



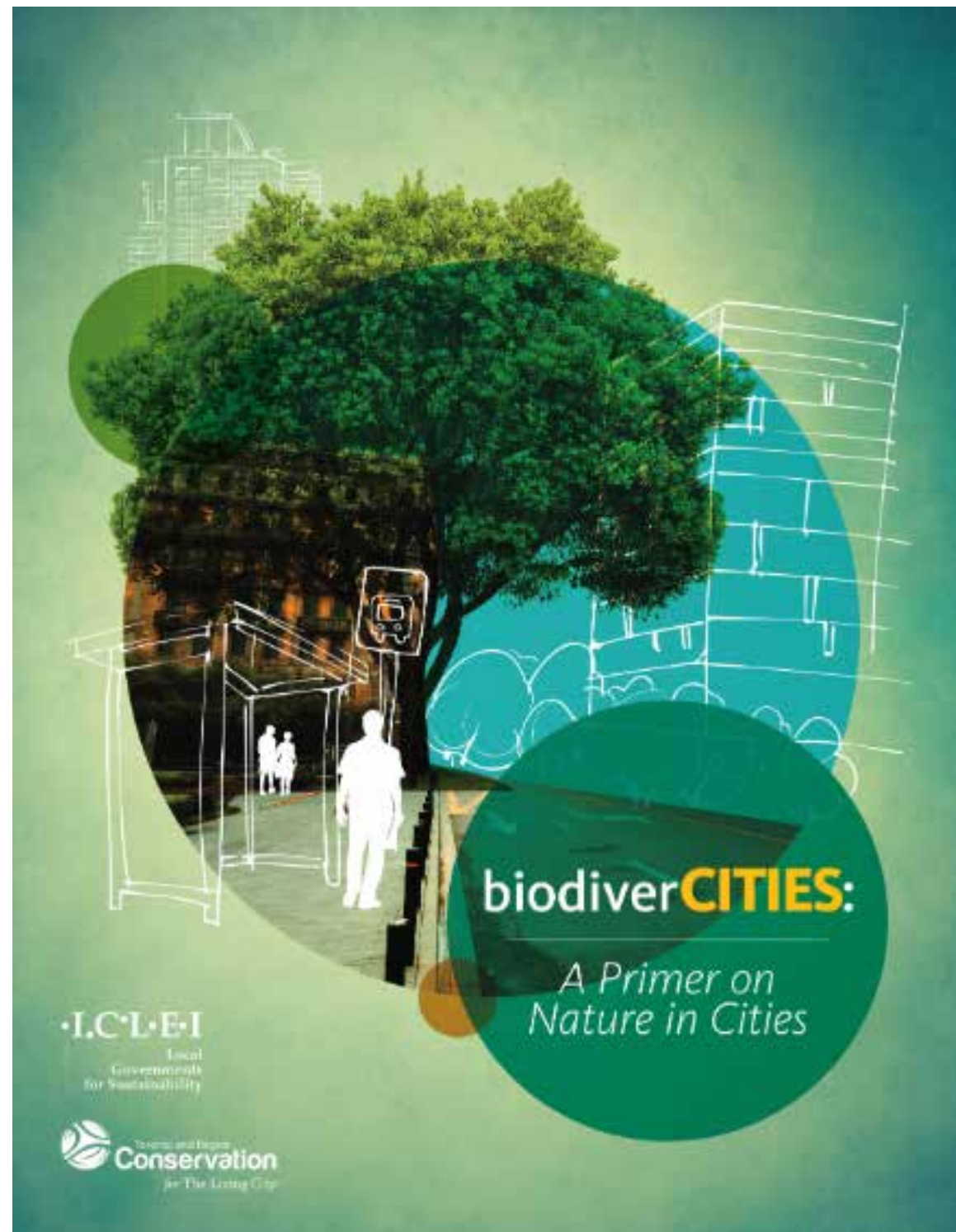
BIODIVERCITIES

Catalysts for change

The image features a dark, almost black background filled with numerous small, white, petal-like particles falling from the top. Three small, round, textured objects, possibly dried flowers or seed pods, are scattered across the scene. One is in the top left, one in the top right, and one in the bottom center. The text 'SUBJECT BACKGROUND' is overlaid in the bottom right corner in a bold, white, sans-serif font.

