



The Nature Smart Cities Business Model concept

Bridging theory with
practice, academia with
local authorities

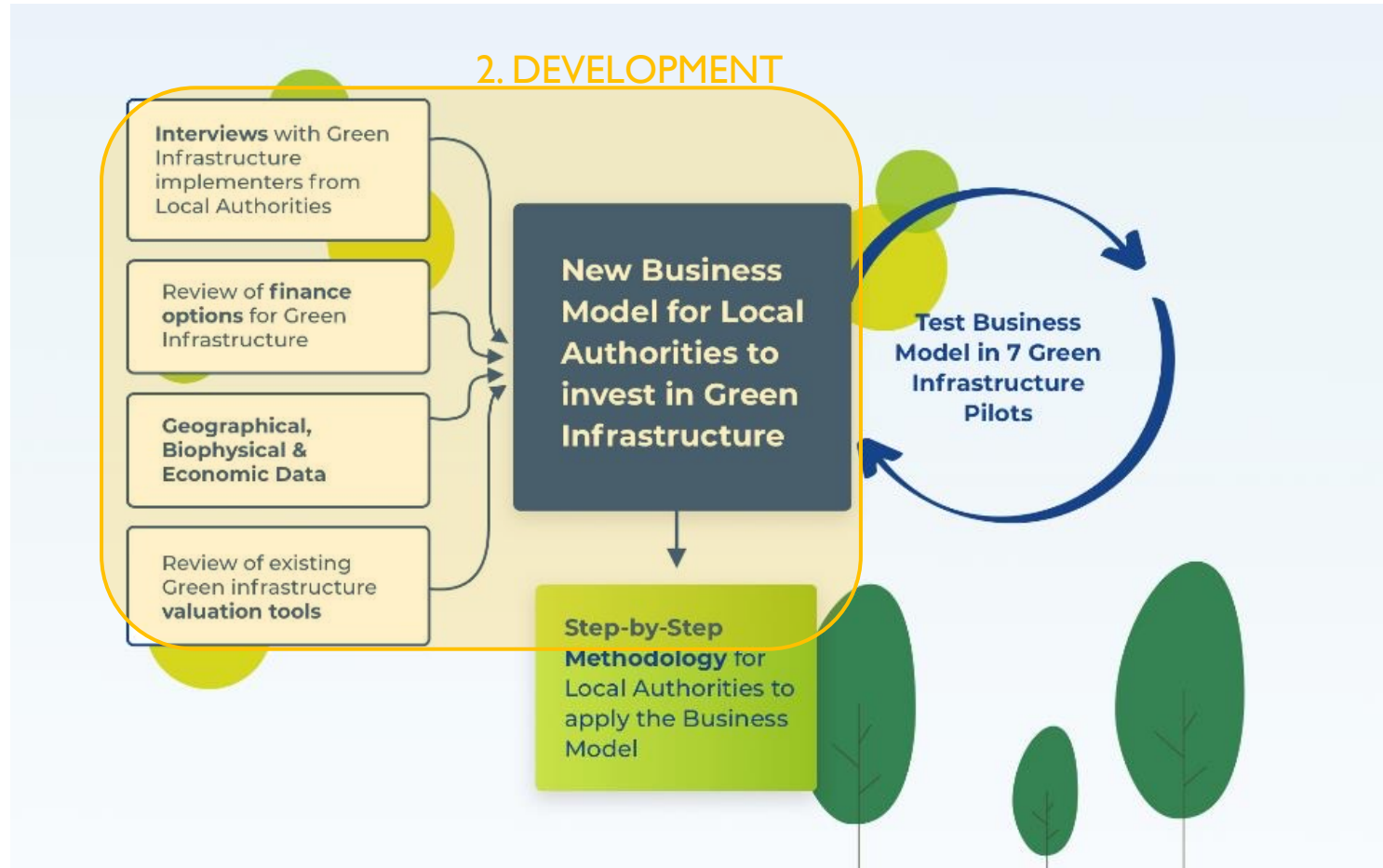
Wito Van Oijstaeijen, University of Antwerp

