

# Kick-off Cities Engagement

## Nature Science-Based Targets for Cities Program

May 16, 2024



SCIENCE BASED TARGETS NETWORK  
GLOBAL COMMONS ALLIANCE





# Cities Program Manager

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# Welcome

## Program goal

Develop an overarching guideline **for cities** to set Science-Based Targets for Nature

## We invite you to collaborate with us

- Align outcomes with current needs and challenges
- Integrate on the ground-perspective and validation
- Build on existing knowledge and lessons learned



# Today's agenda

- 01** Introductions
- 02** Why do we need targets for nature?
- 03** Program objectives and approach
- 04** Nature Policy context
- 05** Selection of pilot themes and indicators
- 06** Next steps







# Introduction



# What is the SBTN, Its vision & mission?



**What:** [The Science Based Targets Network](#) (SBTN) is a collaboration of scientists and sustainability experts from over 80 leading organizations: global environmental non-profits, international agencies and mission-driven entities.



**Vision:** To enable a global economy in which companies and cities operate within environmental boundaries on a socially equitable basis, through implementing science-based targets (SBTs) that reduce and improve their impact on nature and society.



**Mission:** The Science Based Targets Network aims to set the bar for ambitious measurable action on nature, which includes and builds upon climate action.



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# Consortium



WORLD  
RESOURCES  
INSTITUTE

ARUP

WORLD  
ECONOMIC  
FORUM



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# Core team



**Guillermo Dekker**



**Thomas Rieff**



**Jonathan Aronson**



**Jennifer Rae Pierce**



**Maitreyi Koduganti**



**Laura Costadone**



**Anushri Tiwari**



**Ricardo Gomez  
Zamudio**



**Eric Hubbard**

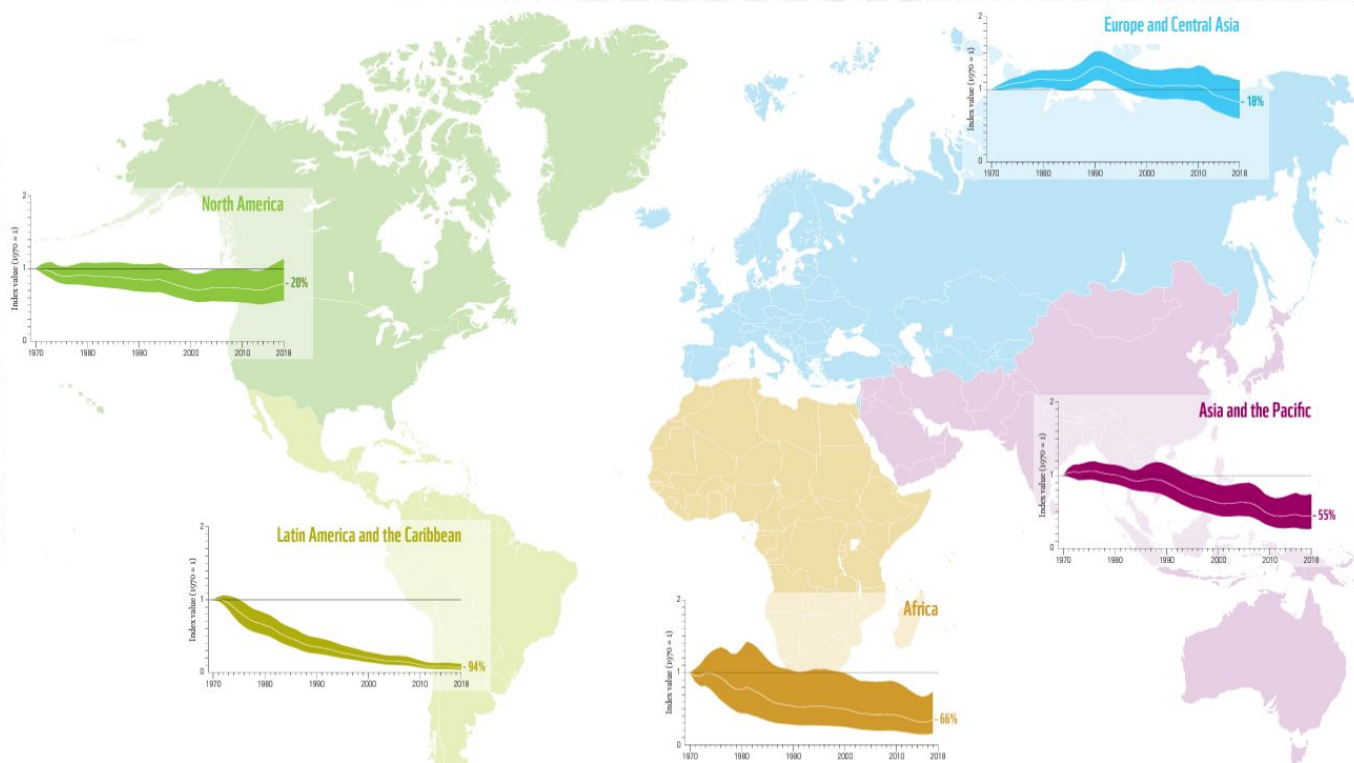


# Why do we need targets for nature?





# State of nature and biodiversity



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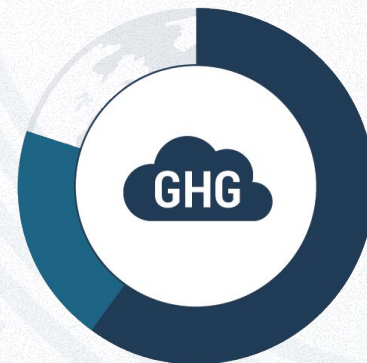
# Cities as leverage points for nature



**Cities occupy 3% of global  
land surface**



**But consume 75% of  
global resources**



**& product 60–80% of global  
greenhouse gas emissions**



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# Why should cities set targets for nature?



