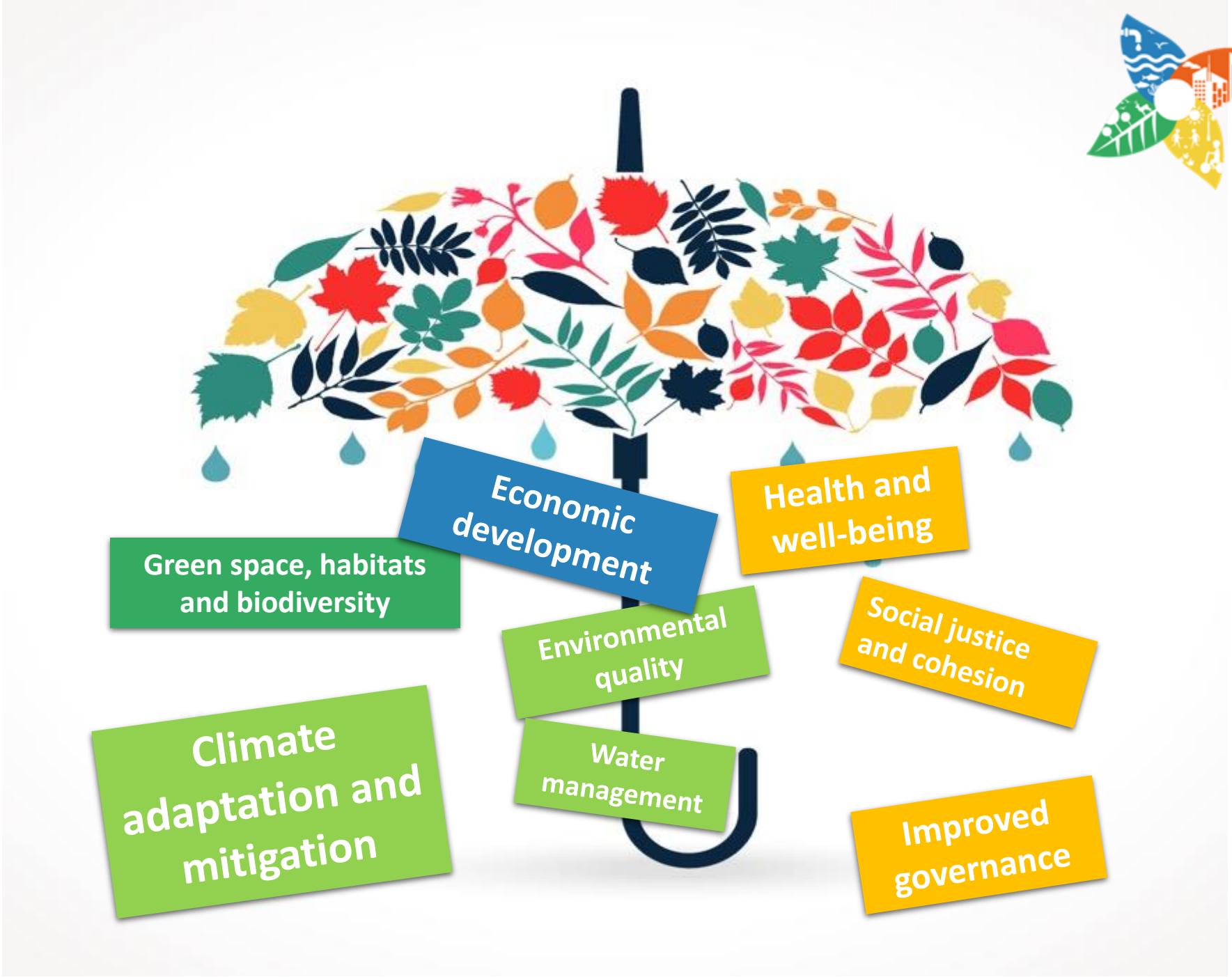
World Economic Forum, Global Risks Perception Survey 2022-2023.