**SUBJECT
BACKGROUND**

FORERUNNERS



biodiverCITIES: A Primer on Nature in Cities

This Primer is intended for urban decision-makers who want to explore new approaches to local biodiversity and see examples of where biodiversity has been successfully integrated into municipal services and programs. The Primer outlines the role of decision-makers in mainstreaming biodiversity as a local issue by presenting a range of case studies and mechanisms that currently exist for local governments, and featuring best practices that have produced positive results. The biodiverCITIES Primer was developed by ICLEI Canada and Toronto and Region Conservation.



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Methodology: Steps towards developing a biodiversity plan and implementation

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Nature in the Urban Century

A global assessment of where and how to conserve nature for biodiversity and human wellbeing

The Nature Conservancy | futurørth | Stockholm Resilience Centre | Stockholm University

www.urbannature100.org

GrowGreen, a partnership for greener cities to increase liveability, sustainability and business opportunities

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Compendium of Nature-based and 'grey' solutions to address climate- and water-related problems in European cities

March 2020

Foivos Petsinaris (Trinomics)
 Laura Baroni (Trinomics)
 Birgit Georgi (Trinomics)

Table 1 List of nature-based solutions and the climate hazards they can address

Nature-based solutions	Hazard				
	Heat	Wind	Water	Storm	Water
1. Green roofs					
2. Vertical green walls					
3. Green facades					
4. Street furniture and other green spaces					
5. Green urban furniture					
6. Greening blue transport infrastructure					
7. Green gardens					
8. Restoration and management of urban wetlands					
9. Restoration and management of floodplains					
10. Green infrastructure for flood control					
11. Restoration and management of urban wetlands					
12. Restoration of urban rivers					
13. Restoration of urban streams					
14. Urban agriculture					
15. Restoration and management of urban wetlands					
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URBAN BIODIVERSITY HUB

The Urban Biodiversity Hub (UBHub) helps cities around the world choose biodiversity strategies, then measure and improve their strategies and action plans

UBHub offers:

Public Site

Map: searchable map of urban biodiversity activities

Guide: planning and management toolkits, guidebooks, and frameworks.

myHub Members' Site

Forum for Experts and Practitioners

Indicator Tracker to Manage Your Projects



FORERUNNERS



BIODIVERCIUDADES UN MODELO PARA EL DESARROLLO URBANO SOSTENIBLE

Colombia, como país **megadiverso**, proyecta ciudades preparadas para los retos socioambientales actuales y futuros, **que conservan y usan la biodiversidad con un enfoque urbano-regional** como herramienta para el desarrollo de ciudades sostenibles.

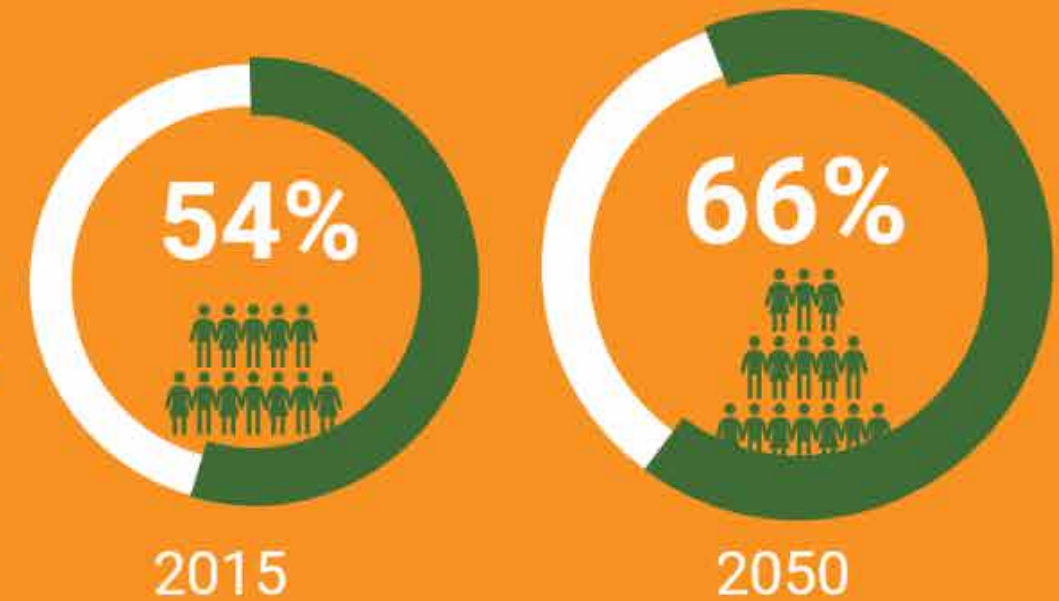
El propósito es promover la **conservación y uso sostenible de la biodiversidad y los servicios ecosistémicos** e incorporarlos en la planificación y el ordenamiento del territorio, impulsar la **bioeconomía, la ciencia, la tecnología, la innovación y la economía circular con el fin de lograr un mayor bienestar de los ciudadanos** y el cumplimiento de los **Objetivos de Desarrollo Sostenible**.