The Nature Smart Cities workflow

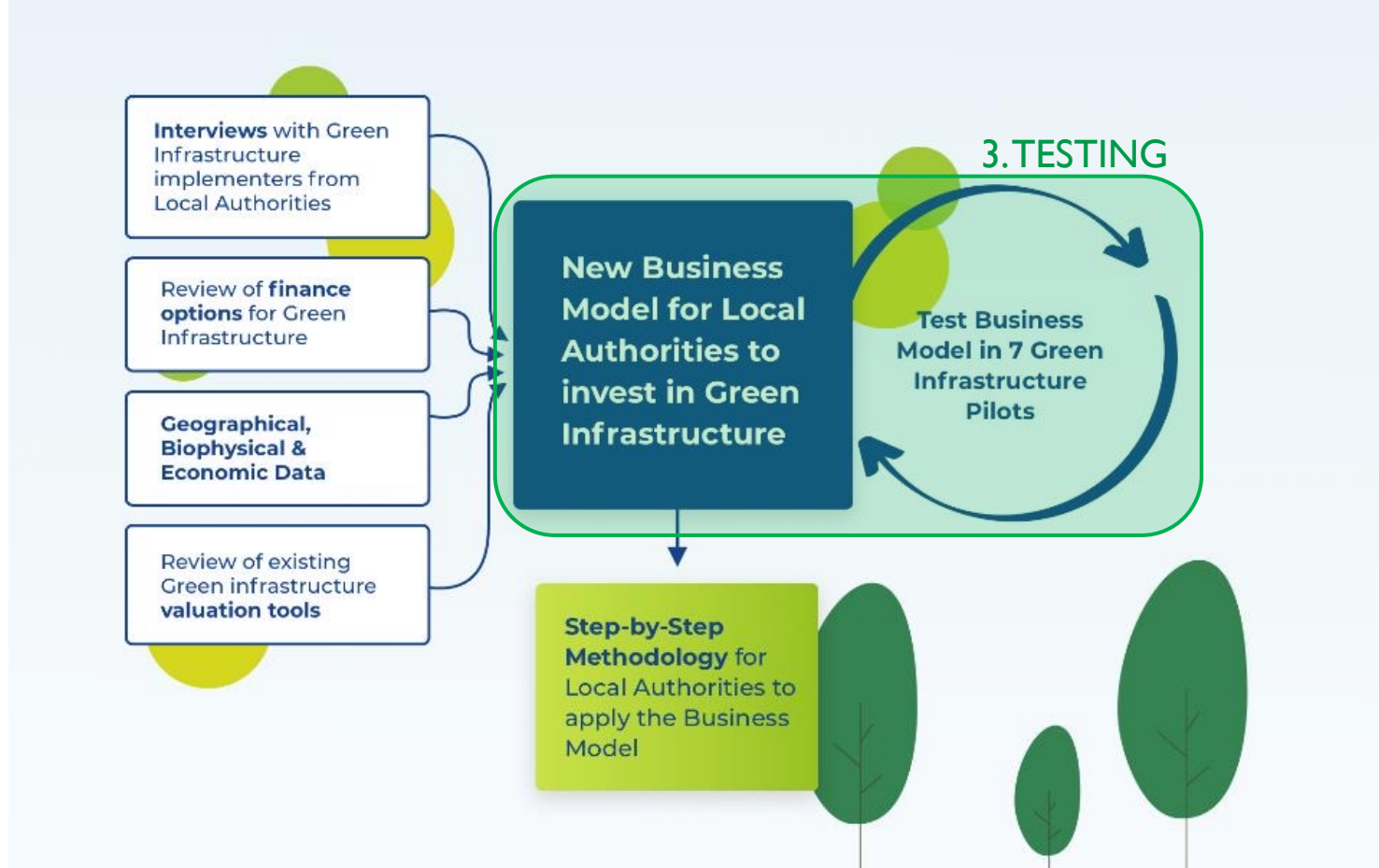
I. CHALLENGES



Today's Webinar



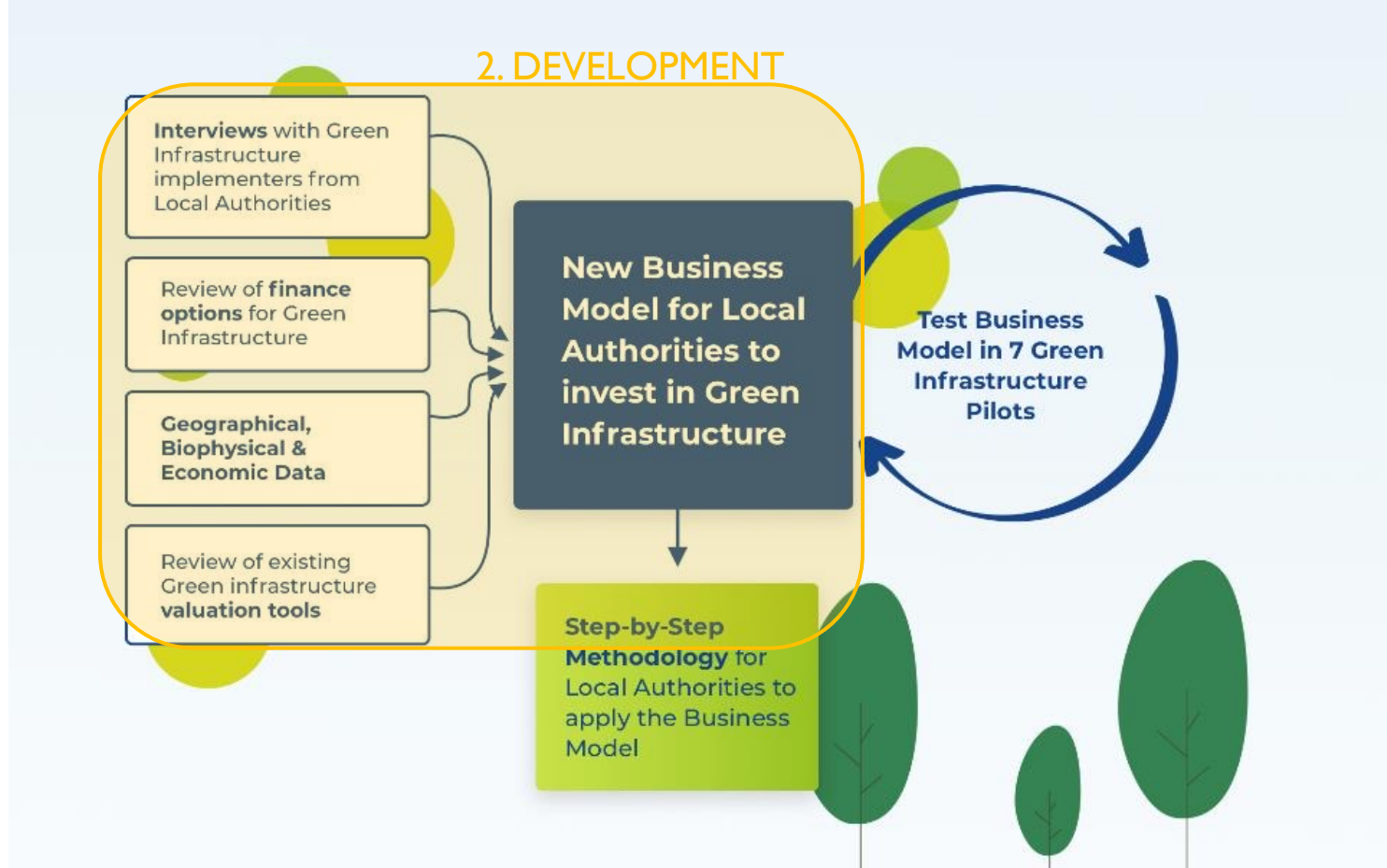
Today's Webinar



Today's Webinar



Today's Webinar



Review of finance options for Green Infrastructure

Evidencing the value of GI

Comparing green alternatives with grey

Interviews with Green Infrastructure implementers from Local Authorities

Shortage of time, skills and resources

Review of existing Green Infrastructure valuation tools*



Decision-support tools combining **biophysical and economic benefits** are scarce



Beneficial to use the **ecosystem services** framework



Added value of tools lies in **early stages** of spatial planning



Comprehensive data on **benefits and costs** of GI is limited



Co-development key to uptake!