Multisolving

- “Multisolving is a growing movement around the world. When people work together across sectors to address multiple problems with one policy or investment, they are multisolving” (Multisolving Institute)

- “Multi-solving—working across sectors to address multiple challenges with one policy or investment—accomplishes more with the same budget and aligns constituencies for greater impact. … Multisolving already exists in countless communities across local and global scales.” (Community Commons)

Nature-Based Solutions can *simultaneously* address multiple sustainability challenges



NSB relevance for SDGs

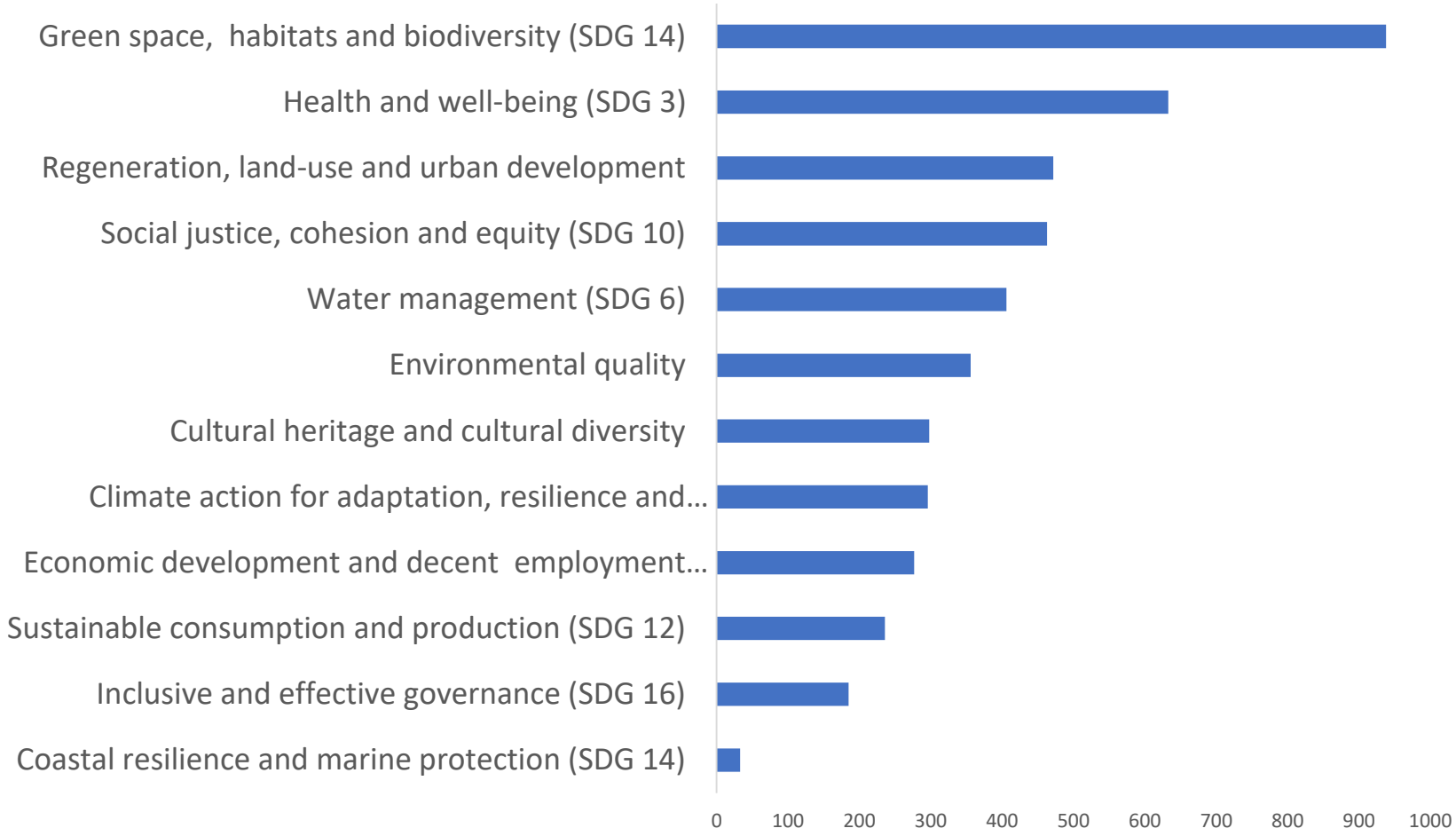
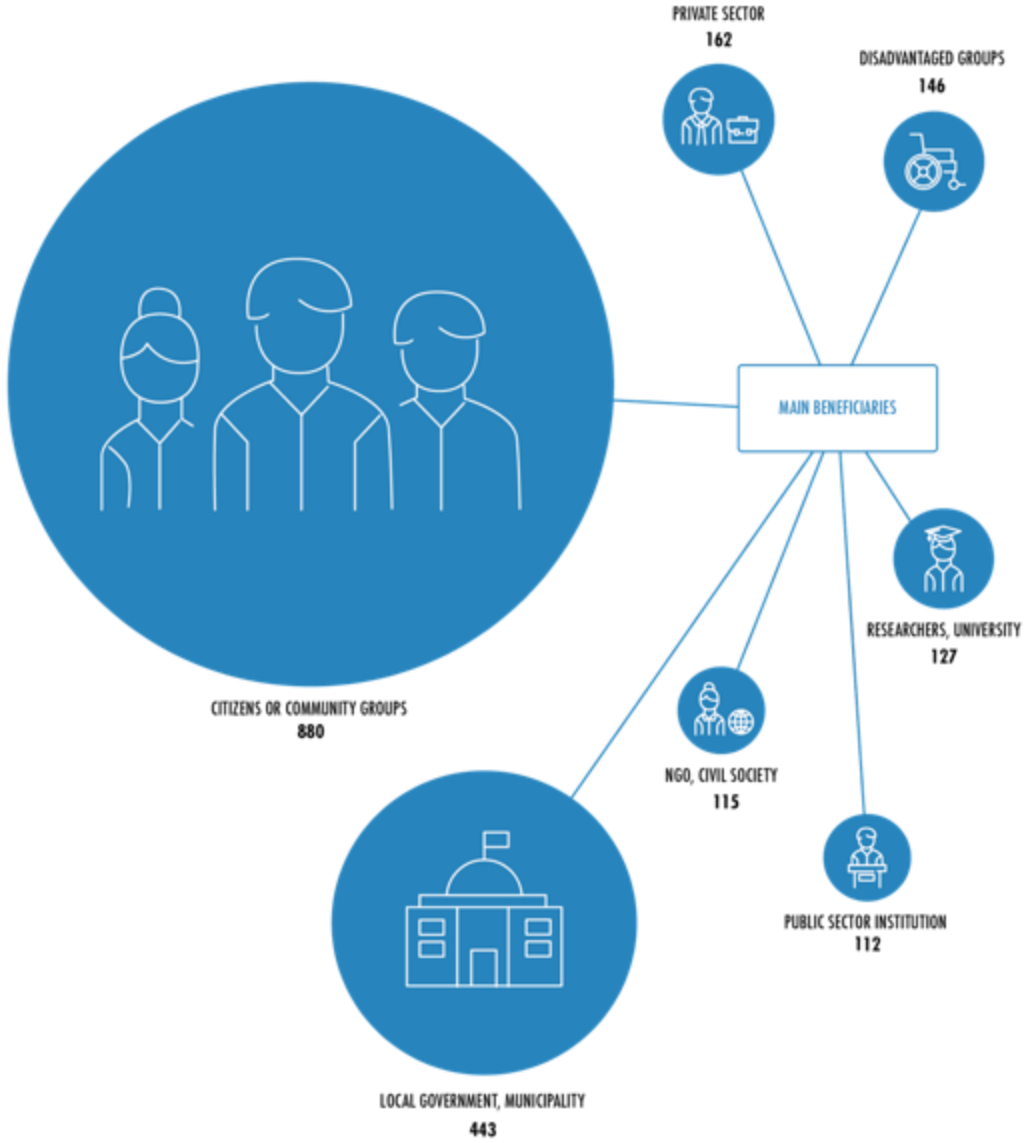
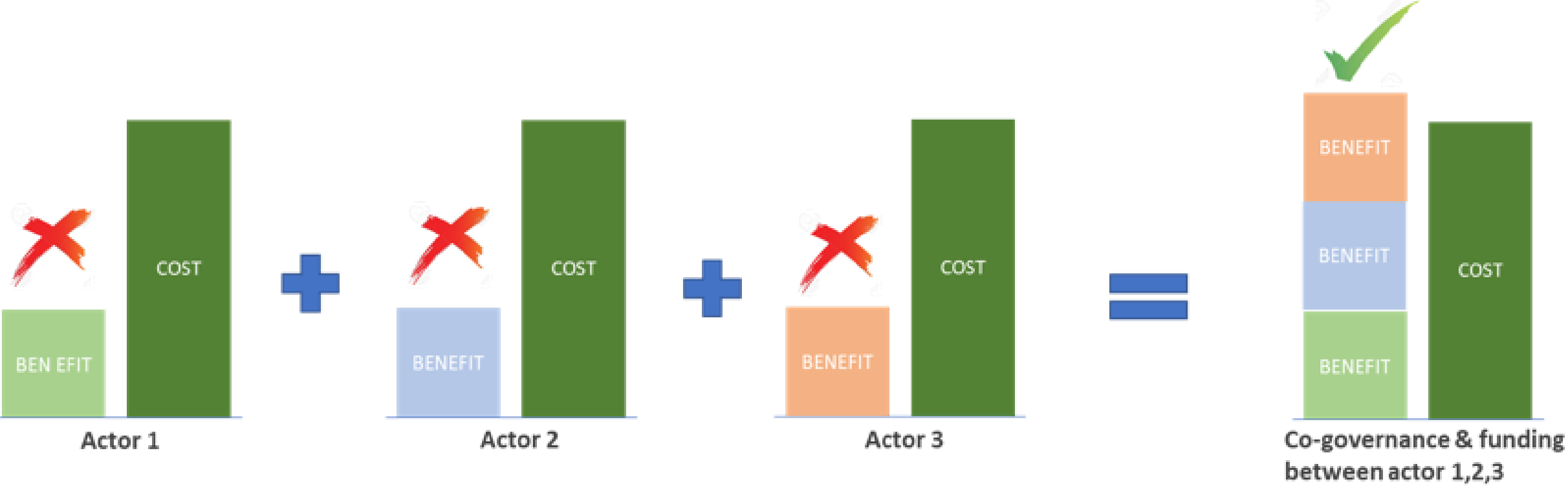