## Healthy ecosystems

- Improving the state of nature and biodiversity
- Supporting ecosystem services that we depend on for our health, livelihoods and survival.



## Wellbeing and quality of life

- Urban green, reduced urban heat islands and clean water and air improve the overall health and wellbeing of citizens.
- Green spaces provide opportunities for recreation and support of a high quality of life

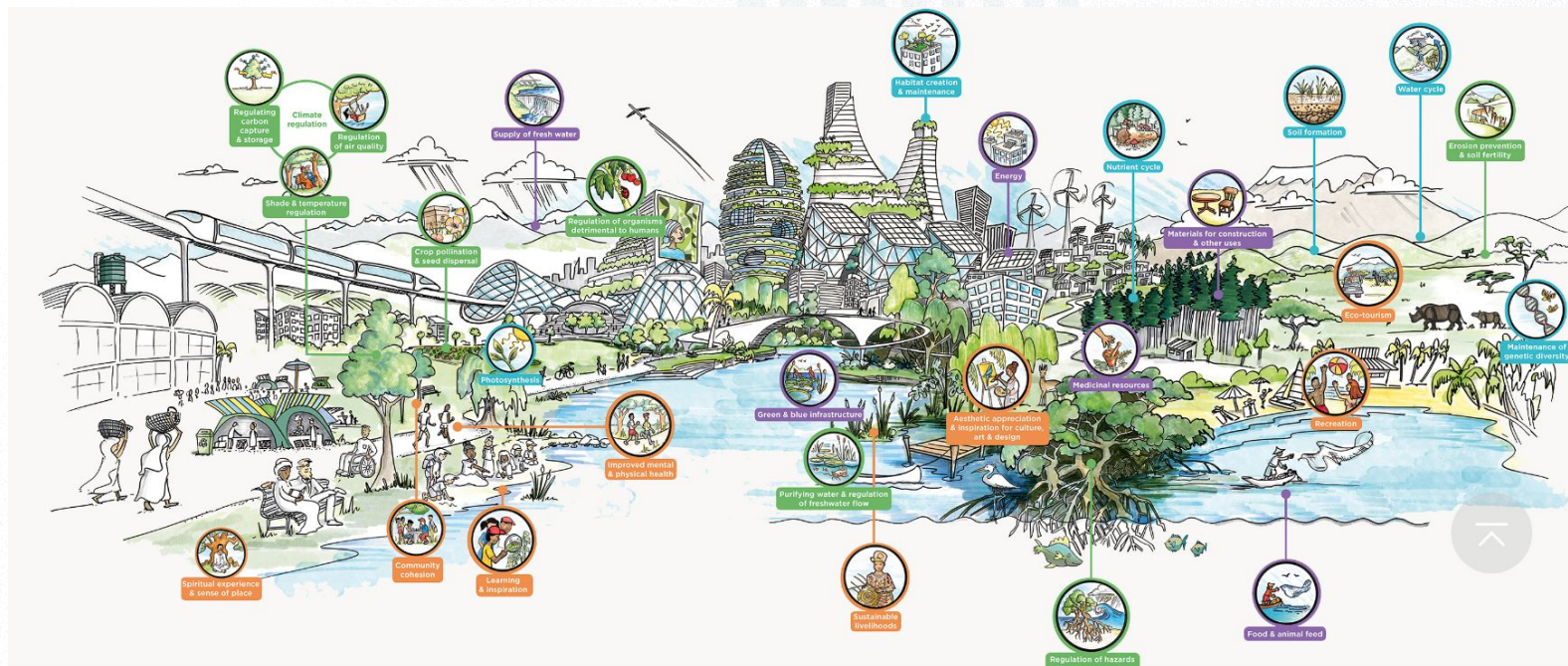


## Thriving Economy

- Greener cities are more livable and attractive for tourism
- Building resilience and reducing climate risks supporting a steady economy
- Nature positive investment have great economic potential in job creation



# Nature's contributions to People CitiesWithNature



Tangible things from nature that meet human needs



Benefits obtained from processes that regulate natural environment



Nature's gifts that enrich our lives



Supporting the long-term health of the planet



# Challenges for target setting

1

Cities are confronted with options for addressing negative ecological impacts, but **guidance on how to choose among them is lacking.**

2

**Application of existing frameworks to the diversity of city contexts is challenging,** resulting in cities commonly having to invent their own approach.

3

Cities need legitimate ways to assess their own impact areas and to **set feasible yet meaningful targets** so they are set up for success.