* <https://www.sciencedirect.com/science/article/pii/S0301479720305363>

Geographical, biophysical and economic data



Collaboration with the
IGNITION project¹



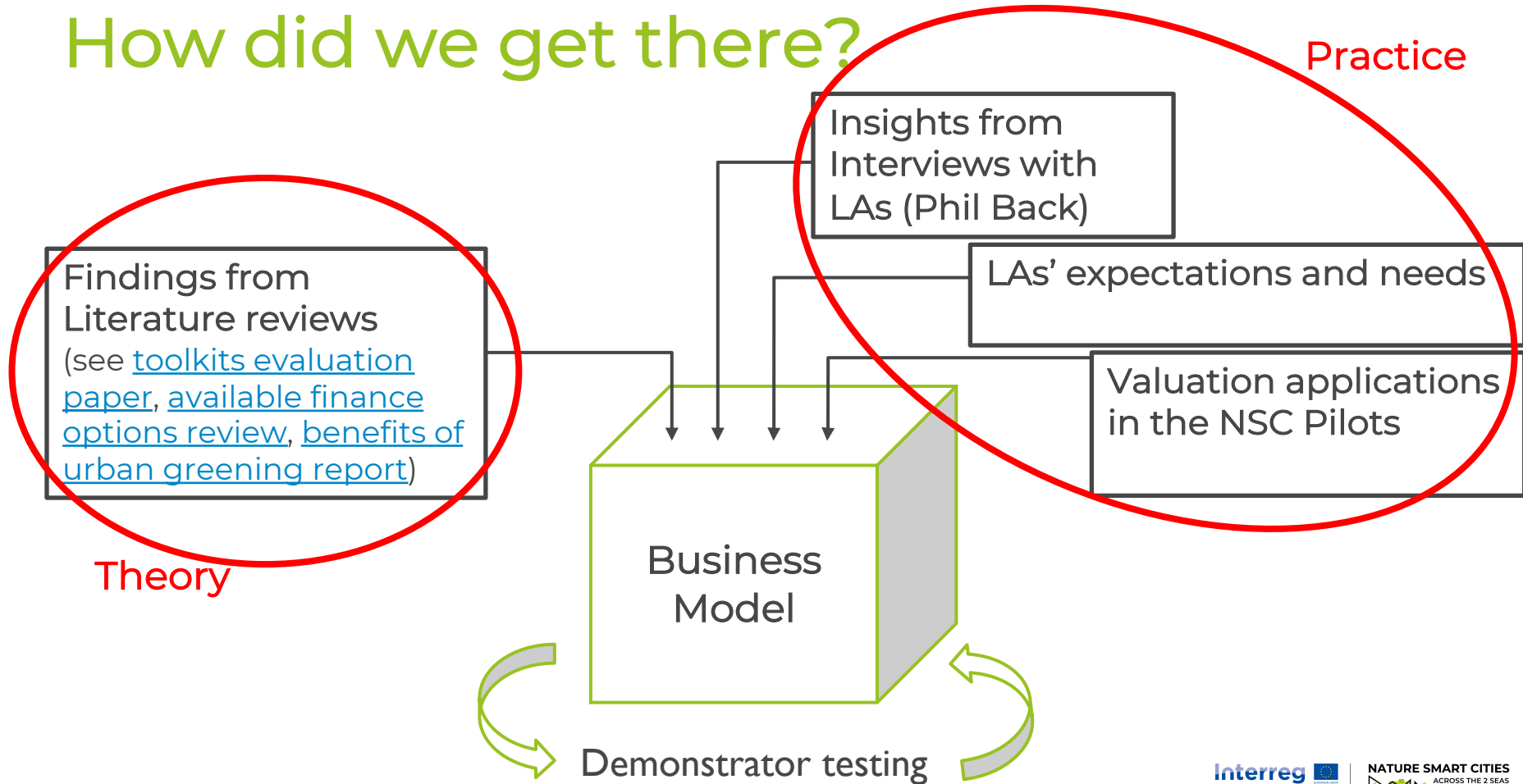
Academic literature
review



Joint work of University
of Antwerp, Ghent
University and Imperial
college

¹<https://www.greatermanchester-ca.gov.uk/what-we-do/environment/natural-environment/ignition/>

How did we get there?



