Setting **Science-Based Targets for Nature** in your City

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COP16
October, 2024

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URBAN BIODIVERSITY HUB

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ICLEI Local Governments for Sustainability

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ARUP

IUCN

The Nature Conservancy

CDP DISCLOSURE INSIGHT ACTION

Meet your facilitators

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Why set Science-Based Targets for Nature?

Sophie Hendriks
SBTN Cities
Program Manager

URBAN BIODIVERSITY HUB

How is the guidance framework developed?

Mika Mei Jia Tan
Urban Biodiversity Hub
Co-founder, East and Southeast Asia Regional Lead

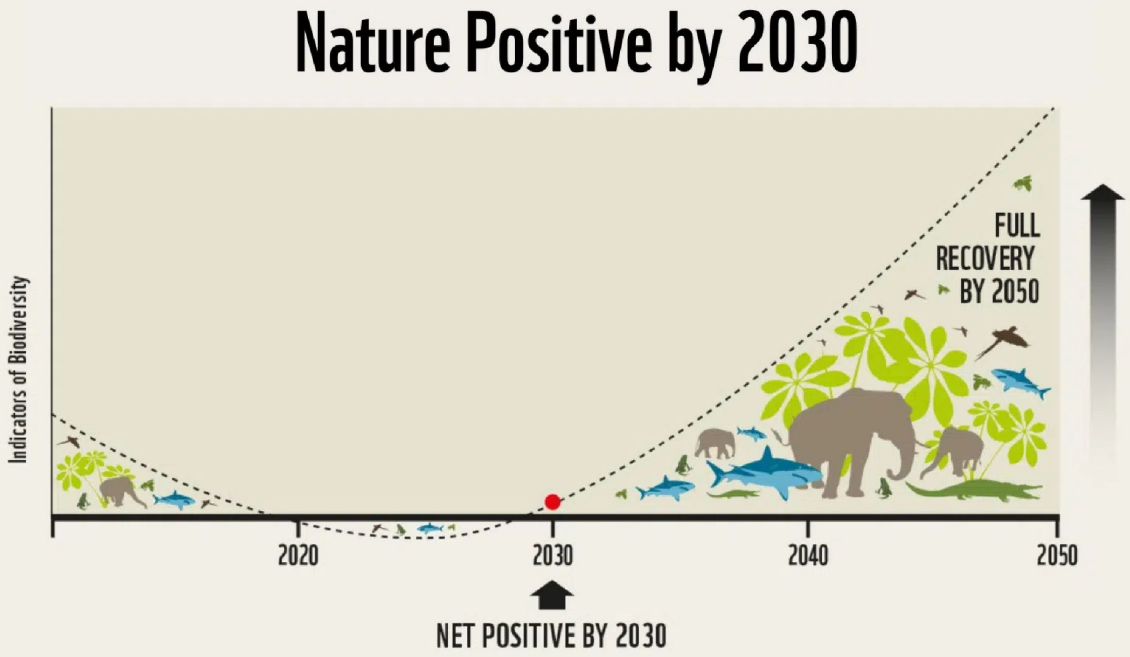
Metabolic
Consulting

How will the guidance framework work?

Tenesha Caton
Metabolic
Lead Nature SBTs for Cities

Why set Science-Based Targets for Nature?

Global goal



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Cities as powerful leverage points

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

But consume **75%** of global **resources**

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

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Cities thriving with 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

- Improve the overall health and wellbeing of citizens.
- Support of a high quality of life

Thriving Economy

- Attractive cities
- Reducing climate risks
- Nature positive investments have great economic potential in job creation

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Many initiatives working on Nature targets and action

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Nature Science-Based Targets for Cities

OBJECTIVE

Providing cities with an **overarching guidance framework** to set Nature Science-Based Targets

Building upon existing research, experience, and efforts

Developing a **feasible and actionable** methodology

Reducing complexity by making it easy to navigate methodologies

Integrating flexibility aligning with cities priorities and contexts

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Collaborative approach

Science-Based Targets Network

Collaboration of scientist and sustainability experts from more than 80 leading organizations

Nature SBTs for Cities Consortium

SBTN frameworks

Existing

To be developed by this program

Who is the guidance for?

©"Green Block" by Wimberly Allison Tong & Goo

Who is the guidance for?

1. Cities that want to get started
2. Cities that have already set nature targets and want to align with the Science-Based method
3. Cities of all sizes

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Structure and process:

How has the guidance framework been developed?

