

# A New Governance Model for City Green Estates

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EPSRC

## Liveable Cities

*Transforming the  
Engineering of Cities to  
deliver Societal and  
Planetary Wellbeing*

**Birmingham City  
Council**

**Leader-** leading  
global green city;

**Planning-** (2031)  
150,000 population;  
51,300 new homes;

**Presentation:**

- **The Story**
- **The Measures**
- **The World**
- **The Opportunity**



The whole picture  
'Synoptic narrative'

Systems mapping  
for  
'The environmentally illiterate'

## Research findings:-

- **Municipal Governance**
- **Municipal Finance**
- **Municipal Planning**



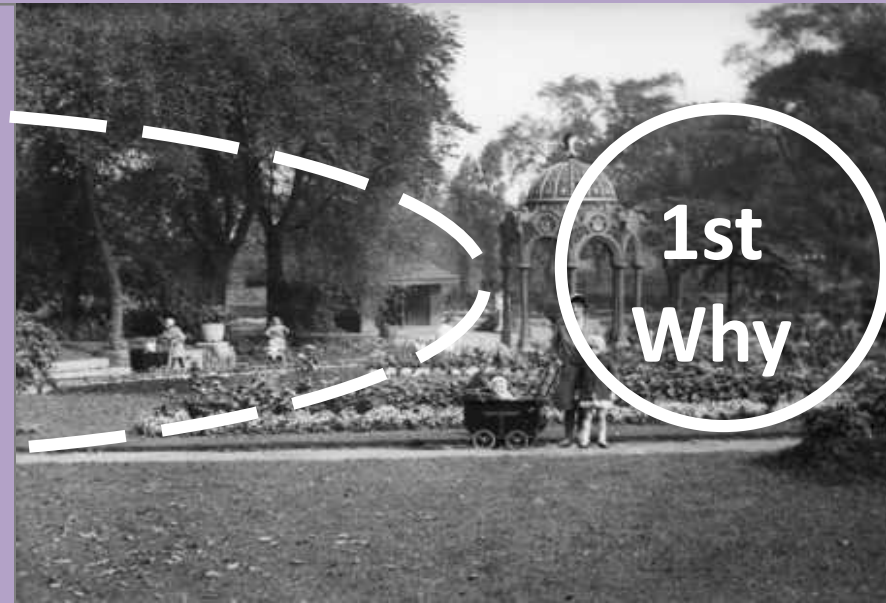
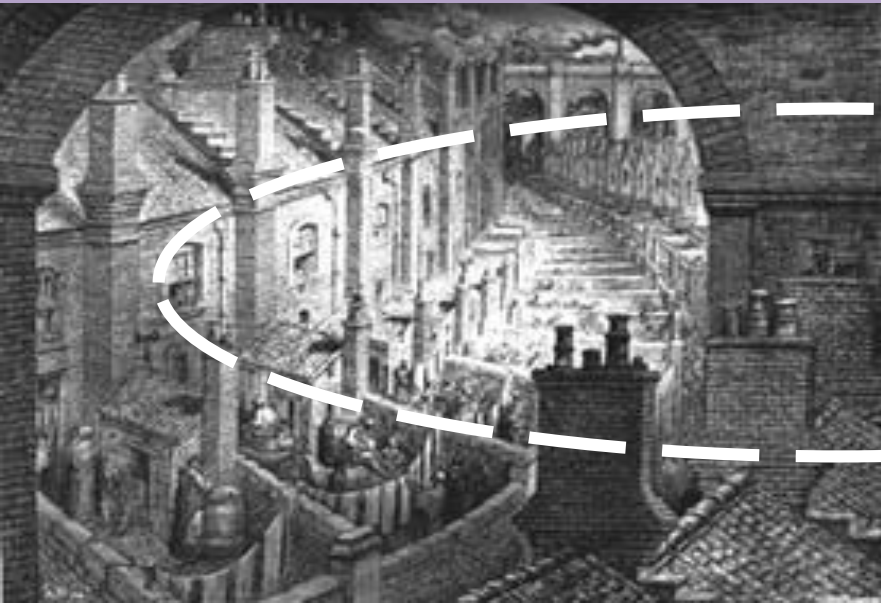
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Nick Grayson, Climate Change & Sustainability Manager,  
Senior Research Fellow, University of Birmingham

