

A Systems Change for Parks

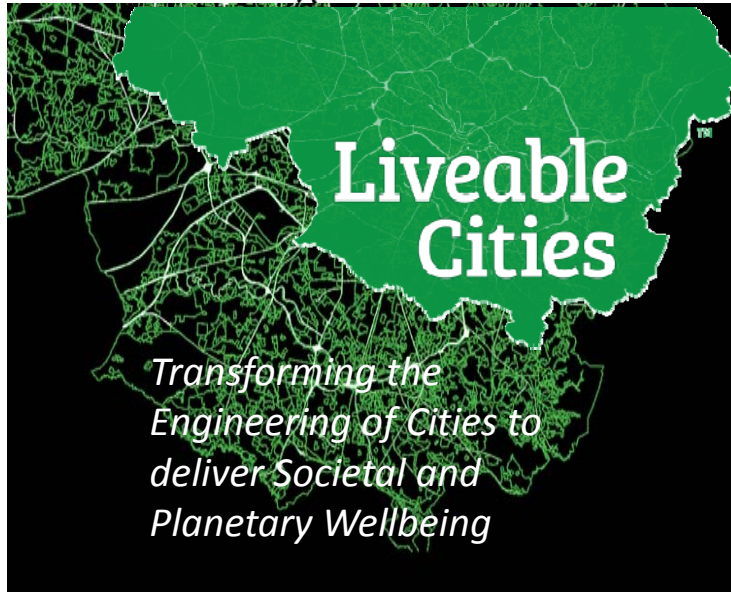
UNIVERSITY OF BIRMINGHAM

LANCASTER UNIVERSITY

UCL

UNIVERSITY OF Southampton

EPSRC



Birmingham City Council
Leader- leading global green city;

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

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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:-

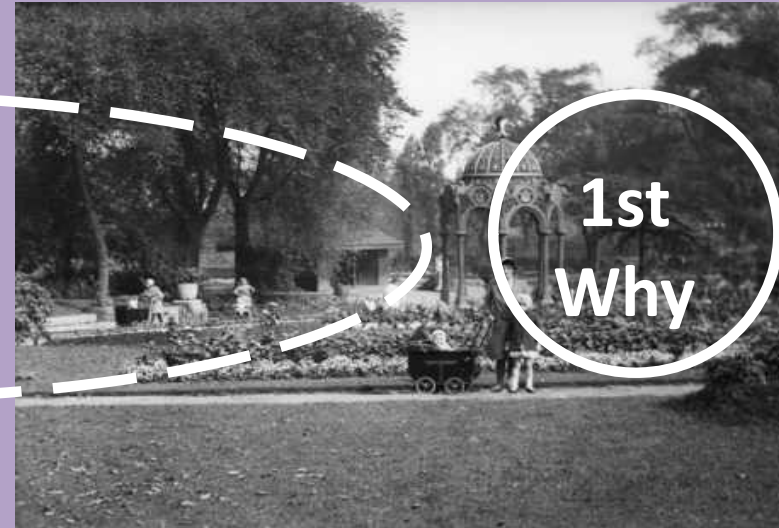
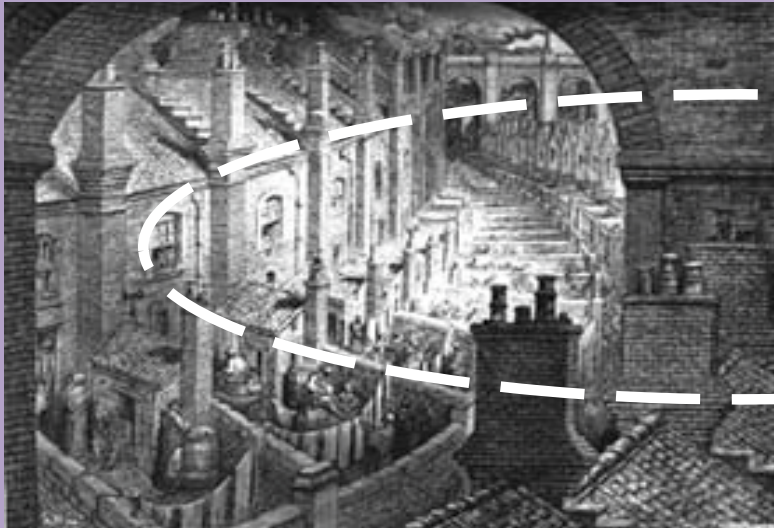
- **Municipal Governance**
- **Municipal Finance**
- **Municipal Planning**

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



APSE Annual Seminar- 2018- Greener, Cleaner, Smarter- Making the Invisible- Visible