Features of the Business Model



Arguments to justify investment



Structure and visuals for presenting information



Provide an evidence base



Compare green and grey scenario's



Raise awareness



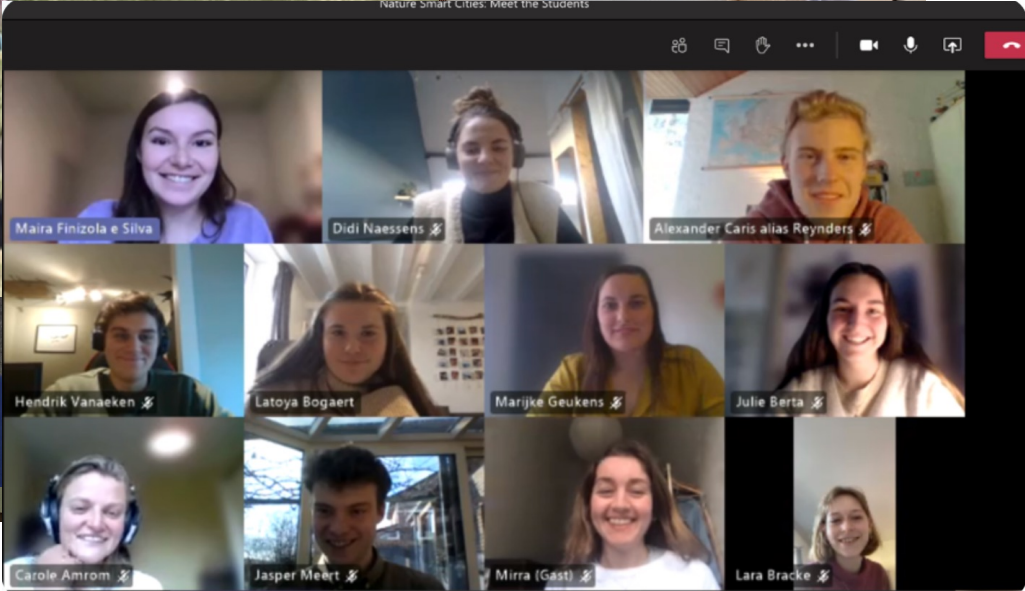
Step-by-step methodology



Practical and useful



Nature Smart Cities: Meet the Students



Maira Finizola e Silva

Didi Naessens

Alexander Caris alias Reynders

Hendrik Vanaeken

Latoya Bogaert

Marijke Geukens

Julie Berta

Carole Amrom

Jasper Meert

Mirra (Gast)

Lara Bracke

The Business Model concept



Produce information that assists/supports decision makers



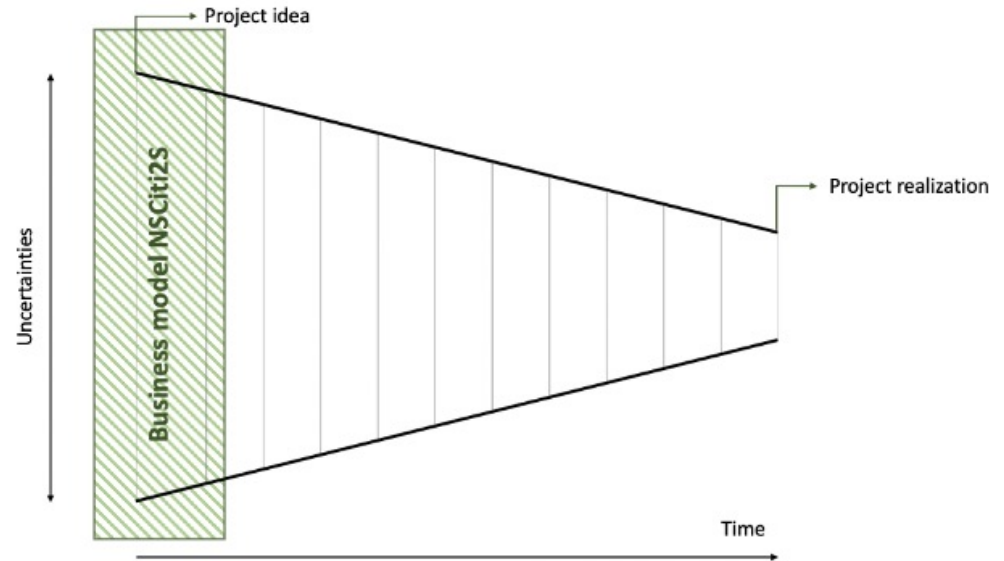
Generate estimations and ballpark figures



Provide the handles to facilitate GI investments



Decision and planning support tool



Why a 'Business Model'?



→ Facilitate demonstrating benefits and expected costs, be easily accessible and widely applicable

The core of the Business Model

Multi-Criteria Analysis (MCA), why?