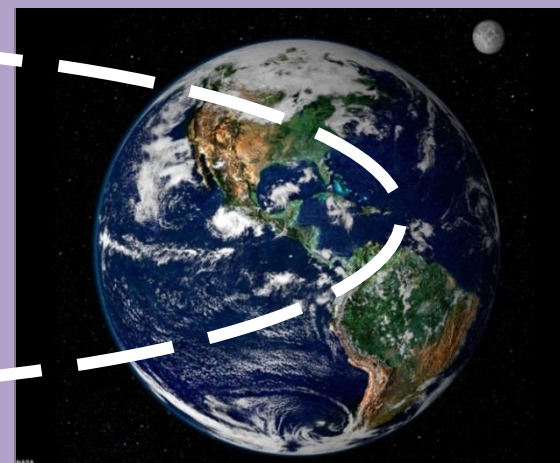


**Birmingham**  
City Council

# The Story



1st  
Why



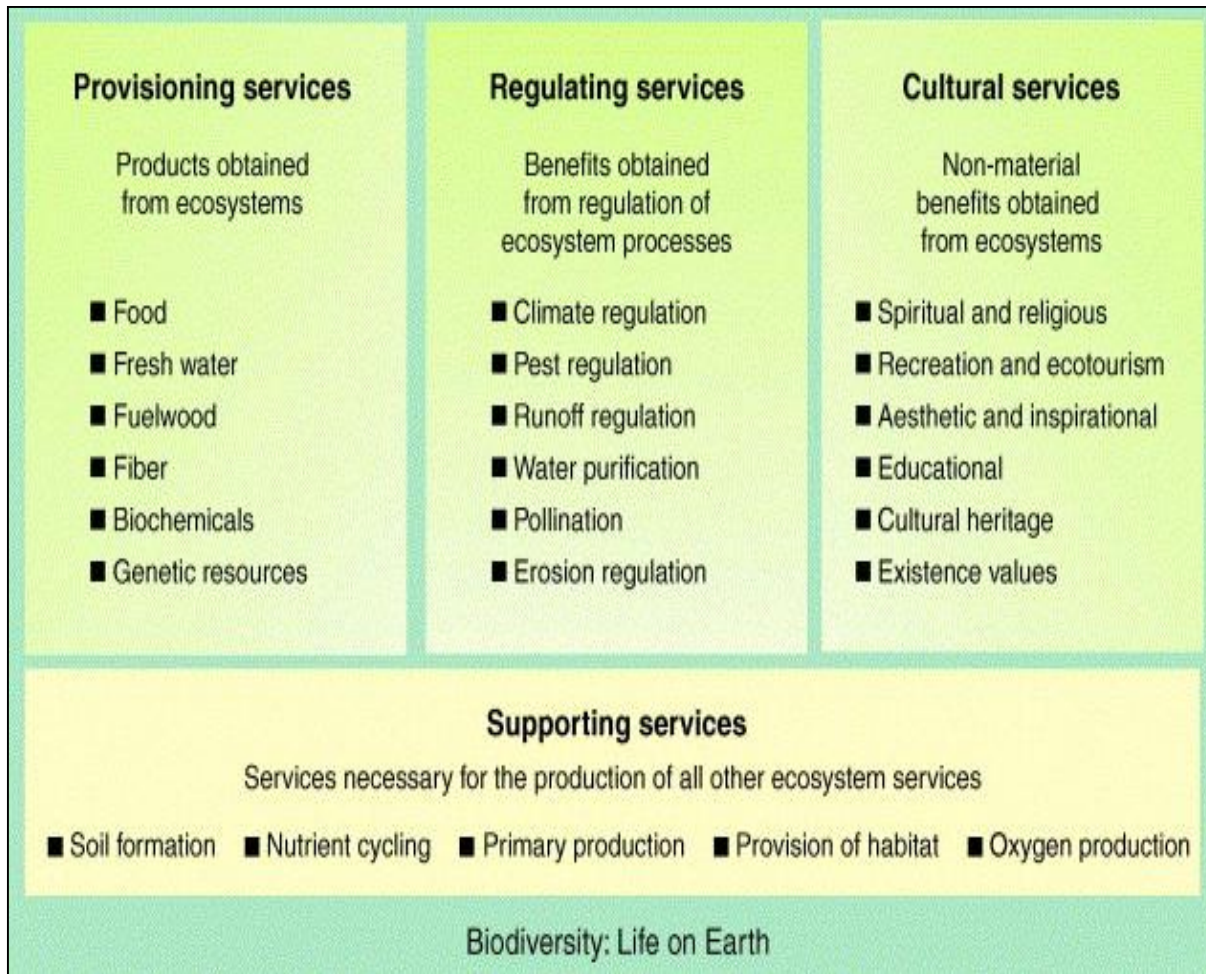
MEA &  
NATURAL  
CAPITAL  
2005

2ndWhy



# The Measures

**Definition** - the benefits provided by ecosystems that contribute to making human life both possible and worth living



Emphasizes  
**service production**  
but the story is  
also about  
**consumption....**