# **Program objectives and approach**

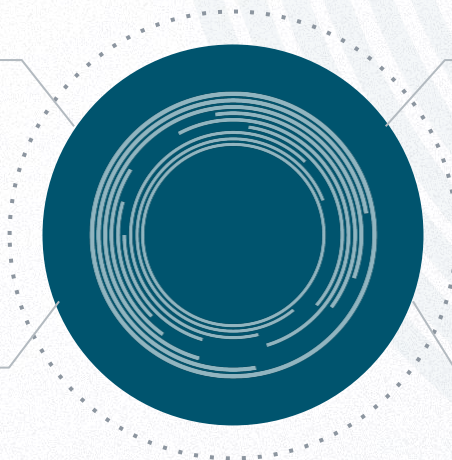


# Objectives and outcomes

The objective of the program is to create an **holistic science-based target framework** that covers the impact of cities on both climate and natural systems.

Providing cities with an **overarching guideline** making it easy to navigate and select the most appropriate methodologies for target setting

**Building upon** existing research, experience, and efforts



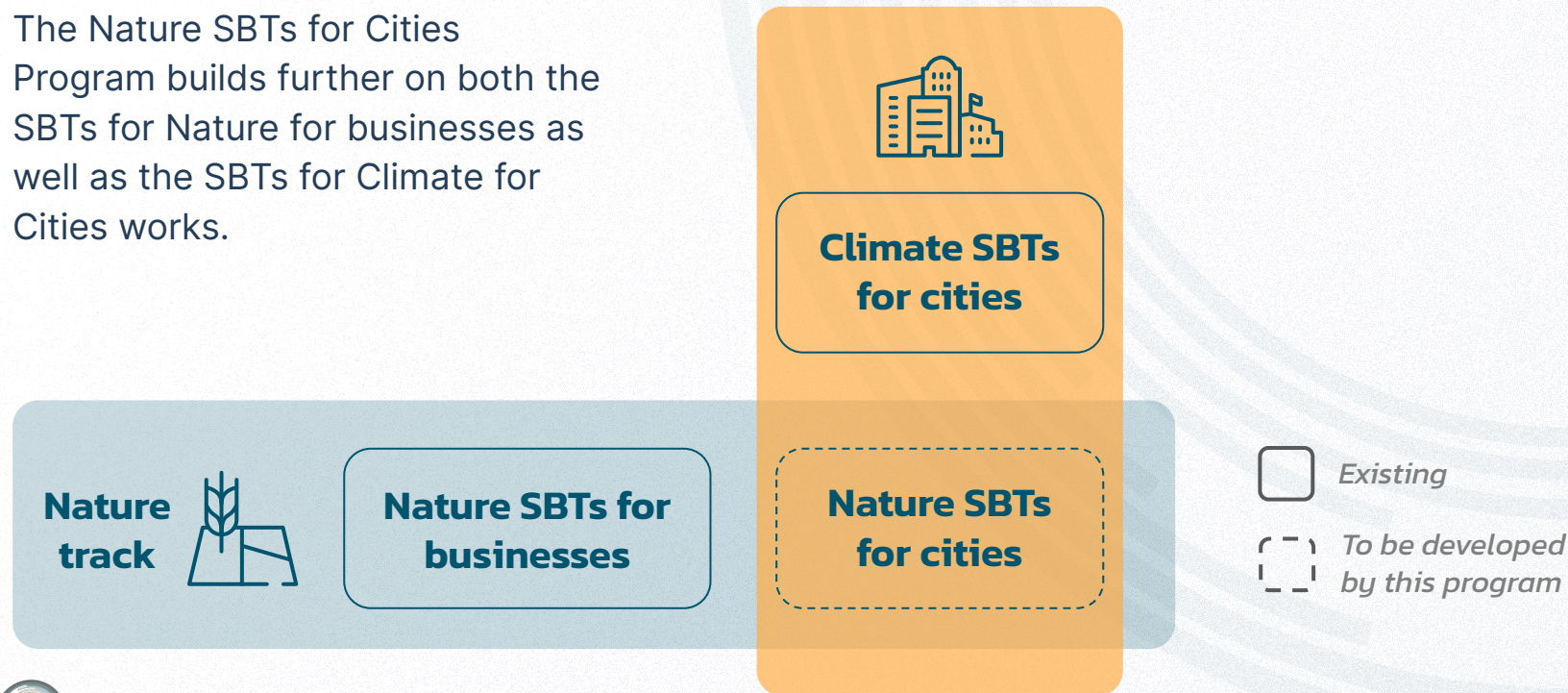
Developing a feasible and actionable **methodology**