Figure 1. Sustainability challenges addressed by NBS in the Urban Nature Atlas.

Beneficiaries



Source: Urban Nature Atlas, una.city



NBS benefits – rationale for partnerships in implementation

- Urban NBS deliver multiple benefits; the ownership of these benefits is scattered between different actors
- Leads to 2 coordination problems:
    1. Valuation of **multiple benefits** (budget often earmarked for one benefit)
    2. Collaboration between **multiple actors** to co-fund and each reap benefits
- Calls for an **integrative business case** – of benefits and actors
- Need for **investment template** that recognizes value of relevant benefits

Source: Naturvation

Example: Resilient Rosario

Rosario, Argentina

City population: 1553530

Duration: 2001 – ongoing

Implementation status: Ongoing

Scale:
Micro-scale: District/neighbourhood level

Project area: unknown

Type of area:
Agricultural area, Previous derelict area, Residental, Public Greenspace Area

Source: Urban Nature Atlas, una.city

Rosario suffers from floods and the urban heat island effect, both of which have been exacerbated due to climate change. Photo by the Municipality of Rosario

Source: https://thecityfix.com/blog/rosario-argentina-uses-urban-farming-to-tackle-economic-and-climate-crises/

Many parallel needs and challenges!

- Climate change mitigation
- Flood protection
- Green space creation and/or management
- Soil quality improvement
- Social justice and equity
- Environmental education
- Economic development: agriculture
- Employment/job creation

- Urban and peri-urban agriculture
- Support for family gardens in vacant land, tax exempt
- Urban farming classes
- New market to sell local produce
- Vegetable Gardens Parks

Implementation measures

Multiple impacts

Environmental

- Reduced emissions
- Increased green space area
- Increased conservation or restoration of ecosystems
- Increased conversion of degraded land or soil

Economic

- Increase of jobs
- Increase in agricultural production (for profit or not)
- Generation of income from NBS

Socio-cultural

- Social justice and cohesion
- Fair distribution of social, environmental and economic benefits of the NBS project
- Increased access to healthy/affordable food

Implementation partnership

Management set-up

- Co-governance with government and non-government actors

Type of initiating organisation

- Local government/municipality
- Non-government organisation/civil society
- Citizens or community group

Participatory approaches/ community involvement

- Co-planning
- Dissemination of information and education
- Consultation (e.g. workshop, surveys)
- Joint implementation (e.g. tree planting)
- Co-management/Joint management
- Citizen oversight (e.g. boards, advisory)