# The Measures



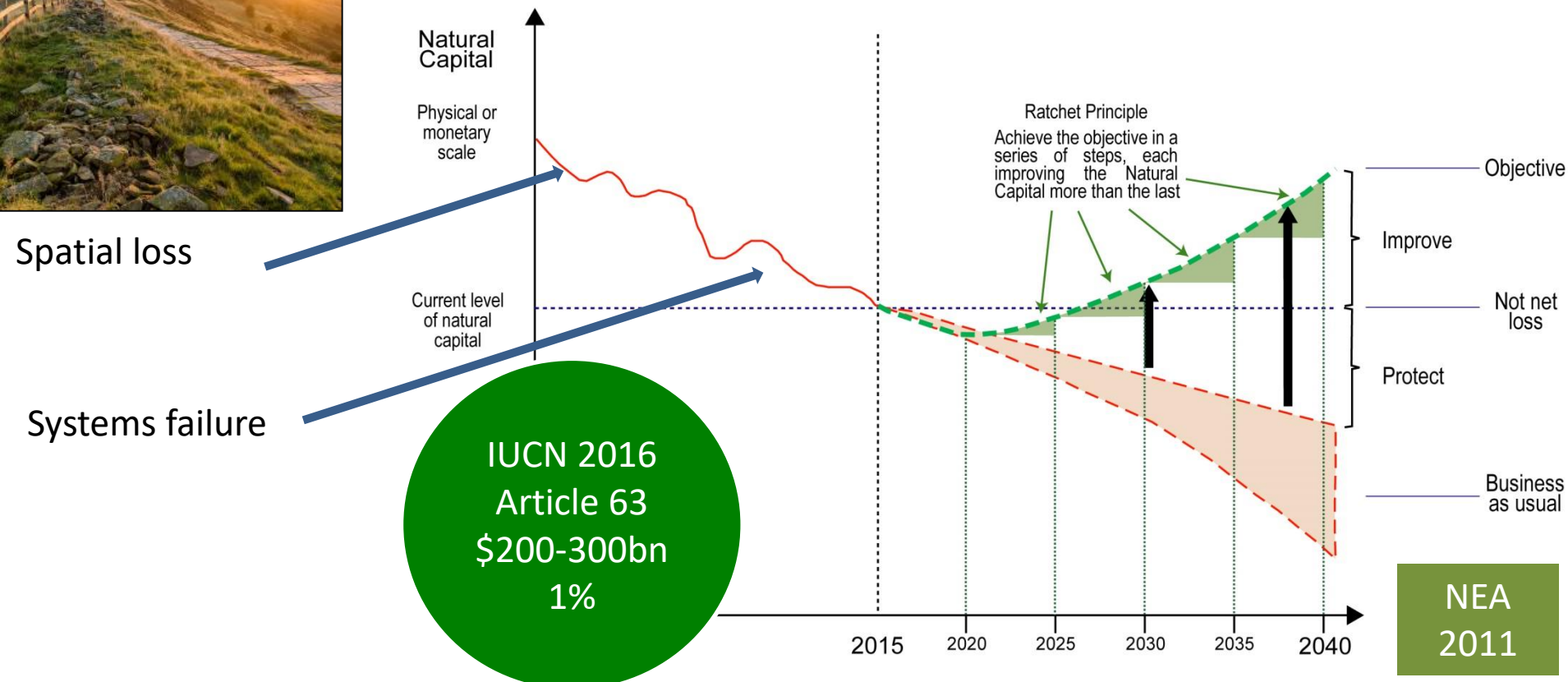
A Green Future: Our 25 Year Plan to Improve the Environment



**Natural Capital** can be **defined** as the world's stocks of **natural** assets which include geology, soil, air, water and all living things. It is from this **Natural Capital** that humans derive a wide range of services, often called ecosystem services, which make human life possible. (Natural Capital Committee Third Report 2015)

**Figure 1: Protecting and improving natural capital over a generation – a stylised interpretation**

25 YEAR NATURAL CAPITAL PLAN

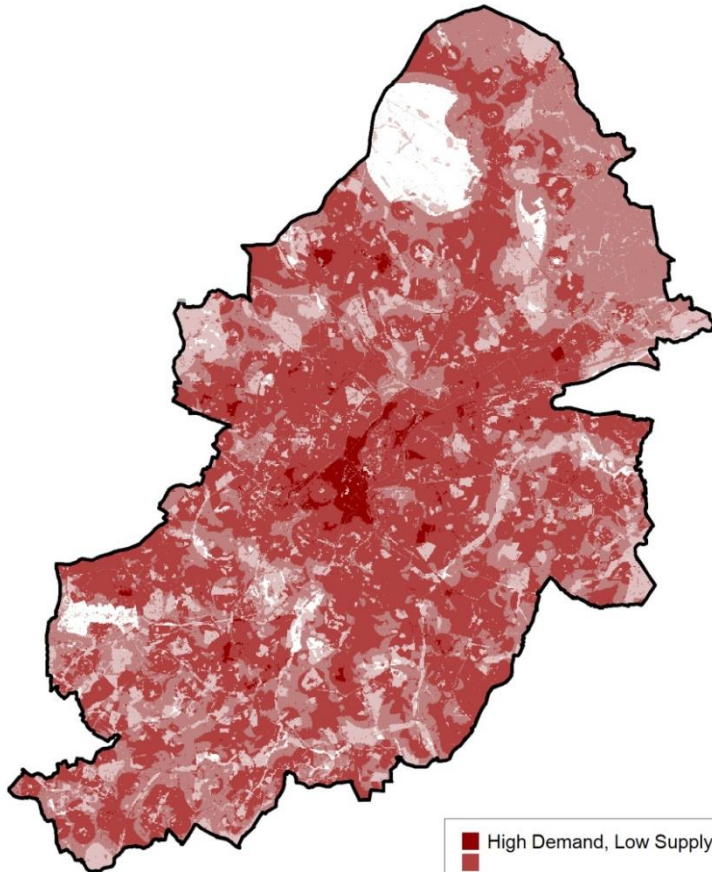




# The Measures

## A Spatial Assessment

The Multi-layered Challenge map for Birmingham



■ High Demand, Low Supply  
■ Low Demand, High Supply  
□ Low Demand, High Supply