Rethinking cities

The proportion of the global population living in cities and towns is expected to rise.








Most of this transition will take place in Asia and Africa, and will require a significant expansion of existing cities, as well as the construction of new cities.



Rethinking the way we eat

Food systems are responsible for:







-  **60%** of global biodiversity loss on land
-  **33%** of degraded soils
-  **24%** of the global GHG emissions
-  **61%** of the depletion of commercial fish
-  **20%** overexploitation of the world's aquifers

60% increase of global food production is needed to feed a future population of 9 billion people

At the same time **> 800 million** people are still hungry today.



The changes that need to happen to get us there

Consumption category	Consumption interventions	Emission reductions per consumption category between 2017 and 2030	Emission reductions per consumption category between 2017 and 2050
	<ul style="list-style-type: none"> - Reduce the number of new clothing items bought every year - Reduce supply chain waste 	39% (Reducing the number of new clothing items alone accounts for 37%)	66% (Reducing the number of new clothing items alone accounts for 64%)
	<ul style="list-style-type: none"> - Dietary change: eat in line with health recommendations and lower meat and dairy consumption - Reduce household waste - Reduce supply chain waste 	36% (Dietary change alone accounts for 27%)	60% (Dietary change alone accounts for 45%)
	<ul style="list-style-type: none"> - Reduce number of flights - Increase adoption of sustainable aviation fuel 	26% (Reducing number of flights alone accounts for 18%)	55% (Reducing number of flights alone accounts for 31%)
	<ul style="list-style-type: none"> - Improve materials efficiency - Enhance building utilisation - Switch to lower carbon materials - Adopt low-carbon cement - Reuse building components 	26% (Improving materials efficiency and enhance building utilisation together account for 18%)	44% (Improving materials efficiency and enhance building utilisation together account for 29%)
	<ul style="list-style-type: none"> - Reduce car ownership - Increase car lifespans - Increase material efficiency 	28% (Reducing car ownership alone accounts for 24%)	39% (Reducing car ownership alone accounts for 31%)
	<ul style="list-style-type: none"> - Optimise lifetimes of IT equipment 	18%	33%

C4O
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● Steering Committee
● Innovator City
● Megacity
● Observer City



**C4O
CITIES**
account for



96
affiliated cities



25 %
of global GDP



1 in 12
people worldwide



10,000

actions to combat climate
change



TAKE ACTION
IN YOUR
COMMUNITY

Research gaps in knowledge of the impact of urban growth on biodiversity

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Maike Hamann ¹¹, Oliver Hillel¹², Kangning Huang¹³, Belinda Kahnt¹⁴, David Maddox⁵,
Andrea Pacheco², Henrique M. Pereira ^{2,3,15}, Karen C. Seto¹³, Rohan Simkin¹³, Brenna Walsh¹⁶,
Alexandra S. Werner² and Carly Ziter¹⁷

By 2030, an additional 1.2 billion people are forecast in urban areas globally. We review the scientific literature ($n = 922$ studies) to assess direct and indirect impacts of urban growth on habitat and biodiversity. Direct impacts are cumulatively substantial, with 290,000 km² of natural habitat forecast to be converted to urban land uses between 2000 and 2030. Studies of direct impact are disproportionately from high-income countries. Indirect urban impacts on biodiversity, such as food consumption, affect a greater area than direct impacts, but comparatively few studies (34%) have quantified urban indirect impacts on biodiversity.