Development of the Guidance Framework

Confirm Scientific Imperatives

Identified 32 existing frameworks, challenges, and current practice with experts and practitioners

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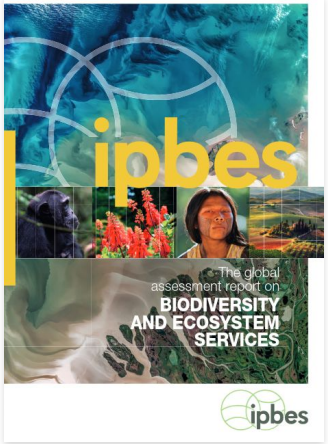
Nature SBTs for Cities: Scientific Imperatives

The Nature SBTs for Cities program will **also respond to these scientific imperatives for nature**

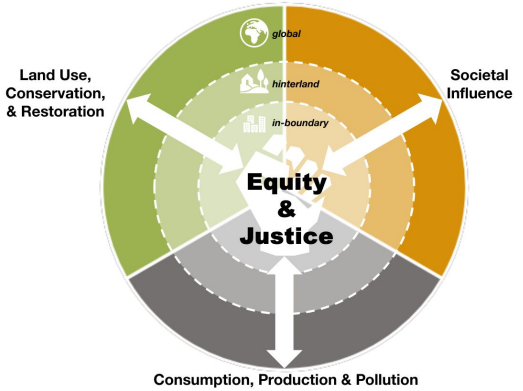
IPBES Global Assessment Report



Safe and Just Earth System Boundaries

Rockstrom et al., 2023

Urban Bioshed Impact Areas



Pierce, 2022

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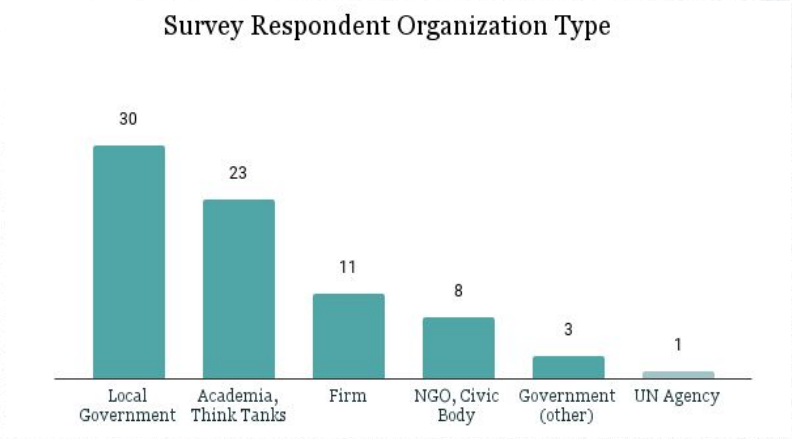
Development of the Guidance Framework

76 Survey respondents



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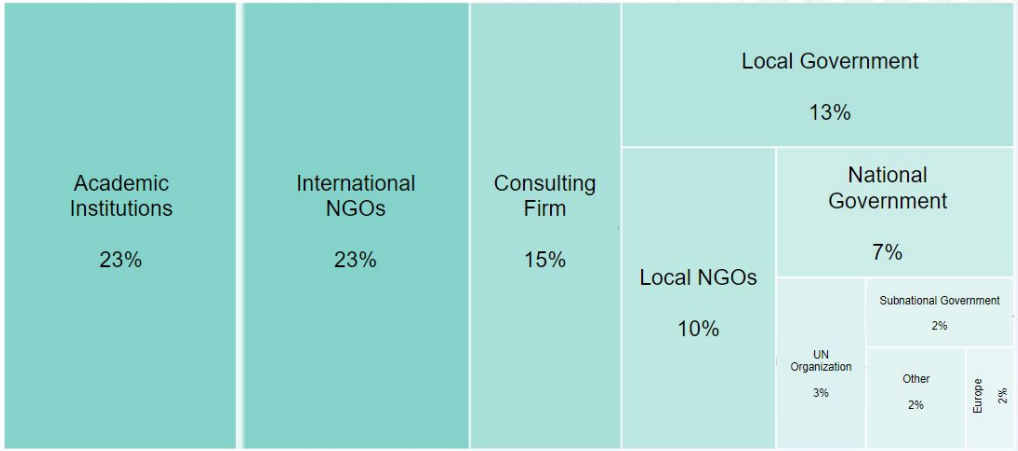
Development of the Guidance Framework

26 Participants in Virtual Workshops

Practitioners with experience across six continents.



12 Expert Interviewees

Leaders in indicators on local land use and nature from 5 global regions:

- North America (California),
- Europe (Finland and Scotland),
- South America (Colombia),
- Africa (Sierra Leone), and
- Asia (India, Thailand, and Nepal).