March 2013



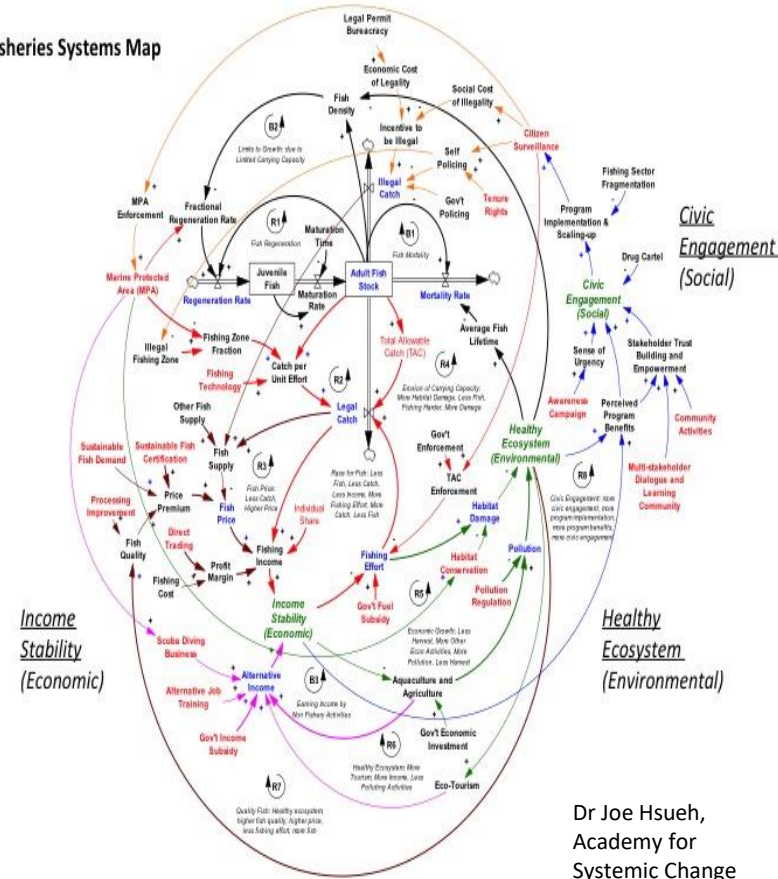
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Biodiversity  
Education  
Recreation  
Local Climate  
Flood Risk  
Aesthetic & mobility

NEA  
2011

## A Systems Approach — (painting ?)

Fisheries Systems Map



Dr Joe Shueh,  
Academy for  
Systemic Change

Fisheries Map Gulf of Mexico

Systems approach-

Who are the main beneficiaries?

Making the Invisible- Visible

# The World

## Gross Ecosystem Product

### NEW SYSTEM OF GREEN FINANCE

200 M people being paid to  
restore natural capital



Liveable Cities:  
Beijing  
Dalian  
Shenzhen  
Shanghai

**GEP – the total value of ecosystem goods and services supplied annually**

natural  
capital  
PROJECT

- China State Council, March 2014

Mark Carney



FINANCIAL  
TIMES



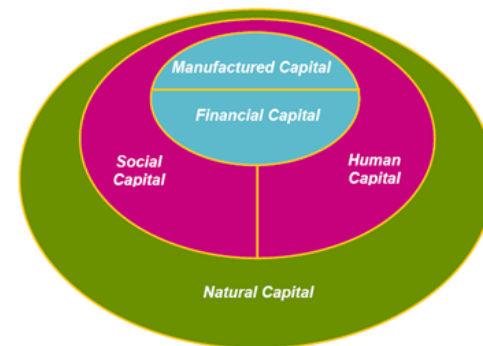
BANK OF ENGLAND



## SUSTAINABLE DEVELOPMENT GOALS



2015



Source: Forum for the Future (2013)  
Five essential capitals for human wellbeing