**Flexible guidance** aligning with cities priorities and contexts



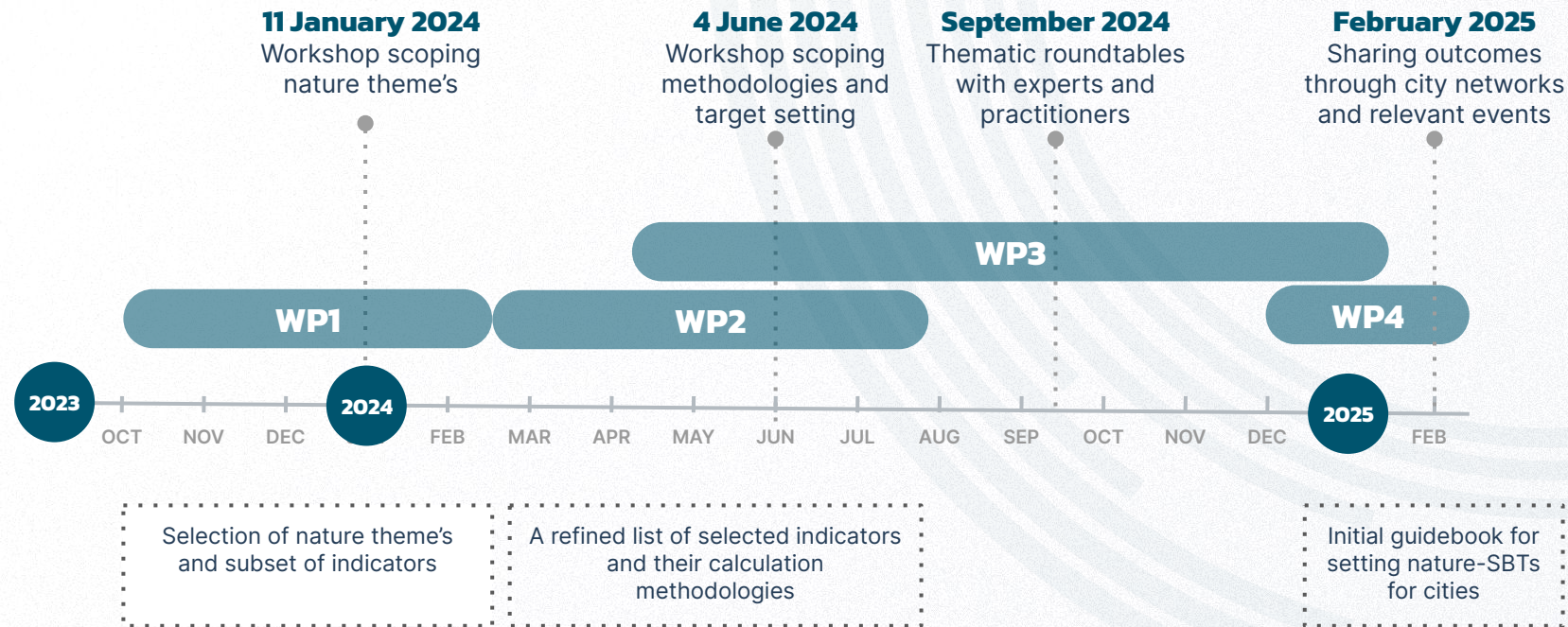
# SBTN frameworks

The Nature SBTs for Cities Program builds further on both the SBTs for Nature for businesses as well as the SBTs for Climate for Cities works.





# Timeline





# Nature Policy context



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# Why take action to protect nature?

(including making agreements,  
and setting indicators and targets)?

- **Bottom-up goals** driven by residents, cities, & regions
- Middle space: (SBTs for Nature for Cities work)
- **Top-down goals** in international diplomacy (UN)  
*Can create global standards and momentum for action*
- *Legally-binding agreements* from the United Nations Convention on Biological Diversity (UN CBD)
- Conference of the Parties (COP): Signatories to the CBD meet every 2 years to make global decisions on biodiversity
- Previous: **COP15**: Dec 2022  
Outcome: **Global Biodiversity Framework (GBF)**  
(i.e., "The Biodiversity Plan"). Parties aim to meet:
  - 4 Goals for 2050
  - 23 Targets for 2030
- Upcoming: **COP16**: Oct-Nov 2024 in Colombia
- SBTs for Nature for Cities work can help to incorporate and reach the goals and targets of the GBF (complementarity)



Convention on  
Biological Diversity





# COP15: 7<sup>th</sup> Summit for Subnational Governments and Cities & Pavilion

- ✓ Historic global milestone to welcome significantly strengthened contributions from subnational governments and cities to the new post-2020 global biodiversity framework (GBF)
- ✓ Co-hosted by ICLEI, the Secretariat of the Convention on Biological Diversity (SCBD) and Regions4, along with the host Government of Québec and the City of Montréal and with the support and engagement of the Province of Yunnan and the City of Kunming
- ✓ Significant mobilization of & commitment by cities & subnational governments

1500+ registered & participating delegates  
200+ subnational & local government leaders  
300+ cities and regions from 70+ countries around the world  
450+ global, regional & local organizations & partners  
80+ speakers contributing to a rich and diverse program over two days





# Overview of the Kunming-Montreal Global Biodiversity Framework

## CBD/COP/DEC/15/4 Kunming-Montreal Global Biodiversity Framework

Four long-term goals by 2050

**23 action-oriented global targets** to be initiated immediately and completed by 2030.

Together, the results will enable achievement towards the outcome-oriented goals for 2050.



## 4 GOALS

- a) Halting human-induced extinction of threatened species and reducing the rate of extinction of all species tenfold by 2050;
- (b) Sustainable use and management of biodiversity to ensure that nature's contributions to people are valued, maintained and enhanced;
- (c) Fair sharing of the benefits from the utilization of genetic resources, and digital sequence information on genetic resources; &
- (d) Adequate means of implementing the global biodiversity framework be accessible to all Parties.