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Development of the Guidance Framework

Confirm Scientific Imperatives

Identified 32 existing frameworks, challenges, and current practice with experts and practitioners

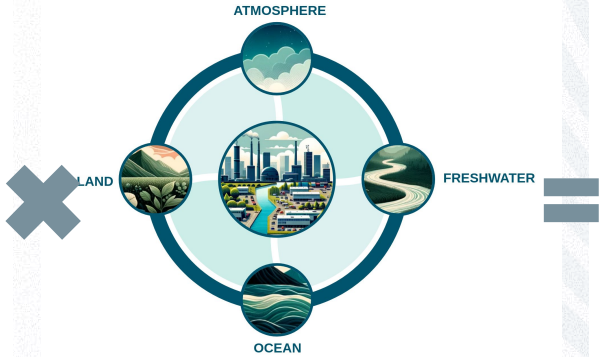
Assessed frameworks for thematic comprehensiveness, target-setting, and indicators

Selection of pilot theme: Land Use Development and Sprawl

Development of the Guidance Framework

5 main pressures on biodiversity loss[1]

4 Realms of nature[2]



Urban pressures on nature

[1] *IPBES Global Assessment for Biodiversity and Ecosystem Services (2019)*
[2] *informed by Nature SBTs for Business, Climate SBTs for Cities, Taskforce on Nature-Related Financial Disclosures (TNFD) recommendations, IUCN Nature Positive for Business guidelines, World Economic Forum (WEF) Nature Positive: Guidelines for the Transition in Cities*

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Pilot Theme Selection

13 Criteria

Assessment Area	Criteria
Applicability	LBSAPs
	Capacity
	Local Gov't Role
Impact	IPBES
	GBF
	Ecological Footprint
Data	Internal
	External
	Primary
SBTN Principles	Science
	Equity
	Completeness
Climate Change	Climate Linkages

1 Result

LAND USE DEVELOPMENT AND SPRAWL

Includes: Connectivity, protected areas, sprawl, development, green spaces and parks, land use planning

Measures are found in:
SDGs 11.3, 15.1, 15.2
GBF Targets 1, 3, 12, 14
Ecological Footprint

19 of the assessed frameworks

10 example cities in the current assessment

Planetary Boundaries: **biosphere**

Survey results: It was the top result by a large margin; listed as an important component by **67%** of local government respondents

Identification of Pilot Indicators

Selection of pilot theme: Land Use Development and Sprawl

Identified 146 indicators related to land development and sprawl

Structured into 55 indicator groupings based on GBF Targets

Identification of Pilot Indicators

GBF Target 1: Plan and Manage all Areas To Reduce Biodiversity Loss
- Buildings
- Informal settlements
- Plans
- Sprawl
- Transport

GBF Target 2: Restore 30% of all Degraded Ecosystems
- Habitat restored
- Habitat connectivity
- Marine habitat degradation

GBF Target 3: Conserve 30% of Land, Waters and Seas
- Habitat protection
- Habitat quality
- Marine habitat area

GBF Target 4: Halt Species Extinction, Protect Genetic Diversity, Manage Human-Wildlife Conflicts
- Abundance
- Species net change
- Functional diversity
- Species richness
- Species status

GBF Target 10: Enhance Biodiversity & Sustainability in Agriculture, Aquaculture, Fisheries, Forestry
- Urban agriculture

GBF Target 11: Restore, Maintain and Enhance Nature's Contributions to People
- Cultural sites
- Soils

GBF Target 12: Enhance Green Spaces and Urban Planning for Human Well-Being and Biodiversity
- Green and blue spaces
- Extent of natural areas
- Ecosystem services
- Habitat restored
- Parks access
- Vegetation

GBF Target 14: Integrate Biodiversity in Decision-Making at Every Level
- Governance
- Enforcement
- Mainstreaming of biodiversity

GBF Target 19: Mobilize $200 Billion per Year for Biodiversity...
- Budget

GBF Target 22: Ensure Participation in Decision-Making and Access to Justice and Information
- Social equity and justice
- Rights

Identification of Pilot Indicators

Selection of pilot theme: Land Use Development and Sprawl

↓

Identified **146 indicators** related to land development and sprawl

↓

Structured into **55 indicator groupings based on GBF Targets**

↓

Indicators assessed according to impact, feasibility, and relevance

↓

Ranked and refined to identify top indicators

Identification of Pilot Indicators

In-person workshop on pilot indicators with Steering Committee members

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Roundtables Attendees

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Identification of Pilot Indicators