COP21 • CMP11  
**PARIS 2015**  
UN CLIMATE CHANGE CONFERENCE

# The Opportunity



# The Opportunity

## Communities of Practice

Governance

Planning & Housing

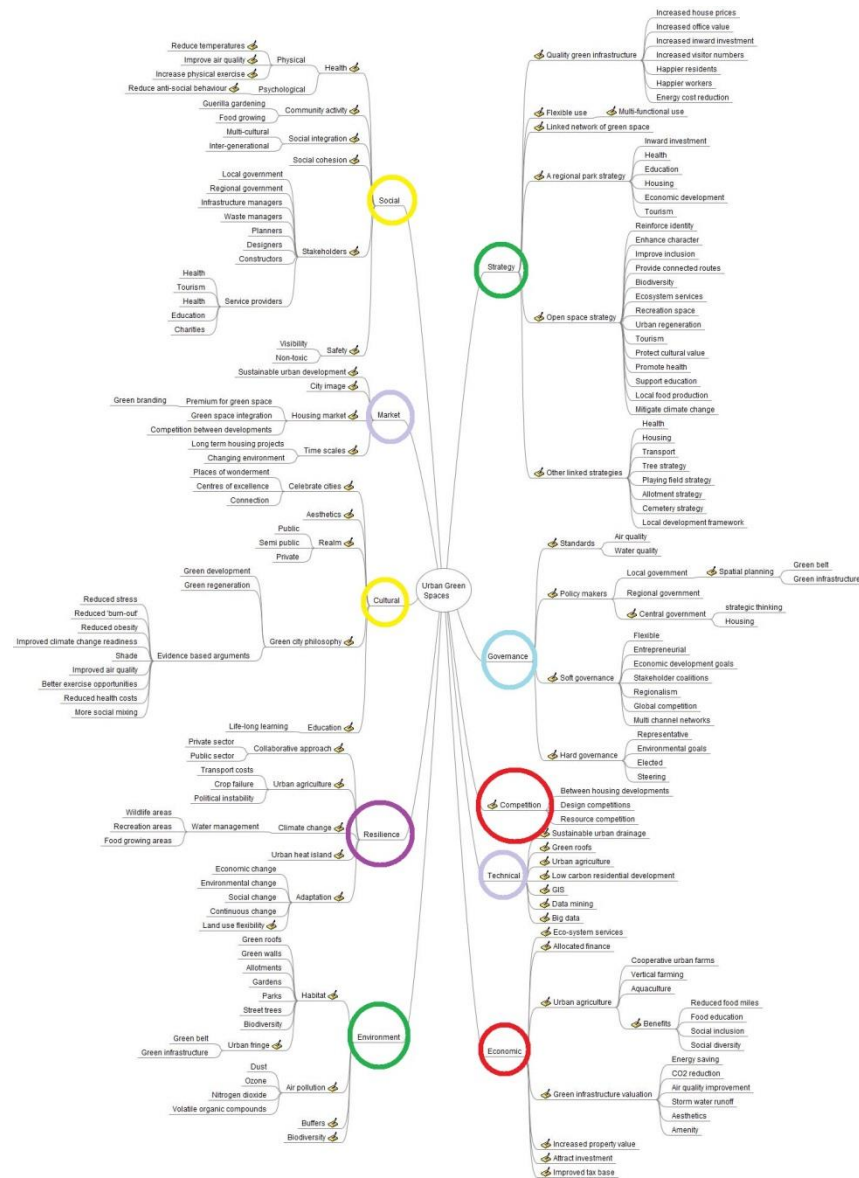
Environmental

Social & Cultural

Resilience & Health

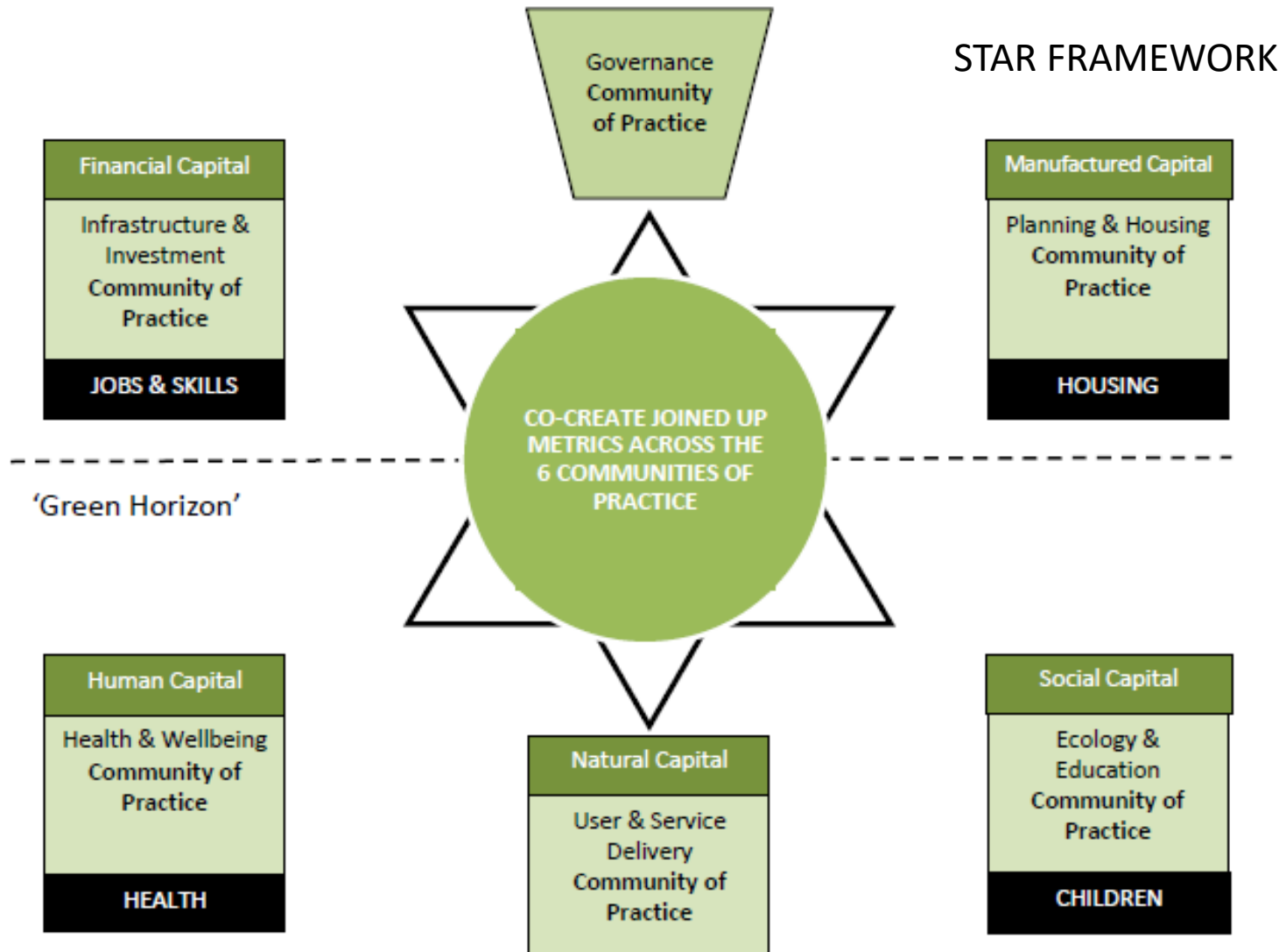
Economy & Infrastructure

- Who are the 'hidden' beneficiaries?