Implementation financing

Total cost

Less than €10,000

Source(s) of funding

- Public local authority budget

Type of funding

- Earmarked public budget

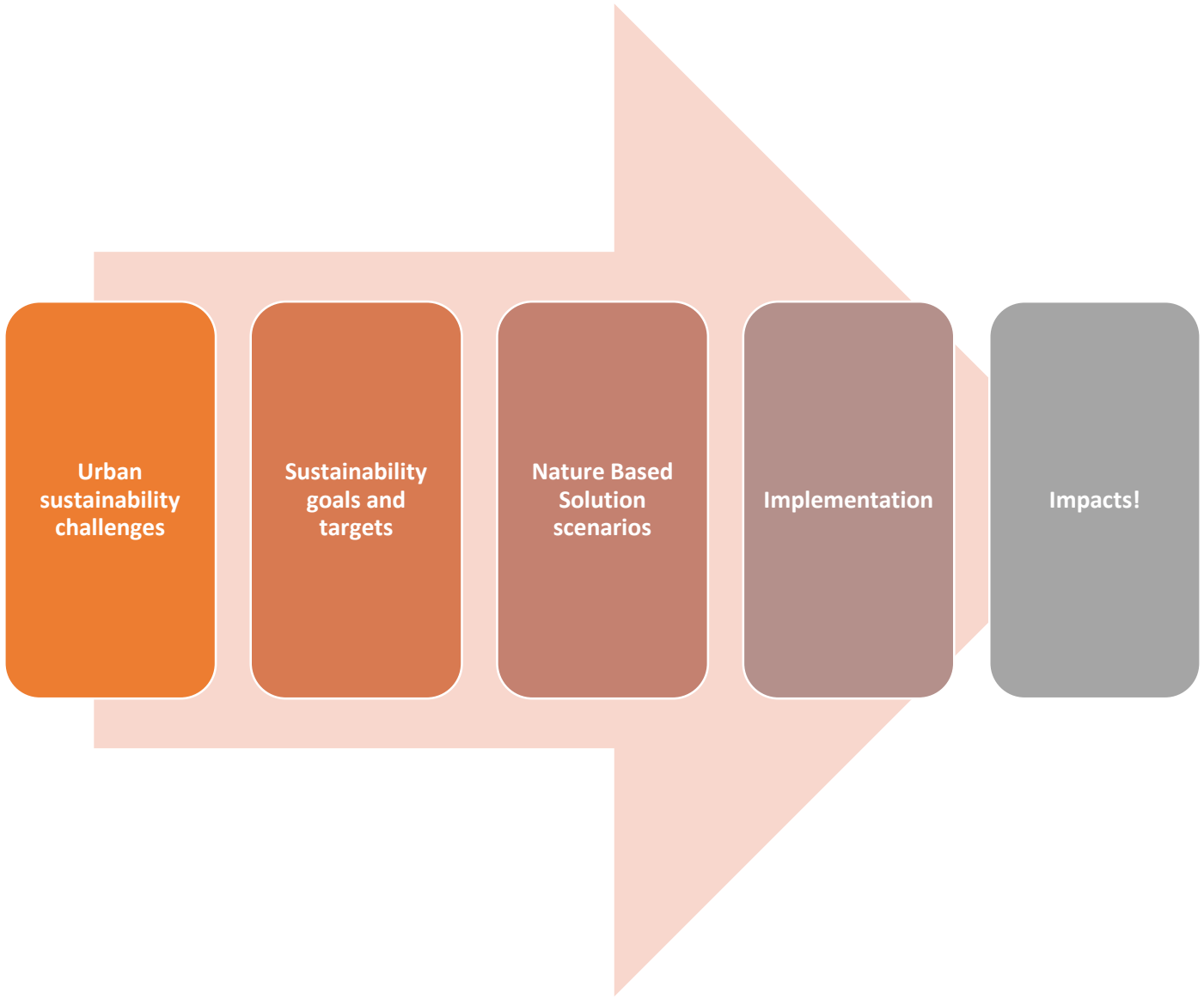
Non-financial contribution

Type of non-financial contribution

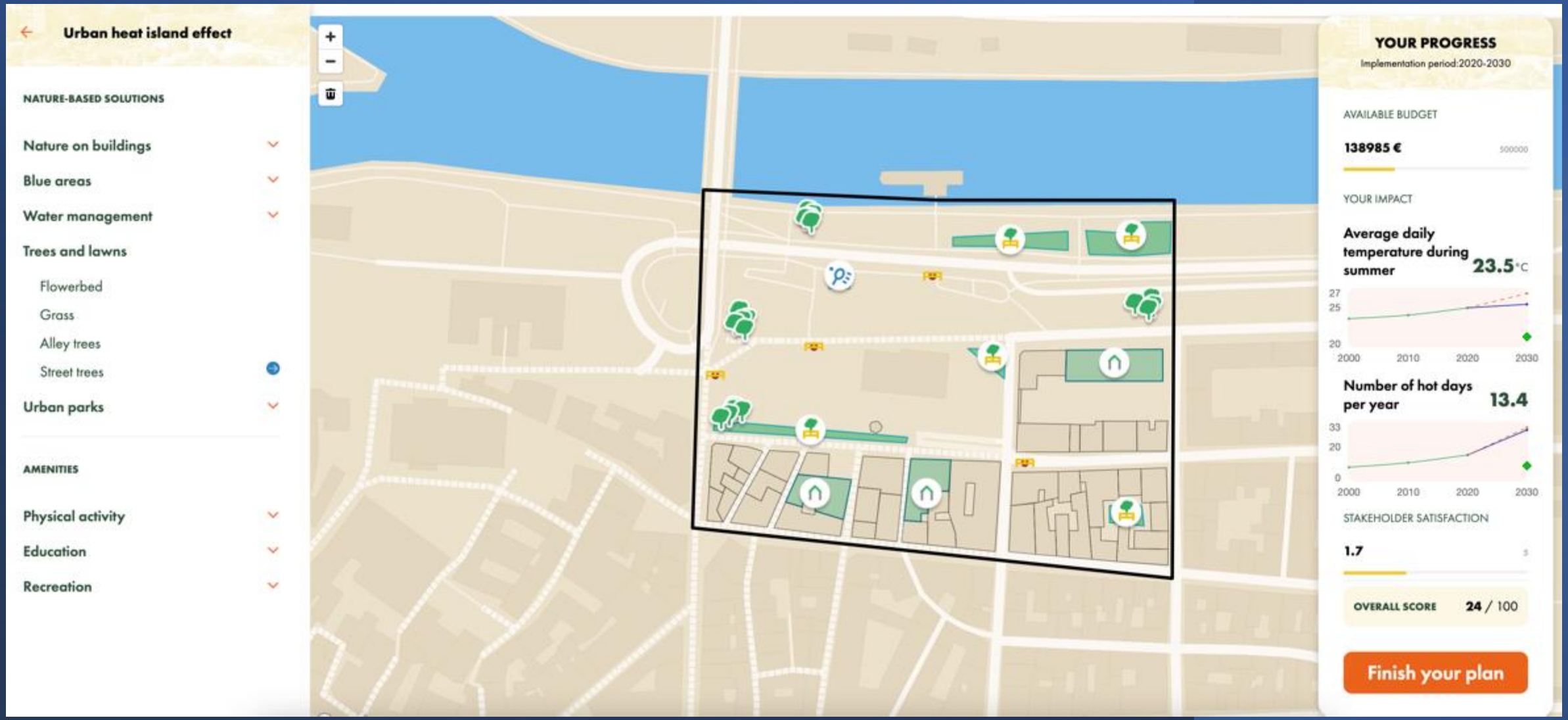
- Provision of land
- Provision of goods
- Provision of labour
- Provision of expertise
- Exchange of services

Who provided the non-financial contribution?

- Public authorities (e.g. land, utility services)
- Citizens (e.g. volunteering)



Urban Nature Explorer: Decision support tool to help participatory NBS scenario development in any urban context