***\*Important for alignment in the SBTN work\****



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## 23 TARGETS

- Reducing threats to biodiversity
- Targets 1 - 8
- Meeting people's needs through sustainable use and benefit-sharing;
- Targets 9 – 13
- Tools and solutions for implementation and mainstreaming
- Targets 14 - 23

***\*Important for alignment in the SBTN work\****  
**GBF targets 1,2,3,4,10,11,12,14,19,& 22**  
**connect to the selected pilot theme of:**  
**Land Use Development and Sprawl**



# Overview of the Kunming-Montreal Global Biodiversity Framework

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## Some key Considerations for the implementation of the Kunming-Montreal Global Biodiversity Framework

- Whole of Government & Whole of Society approach
- Contribution and rights of indigenous peoples and local communities
- Right to development
- Human Rights-based Approach
- Gender equality & empowerment

***\*Important for alignment in the SBTN work\****  
**Emphasis on equity and justice**



# COP15: Decisions adopted at COP15 and directly relevant to local & subnational gov'ts [incl. cities]



**CBD/COP/DEC/15/4** Kunming-Montreal Global Biodiversity Framework

**CBD/COP/DEC/15/5** Monitoring framework of the GBF

**CBD/COP/DEC/15/6** Mechanism for planning, monitoring, reporting and reviewing

**CBD/COP/DEC/15/7** Resource mobilization

**CBD/COP/DEC/15/8** Capacity-building and development and technical and scientific cooperation

**CBD/COP/15/12** Engagement with subnational governments, cities and other local authorities to enhance implementation of the post-2020 global biodiversity & Plan of Action (2022-2030)

**CBD/COP/15/27** Invasive alien species

**CBD/COP/15/24** Conservation and sustainable use of marine biodiversity

**CBD/COP/15/28** Biodiversity and Agriculture

**CBD/COP/15/29** Biodiversity and Health

All decisions from COP15 can be found on  
[www.cbd.int/conferences/2021-2022/cop-15/documents](http://www.cbd.int/conferences/2021-2022/cop-15/documents)



# Decision 15/4 Kunming-Montreal Global Biodiversity Framework: 2030 Targets relevant to cities

## CBD/COP/DEC/15/4 Kunming-Montreal Global Biodiversity Framework

The framework's four long-term goals by 2050

The framework has **23 action-oriented global targets** to be initiated immediately and completed by 2030.

Together, the results will enable achievement towards the outcome-oriented goals for 2050.



With direct reference to urban and densely populated areas

**Target 12** urges for increasing the area, quality and connectivity, and improving access to and benefits from green and blue spaces in urban areas. This can be achieved by mainstreaming the conservation and sustainable use of biodiversity at all local decision making and urban planning.

**Target 14** aims to ensure that biodiversity issues are integrated into policies, regulations, planning and different strategies within and across all levels of government to make cities and regions more livable places.

***\*Important for the SBTN selected pilot theme: Land Use Development and Sprawl***

# Decision 15/4 Kunming-Montreal Global Biodiversity Framework: 2030 Targets relevant to cities

## CBD/COP/DEC/15/4 Kunming-Montreal Global Biodiversity Framework

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Targets where cities can make contributions based on their mandates and roles, even though this is not specifically recognized in the decisions.

**Target 7:** Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects

**Target 11:** Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.



# Decision 15/4 Kunming-Montreal Global Biodiversity Framework

## Framework: 2030 Targets relevant to cities



### CBD/COP/DEC/15/4 Kunming-Montreal Global Biodiversity Framework

The framework's four long-term goals by 2050

The framework has **23 action-oriented global targets** to be initiated immediately and completed by 2030.

Together, the results will enable achievement towards the outcome-oriented goals for 2050.



**Target 2:** Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

**Target 3:** Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

# How can cities & subnational governments support GBF implementation?



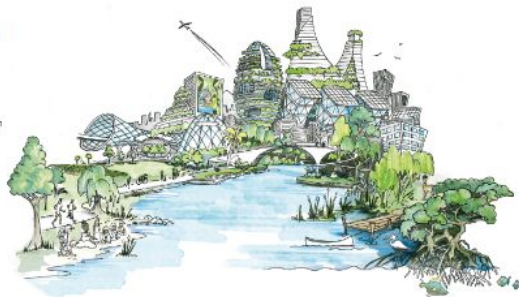
- **Align priorities & actions** on biodiversity & ecosystem restoration with National Biodiversity Strategy & Action Plans
- Prioritise & **implement projects**, programmes & measures that **contribute to GBF targets**: e.g. 2, 3, 7, 11, 12 & 14
- **Mainstream biodiversity** considerations into **land use & spatial plans and decisions on infrastructure delivery** (ecological infrastructure)
- Apply **Nature-based solutions & ecosystem-based approaches** to address urban challenges
- **Collaborate with national governments** to develop action plans to implement that POA, & encourage them to identify, enhance and disseminate policy tools, guidelines, financial mechanisms or instruments, & programmes that will facilitate local action on biodiversity & build capacity of cities & subnational governments



## How is your city taking **action** for nature?

What cities do for nature really matters. For healthier, happier and more resilient cities. For people and nature nearby and far away. On this Action Platform you can showcase your city's actions and plans, understand how they contribute to global nature goals and easily track your city's achievements.

Join CitiesWithNature



**208** Total actions taken

**17** Participating cities



Make  
a commitment

Share your city's actions



Learn more about  
the Action Platform

Let's go



How do cities  
contribute to global  
nature goals?