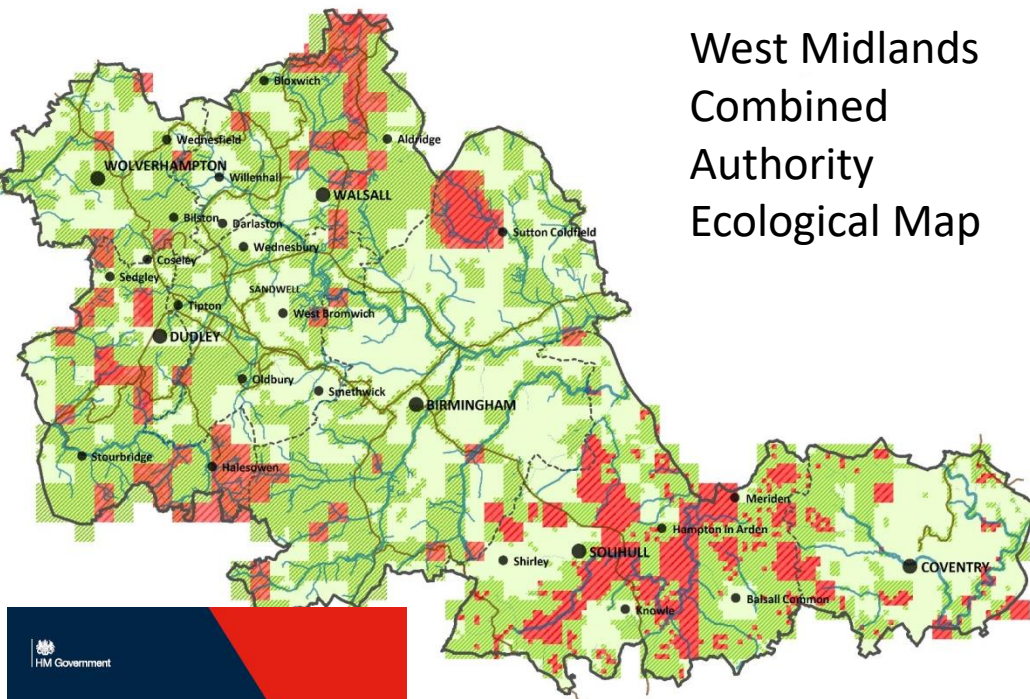
# The Opportunity



**LIVEABLE CITY CONCLUSION**

# The Opportunity

## West Midlands Combined Authority Ecological Map



-  Core Ecological Areas
-  Ecological Linking Areas
-  Ecological Opportunity Areas
-  Rivers and Streams
-  Canals
-  Major Settlements
-  Settlements
-  District Boundaries