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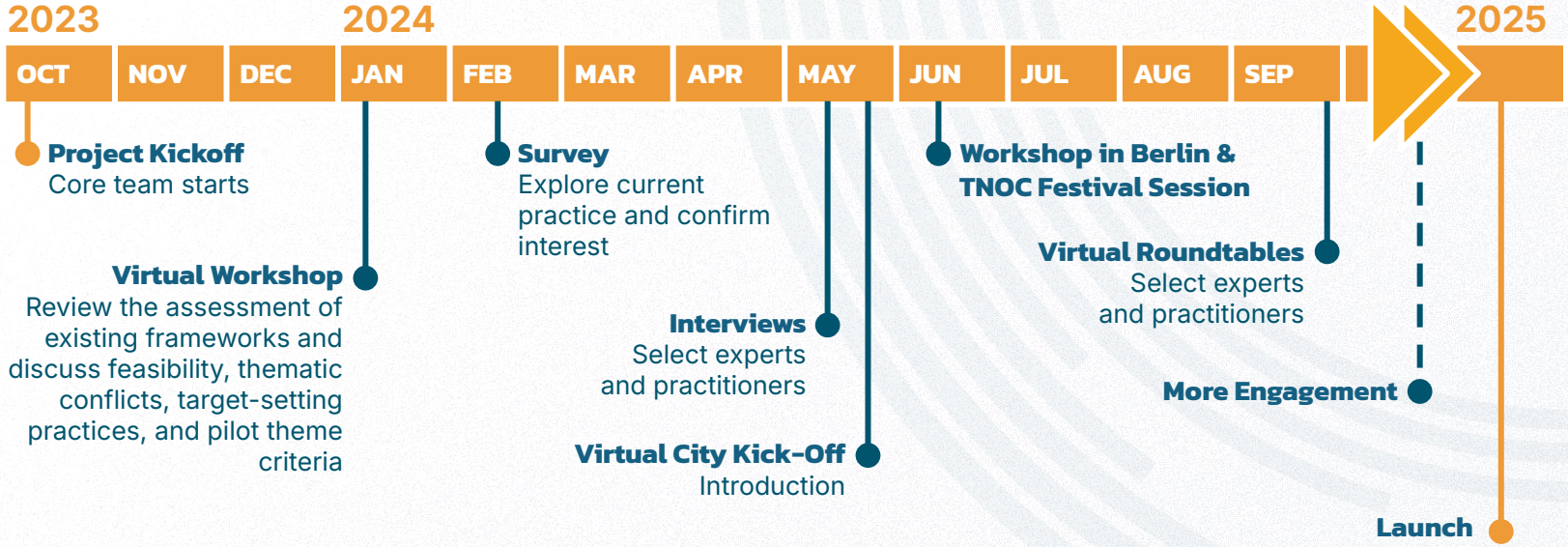
Guidance framework development

Engagement on SBTs for Cities for Nature



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How will the Guidance Framework work?

Structuring the Guidance Framework based on existing SBTN frameworks

1. **Assess**

2. **Prioritize**

3. **Target setting**

4. **Act**

5. **Track**

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Guidance Framework: Scope

1 **Assess**

2 Prioritize

3 **Target setting**

4 Act

5 Track

How the Guidance Framework is structured

Category 1:
Biodiversity
Protecting and enhancing biodiversity

STATE INDICATORS

Category 2:
Ecosystem services
Maintaining and improving ecosystem services

STATE INDICATORS

Category 3:
Land Use Development and Sprawl
Manage land use and control sprawl

PRESSURE INDICATORS

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1 Assess

Biodiversity: State of biodiversity for a given area

Richness Species
Ecosystems Connectivity
Ecosystems Diversity

- INDICATOR X
- INDICATOR X
- INDICATOR X

- FRAMEWORK X
- FRAMEWORK X
- FRAMEWORK X

1 Assess

Available resources City x

- Satellite data
- Community involvement
- Local experts on the ground
- ....

Biodiversity: State of biodiversity for a given area

Richness Species

Ecosystems Connectivity

Ecosystems Diversity

INDICATOR 4.4

- INDICATOR X
- INDICATOR X

C40 UNA

- FRAMEWORK X
- FRAMEWORK X

1 Assess (Cities with targets)

Biodiversity: State of biodiversity for a given area

Indicator 4.4 Richness and conservation status of native species

C40 URBAN NATURE ACCELERATOR	✓	✓	✗
IUCN Urban Nature Indexes	✗	✓	✓
BERLIN URBAN NATURE PACT	✓	✗	✓
Singapore Biodiversity Index	✗	✓	✓

For illustrative purposes only

3 Target setting (Aligned with Planetary boundaries)

Factors City x

- Resources
- Current environmental status
- Alignment with local/global plans
- ....

Biodiversity: State of biodiversity for a given area

Indicator 4.4 Richness and conservation status of native species

TARGET AMBITION

- HIGH
- MEDIUM
- LOW

- *x%*
- *Year on year improvement*
- *Improvement if condition x is met*

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How can you get involved?

Join our community of Cities

- Stay updated and get involved
- Receive invitations to the launch in spring 2025, future events and webinars
- Be the first to get the opportunity to pilot Nature Science-Based Targets in your city

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THANK YOU

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