Learn more

### Who is taking action?



City of Cape Town  
Metropolitan  
Municipality  
Western Cape - South Africa



City of San Antonio, TX  
Texas - United States

### Commitments per action area



**208**

Total actions taken

# Plans to support national governments – NBSAP implementation & Reporting

CitiesWithNature & RegionsWithNature online platforms - local & subnational governments can report on, & track progress against, their commitments to contributing to the implementation of the GBF (recognized in action area 7 of the Plan of Action)

Aligned with GBF's 2030 Action Targets – interprets the global targets to what is relevant to local governments

Cities actions can feed into National Reports to CBD

# How can the SBTs for Nature for Cities process align with the UN CBD & GBF?



- Reflect and consider the **GBF goals & targets**
- Align with **National Biodiversity Strategy & Action Plans (NBSAPs)**
- Pay attention to and incorporate the ongoing development of **headline, component, and complementary indicators** that signatory Parties must meet (UN CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) process)



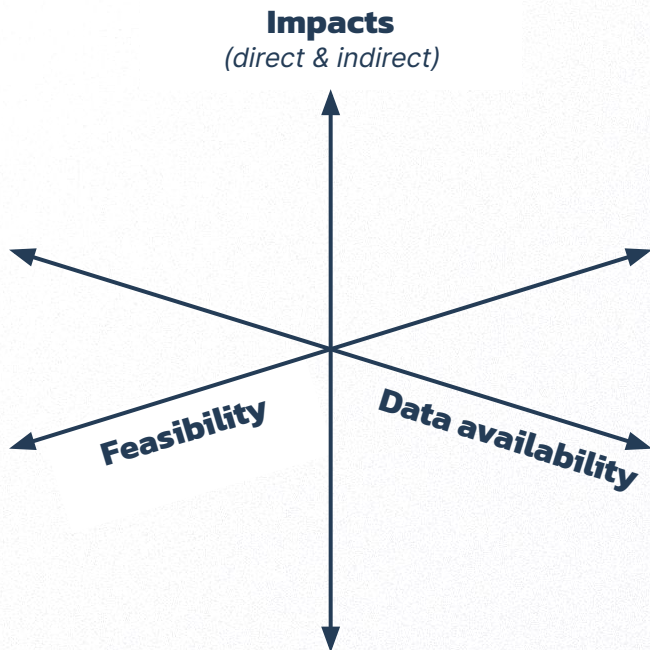




# **Selection of pilot theme and indicators**



# Methodology: Core Principles



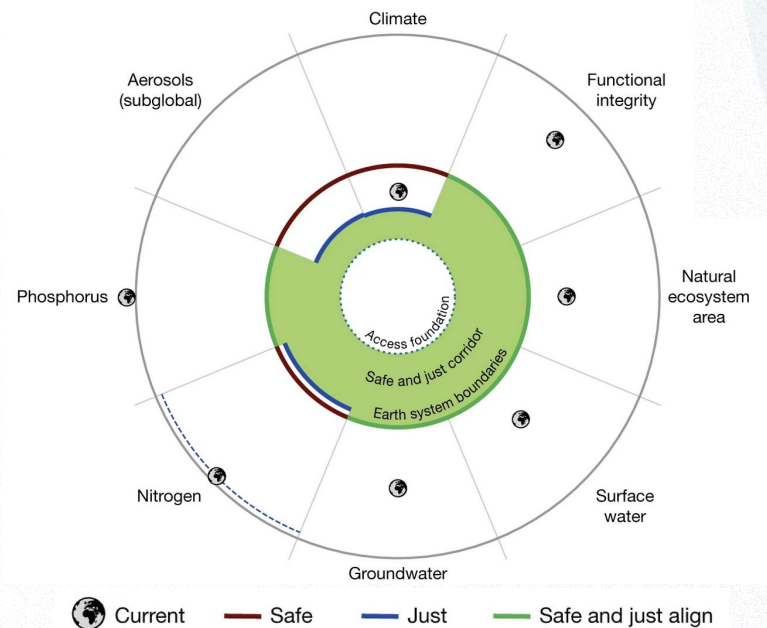
The framework will be built at the conjunction of three key considerations:

- **Impacts:** cities can define what their impact areas are, allowing them to transparently focus on areas of their choice while remaining aware of other impact areas.
- **Data availability:** existing data is expected to fall short of a full assessment of the bioshed, but acknowledging all impact areas of cities is key to expanding awareness of urban influence on global ecological health.
- **Feasibility:** the guidance output is limited by real-world considerations and is expected to provide an initial indication towards the state of a city's directly- and indirectly-impacted bioshed.



# Target-setting

## Safe and Just Earth System Boundaries



[Rockstrom et al., 2023](#)

In the Safe and Just Earth System Boundaries (previously the Planetary Boundaries), local targets for biosphere integrity are:

- **For Natural ecosystem area:**  
critical natural ecosystems need to be preserved or restored  
(set at 50-60% globally)
- **For functional integrity:**  
>20-25% of each 1 km<sup>2</sup> must be under (semi-)natural vegetation;  
>50% in vulnerable landscapes;  
at <10%, few nature's contributions to people (NCP) remain.