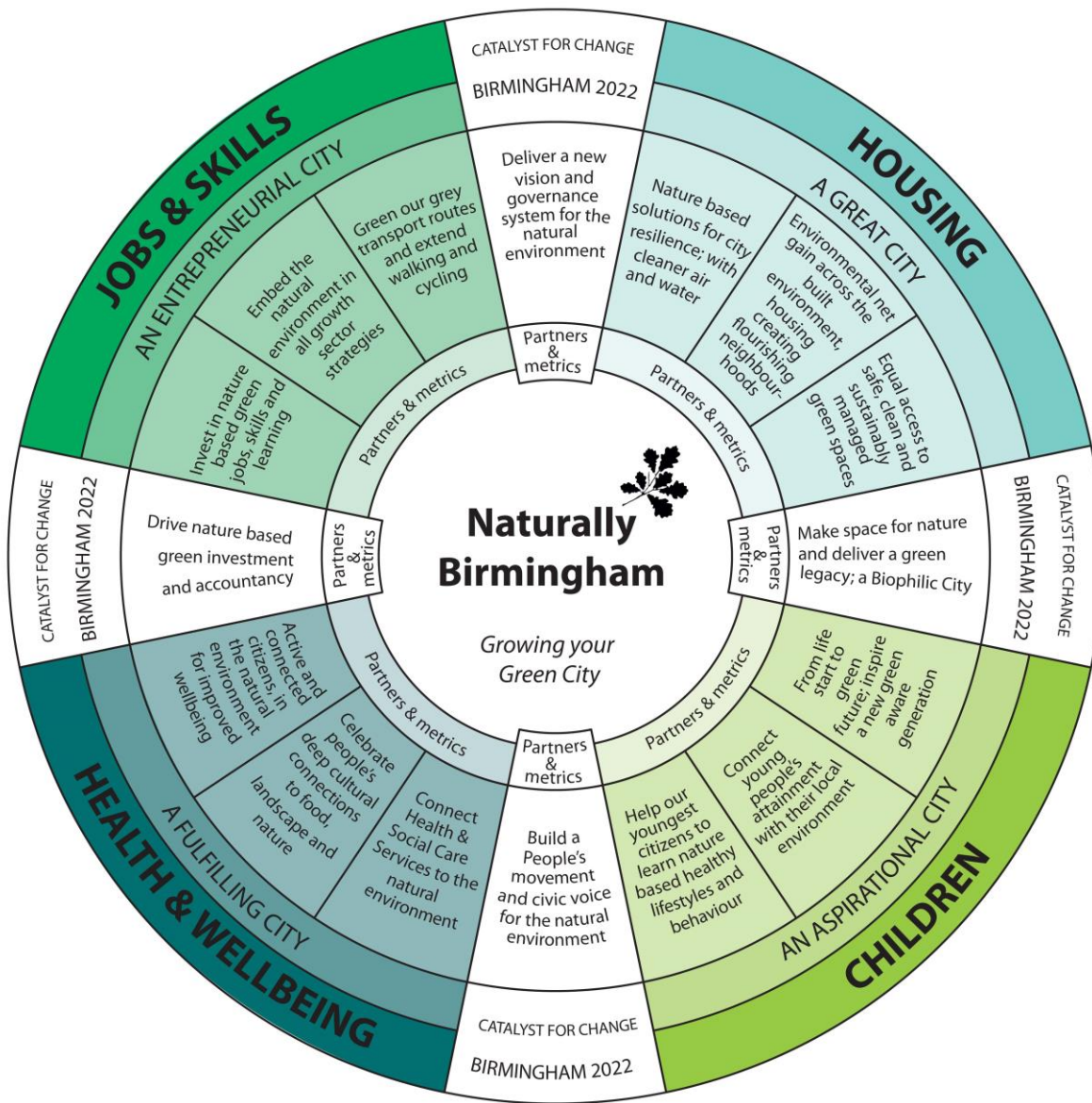
## Birmingham Smithfield Zero Emissions City Framework January 2017