1. GI is characterized by its multi-functionality
2. Compare grey and green infrastructure
3. Flexibility
4. Qualitative & Quantitative assessment
5. Accessible and transferable

“Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling, that maintain the conditions for life on Earth”

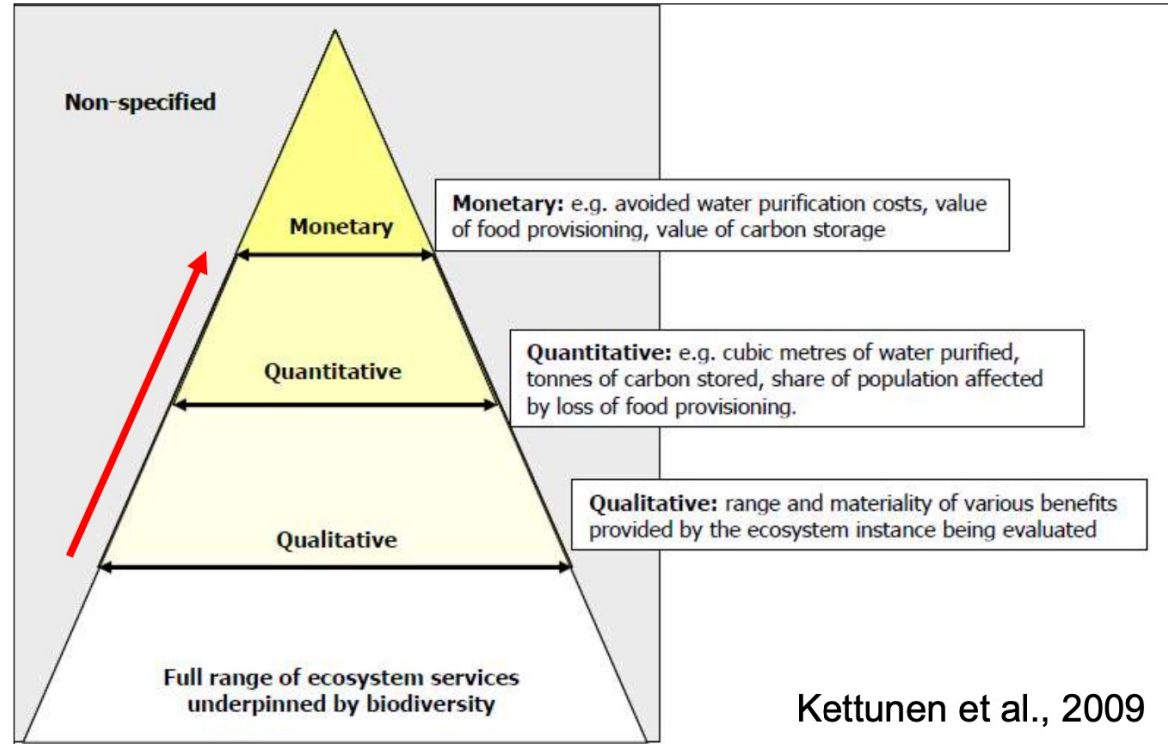
Millenium Ecosystem Assessment (2005)

Ecosystem services included in Business Model

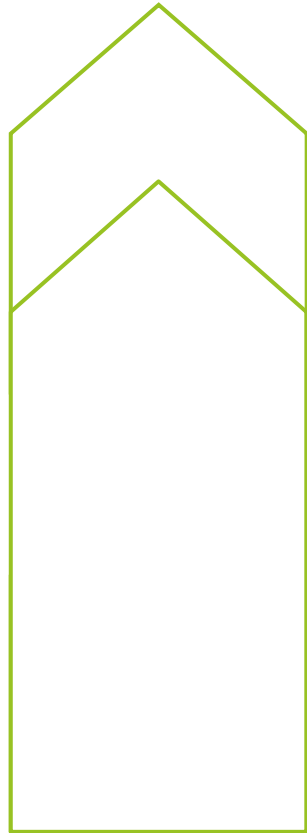


Structure of the business model

Value proposition
→ MCA: qualitative, quantitative, monetary evidence



To summarize



Evidence and experience from practice

An accessible tool to demonstrate added value of a green infrastructure project qualitatively, quantitatively and monetarily!

Scientific, theoretical foundation