THE PROPOSAL



RATIONALE

PROBLEM

Cities drive the global economy, and urban decisions have an impact well beyond city boundaries. Over half of the world's population now live in cities, with numbers expected to double by 2050 (UNHABITAT 2020). By understanding that biodiversity plays a critical role in providing the basic needs¹ of this population, and of society as a whole, cities emerge with paramount relevance as catalysts or powerhouses for the **global effort to tackle biodiversity loss and mitigate climate change**. The loss of biodiversity is considered among the greatest global risks facing society today and, for the first time, the natural environment category encompasses the top five global risks the world will be facing in the coming year (WEF 2020). Previous assessments have assembled information on how urban growth impacts and depends on biodiversity in particular places, but there is still no common metrics nor set of core indicators to be **harmonized and agreed-upon** internationally for such a purpose.

NEED

| To stimulate the potential of **cities as catalysts** for transformative change.

BIODIVERCITIES

SOLUTION

| A global trusted comprehensive deliverable that will serve as a shared value reference for the overarching challenge of a pro-biodiversity urban growth.

TAKEAWAYS

- Global convening power
- Multi-stakeholder governance
- Cross-sector cooperation
- Community creation
- Insight generation
- Adaptive innovation

¹Food and feed, energy, medicines and genetic resources and a variety of materials fundamental for physical well-being and for maintaining culture.

BIODIVERCITIES

THE MISSION

| To stimulate the potential of cities as catalysts for **transformative change**.

THE COMMISSION

| A group of experts committed to develop a roadmap and lay out a comprehensive frame of reference for the overarching challenge of a **pro-biodiversity urban growth**.

THE PLATFORM

| A tool for thought and action where **stakeholders interests** and needs are sufficiently mainstreamed, thus enabling frequent constructive interaction and information exchanges that will lever transformative changes.

THE BOOK

| A thoughtful publication guiding **reflection and action** for substantial urban transformations. A benchmark for the cities of the future, providing an integrated approach to measure and monitor links and flows between cities and biodiversity at all levels.



THE BOOK

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9. Benchmark publications and knowledge networks
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BIODIVERCITIES CATALYSTS FOR CHANGE

A closer look

A Biodivercity is a city that

- 1 Hace posible que la biodiversidad **habe** en su matriz. Puts biodiversity into the heart of the urban matrix.
- 2 Entiende sus **relaciones** con los ecosistemas y se planifica a escala regional. Understands its **interdependence** with nature and plans for sustainability against a regional backdrop.
- 3 Asegura que el ciudadano **valore y se conecte** con la naturaleza de su ciudad-región. Ensures that citizens **value** biodiversity and **connect** with nature.
- 4 Genera **competitividad** desde la naturaleza de su ciudad-región. Stimulates nature-based **competitiveness**.
- 5 Es consciente de los efectos de sus patrones de consumo sobre la biodiversidad y la salud planetaria. Is **aware** of the effects of its consumption patterns on biodiversity and planetary health.

Una Biodiverciudad es una ciudad que



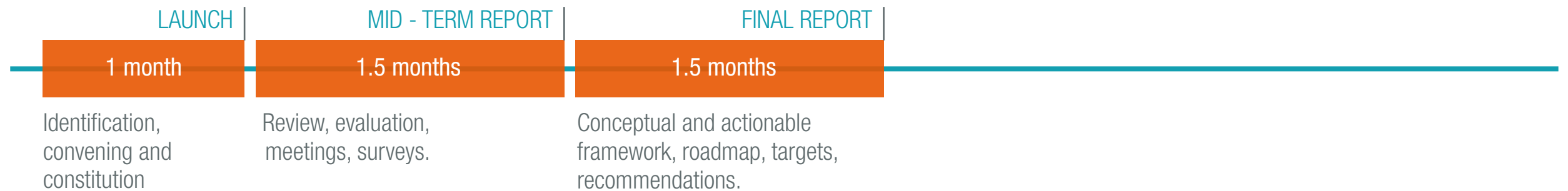
TIMELINE



THE MISSION



THE COMMISION



THE PLATFORM



THE BOOK