# The Opportunity

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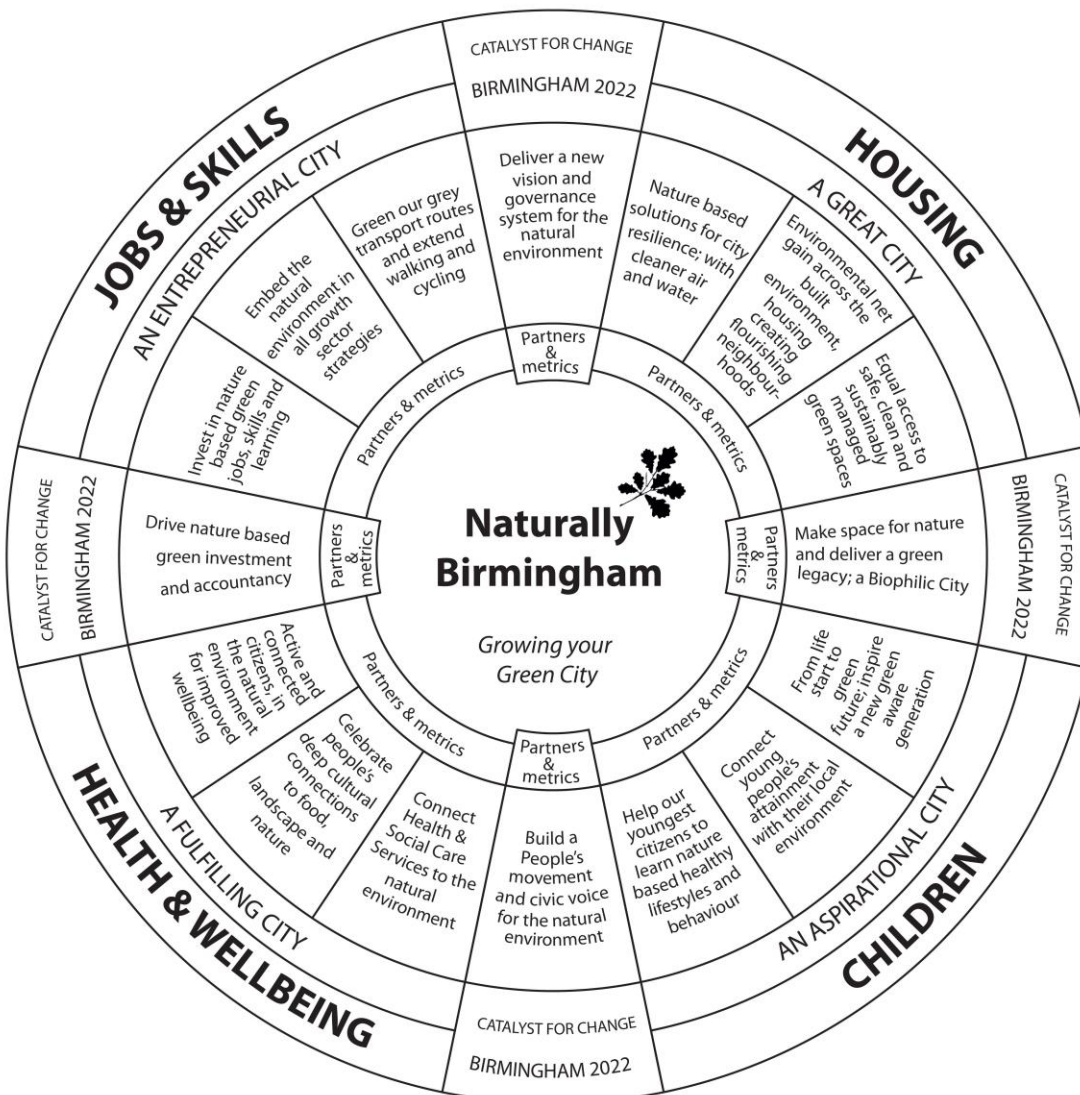
# The Opportunity (Cross-check)

**The 5 Capitals**  
Financial  
Manufactured  
Social  
Human  
and  
Natural

**Framework  
For the  
25 Year  
Environment  
Plan**

- Parks Inquiry

**3 questions**



**Research Findings:**

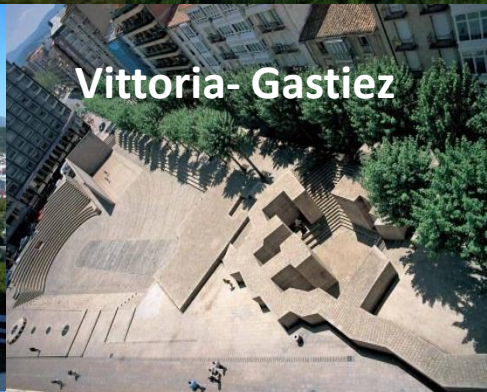
- Municipal Finance
- Municipal Planning
- Municipal Governance

**Delivery mechanism for a Biophilic City & Natural Capital Investment Trust**



# A New Governance Model for City Green Estates

**BiophilicCities** - Cities that achieve a deep affinity with nature





# A New Governance Model for City Green Estates

## Questions & Answers?

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<http://www.birmingham.gov.uk/greenlivingspaces>

<http://www.birmingham.gov.uk/plan2031>

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<http://www.westmidlandscombinedauthority.org.uk/>

<http://www.overshootday.org/>

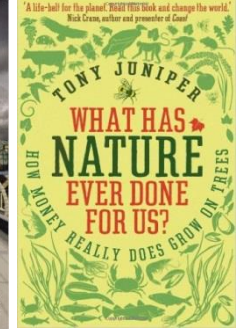
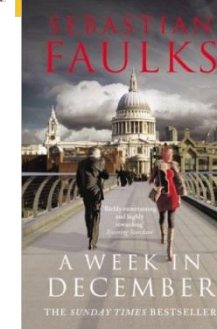
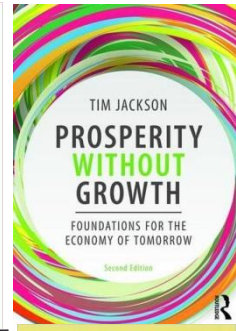
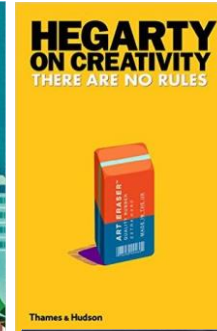
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<http://liveablecities.org.uk/>

<http://biophiliccities.org/>

<http://www.farrellreview.co.uk/>

<http://www.un.org/apps/news/story.asp?NewsID=48773#.VrnAcVLctjo>



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City Council