# Alignment with Global Agreements

## **The Nature SBTs for Cities program will:**

Link targets with major related global agreements

### Global Biodiversity Framework



**THE BIODIVERSITY PLAN**  
For Life on Earth

### SDGs

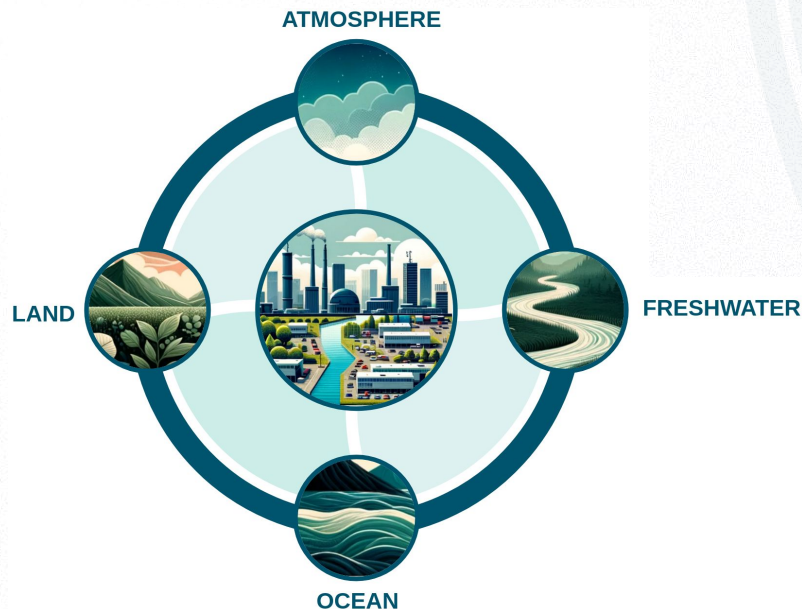
**SUSTAINABLE  
DEVELOPMENT  
GOALS**



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# Realms of Nature



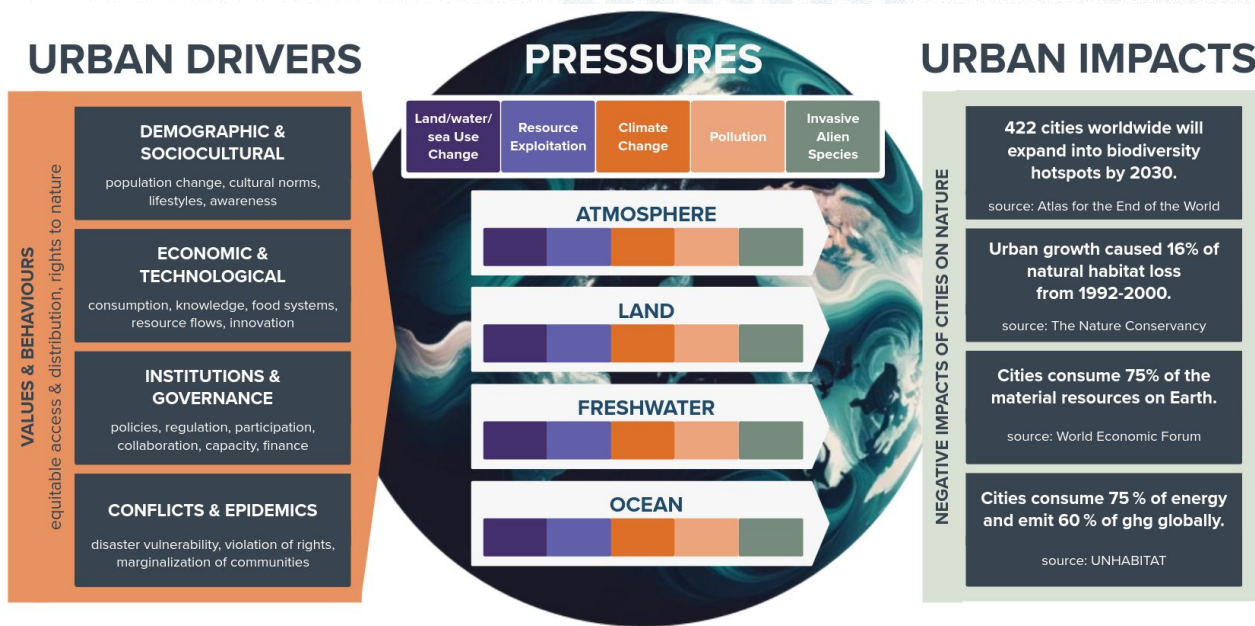
Informed by existing frameworks 4 realms of nature were identified.

- Nature SBTs for Business and Climate SBTs for Cities
- Taskforce on Nature-Related Financial Disclosures (TNFD) recommendations
- International Union for the Conservation of Nature (IUCN) Nature Positive for Business guidelines
- World Economic Forum upcoming Nature-Positive Cities Guidelines



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# Guiding Structure



Guiding structure is similar to the Nature SBTs for Businesses diagram (adapted from IPBES) of drivers, pressures, and impacts, but tailored towards urban drivers and impacts.



