# C cocarbon





strategicRESEARCH

HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI UNIVERSITY OF COPENHAGEN

#### Assessing public support for carbonsmart solutions to biodiversity and climate crises in cities

Jussi Lampinen, Oriol García-Antúnez, Anton Stahl Olafsson, Natalie Gulsrud, Eugenia Castellazzi, Christopher Raymond

# The challenge

Inter-linked biodiversity and climate crises

Carbon-smart solutions that benefit biodiversity and climate mitigation are possible to implement with **policy**, **urban planning**, **and green area management** 

#### But many uncertainties remain...

- Are carbon-smart solutions supported by the public, by whom, where?
- What explains varying levels of support among the public?
- How do social values for green areas align with biodiversity and carbon?

## Key message 1

Public support for carbon-smart solutions is moderate to strong among residents of Helsinki, but varies according to...

- different ways of valuing, using, and accessing green areas
- different **socio-economic contexts** (age, gender, income)
- different **perceptions and understandings** of the role of green areas in modulating the dynamics of carbon sequestration and storage
- across different urban contexts in the cityscape
- according to **suggested trade-offs** to biodiversity (**IP**) and well-being (**Ib**)



Hot- and cold spots of support for carbonoriented policies across green areas in Helsinki

#### e.g.:

"Managing green areas for increased vegetation density"

"Relaxing management intensity in green areas"

## Key message 2

The interplay between biodiversity, carbon, and social values in green areas across Helsinki is complex and variable. Yet, certain generalizations can be made:

- Different parts of biodiversity and carbon sequestration gradients are valued in different ways
- Biodiversity, carbon sequestration, and social values for nature cooccur in large, contiguous green areas
- Perceptions of biodiversity and carbon **follow modelled estimates of actual** biodiversity and carbon sequestration

Different parts of the biodiversity- and carbon -gradients are valued in different ways

> Predicted presence 0.25 of social value: Walking 0.00 *n* = 3 616 1.00 0.75 P(Wildness) Predicted presence 0.25 of social value:



Perceptions of carbon sequestration and biodiversity align with modelled estimates of carbon sequestration and biodiversity



## Key message 3

The above leads to both opportunities and challenges in taking the broad political targets of biodiversity conservation and carbon neutrality into practice in cities. This should be done in a manner that acknowledges different values, attitudes and uses of green areas and different levels of access to them, meaning...

- Inclusive and participatory planning practices
- Recognition of the **interconnectedness** of everything
- Understanding that win-win-win —situations between biodiversity, carbon, and social values for green areas **are unlikely to be universal**



#### Thank you!

Jussi Lampinen, Oriol García-Antúnez, Anton Stahl Olafsson, Natalie Gulsrud, Eugenia Castellazzi, Christopher Raymond