Source: urbannatureexplorer.com

Permeable surface

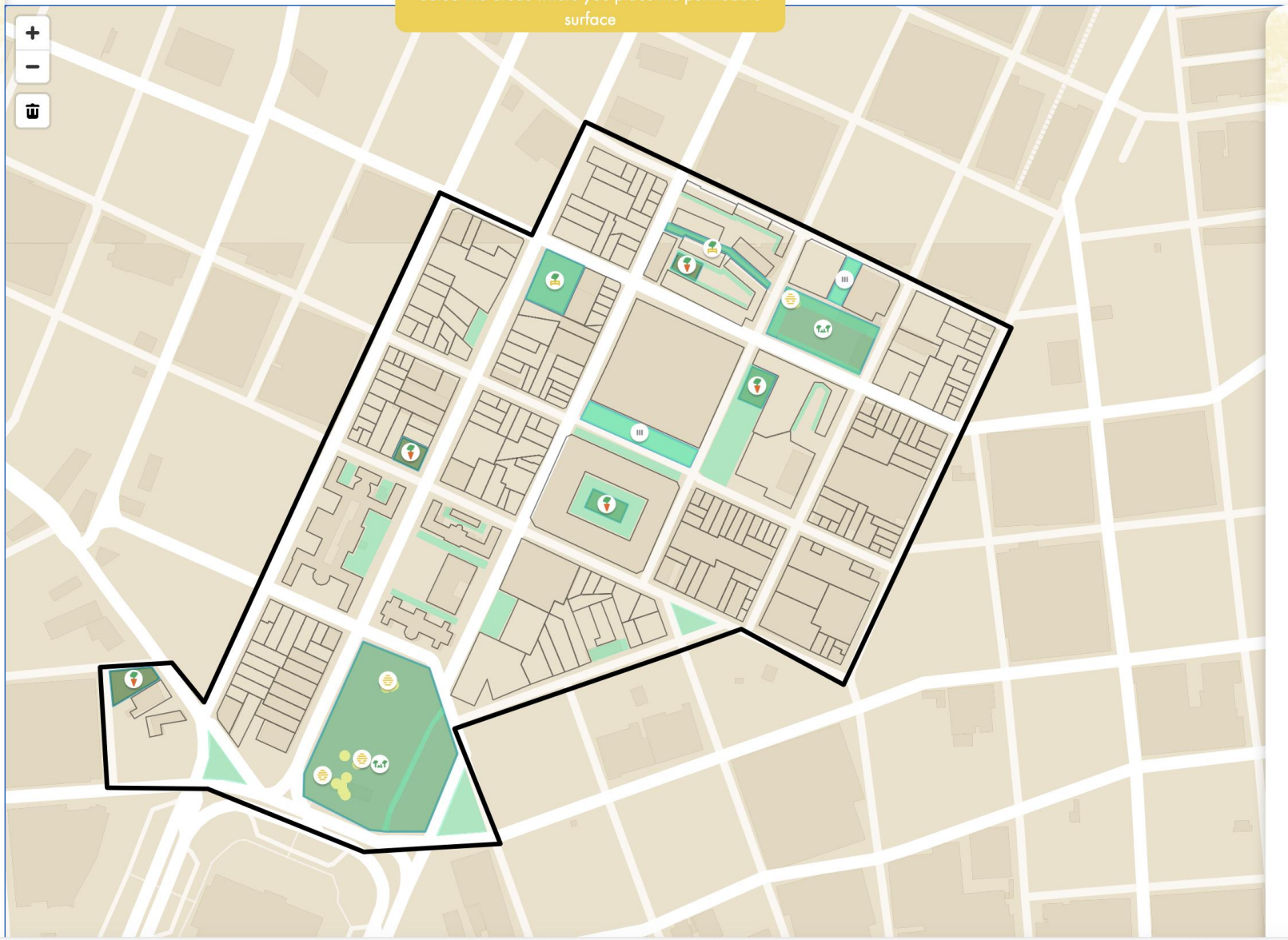
Replacement of non-porous materials (e.g. concrete) from grey infrastructural paths or roads, with more permeable materials to improve water drainage and infiltration.

Cost per m2: 69 €

Maintenance cost per m2 1 €

Stop deploying

Select the areas where you place the permeable surface



YOUR PROGRESS

Implementation period:2022-2040

AVAILABLE BUDGET

1660741 € 2000000

DISTANCE TO TARGET

20.0 %	AVERAGE DAILY TEMPERATURE DURING SUMMER DAYS
23.3 %	NUMBER OF HOT DAYS ABOVE 31 °C PER YEAR
26.6 %	ACCESS TO GREEN SPACE
31.0 %	AVAILABILITY OF HIGH-QUALITY GREEN SPACE
31.2 %	RUNOFF RETENTION
5.0 %	REDUCTION OF EXTREME FLOODING EVENTS
13.5 %	AVERAGE HABITAT QUALITY
21.3 %	POLLINATOR SUPPLY

STAKEHOLDER SATISFACTION

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NATURVATION
cities – nature – innovation

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www.naturvation.eu
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