# Urban Pressures

**Urban Pressures** - thematic areas by pressure type (direct and indirect) and realm of nature.

Direct Pressures from Urban Activities

Land/Water/Sea Use Change

Resource Exploitation

Climate Change

Pollution

Invasive Alien Species

Indirect Pressures through Climate Change

Climate Change

## ATMOSPHERE

Energy land-use-related emissions

Degradation of carbon sinks

Industrial land use emissions

Material off-gassing, landfill gas

Urban Heat Island Effect

Excessive lighting

Airborne particulates & other pollutants

Ozone-depleting compounds

Greenhouse gas emissions

## LAND

Habitat fragmentation

Land development and sprawl

Deforestation

Habitat conversion

Soil contamination

Predation of native species

Habitat degradation & niche invasion

Wildfire

Artificial landscaping & aesthetics

Soil fertility and nutrients

Wildlife markets

Over-harvesting

Noise pollution

Genetic hybridisation

Altered biology & behavioural cycles

Extreme weather

## FRESHWATER

Impermeable surfaces, runoff & erosion

Modification of surface flows

Freshwater consumption

Material overextraction

Contaminants, suspended matter

Thermal pollution

Predation of native species

Habitat degradation & niche invasion

Changes in water balance

Dredging, infill & drainage

Burying & channelization of streams

Species over-exploitation

Deposition, runoff, excess nutrients

Sewerage outflows, dumping

Genetic hybridisation

Altered biology & behavioural cycles

Floods, and other water-related hazards

Drought, water table depletion

## OCEAN

Shoreline development & hardening

Commercial fishing & overexploitation

Sound pollution

Sewerage, excess nutrients

Chemical spills

Predation of native species

Habitat degradation & niche invasion

Ocean acidification

Dredging & infill

Recreational activities

Thermal Pollution

Suspended matter, foreign objects

Ballast water discharge

Genetic hybridisation

Altered biology & behavioural cycles

Sea level rise

# Urban responses and potential outcomes

This figure illustrates how responses by cities to the pressures and drivers from the previous two figures can improve outcomes.

## Local responses

### Governance

- Reporting
- Training
- Management
- Information sharing
- Decision-making processes

### Policy & Regulations

- Policy framework
- Regulatory framework
- Compliance
- Incentives & subsidies
- Stakeholder consultation
- Procurement
- Advocacy

### Risk & Impact Management

- Target-setting
- Monitoring
- External review
- Assess risks and impacts
- Assess local status of nature

### Financing

- Budget commitment
- Funding leveraging
- Financial incentives
- Payment schemes

### Communications & Engagement

- Public reporting
- Education campaigns
- Communication strategy
- Engagement
- Behavioral shifts
- City and citizen identity
- External partnerships
- Consensus-building

### Human Capital

- Training
- Internal culture
- Events
- Knowledge transfer
- Access to expertise

## Possible outcomes

### POTENTIAL BENEFITS OF NATURE FOR CITIES

strive for benefits across society

#### INCLUSIVE WELL-BEING

biophilia, mental and physical health, support for livelihoods, spiritual fulfillment

#### RESILIENCE & REDUCED RISK

disaster risk reduction, food security, improved stability and capacity

#### ECOSYSTEM & BIOSPHERE HEALTH

abundance of resources and biodiversity at the local, regional, and global scale

#### NATURE'S CONTRIBUTIONS TO PEOPLE

growth of ecosystem services and tourism, economic opportunities



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# Assessment Criteria

To guide the selection of the pilot theme, we **assessed the urban pressures according to 13 criteria** compiled from the workshop, SBTN standards, and other important factors.

Criteria	Subtitle	Description
<b>Applicability</b>	<b>LBSAPs</b>	How many of the 13 cities in the assessment include this theme in their local biodiversity plan?
	<b>Capacity</b>	Do cities have the local expertise and capacity to address this theme?
	<b>LG Role</b>	Do local governments have authority and/or responsibility in this theme?
<b>Impact</b>	<b>IPBES</b>	What does the IPBES Global Assessment say about the role of this theme on biodiversity loss?
	<b>GBF</b>	Does the Global Biodiversity Framework include this theme?
	<b>EF</b>	Does the ecological footprint account for this theme?
<b>Data</b>	<b>Internal</b>	Do cities have access to this data internally?
	<b>External</b>	Do cities have access to this data from external organizations?
	<b>Primary</b>	Could this data be collected first hand if needed?
<b>SBTN Principles</b>	<b>Science</b>	Can the targets for this theme, as used in practice, be linked to the Planetary Boundaries directly?
	<b>Equity</b>	Does existing practice consider equity in target-setting related to this theme? If not, is there an opportunity to do so?
	<b>Completeness</b>	The holistic nature of this domain and its correlation with other pressures
<b>Climate Change</b>	<b>Climate</b>	Possibilities for alignment with the Climate SBTs for Cities product.



# Selected pilot theme

## **Out-of-scope:**

invasive species, resource exploitation (such as ecological footprint), consumption, climate change, education and awareness, and pollution.

## **Land Use Development and Sprawl**

### **In Scope:**

Spatial planning, transportation, buildings and infrastructure, open spaces, urban agriculture, vegetation, protected areas, connectivity, species status, and related governance and equity issues.

### **Indicators for this theme are found in:**

- GBF Targets 1, 2, 3, 4, 10, 11, 12, 14, 19, 22
- **146 indicators** across 12 frameworks in this theme
- **10** example cities have indicators in this theme

### **Experts & Practitioners Survey results:**

This was the top selected theme by a large margin; listed as an important component by 67% of local government respondents



# Next steps



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# Looking ahead

- **Workshop June 4th + June 10th**
  - What approach or actions have already been taken in setting targets for nature and what are the lessons learned so far?
  - What would benefit you most as a practitioner to move forward with target setting for nature?
  - What are the main obstacles in target setting for nature?
- **September 2024:** Roundtable discussions with cities and experts
- **November 2024:** First draft of Nature pilot guideline for cities
- **December 2024:** Feedback round and review of the draft
- **February 2025:** Nature pilot guideline for cities







# Questions



# Thank you