The Story



The Measures

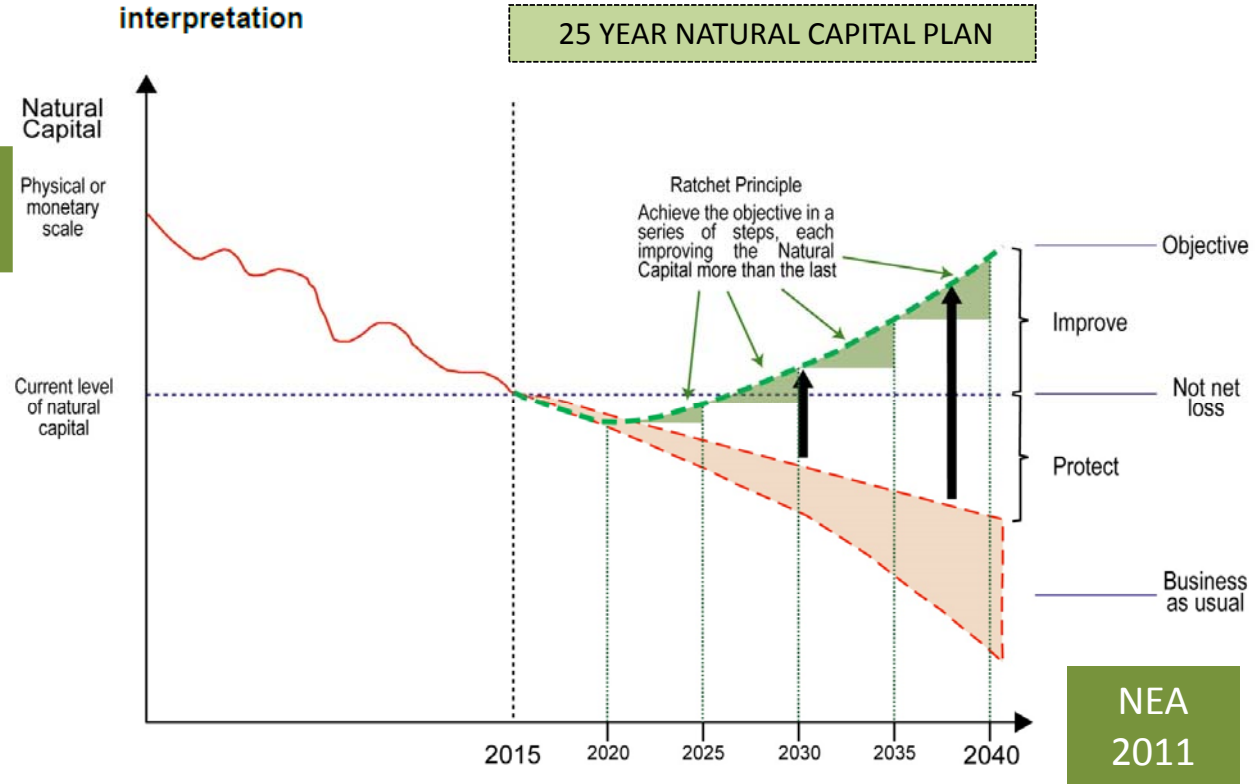
IUCN 2016
Article 63
\$200-300bn
1%

NATIONAL &
INTERNATIONAL SCALE

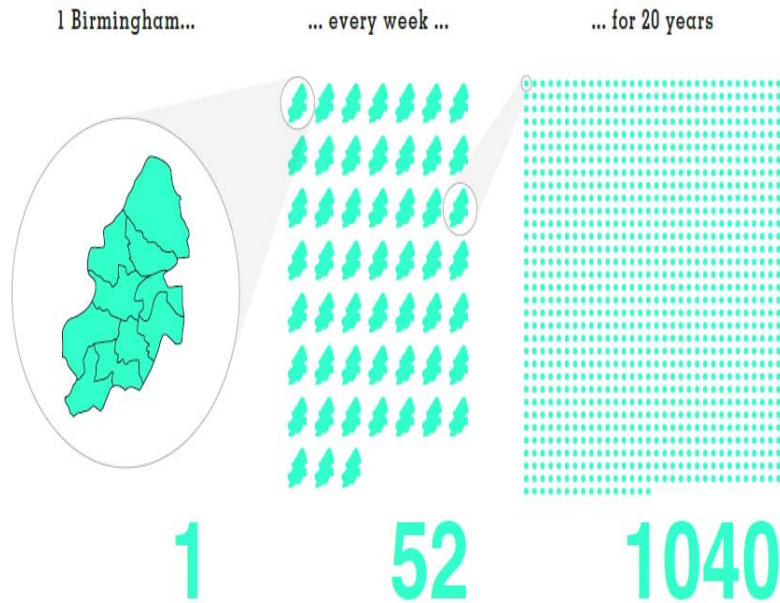


Natural Capital can be defined as the world's stocks of **natural** assets which include geology, soil, air, water and all living things. It is from this **Natural Capital** that humans derive a wide range of services, often called ecosystem services, which make human life possible. (Natural Capital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

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



The World



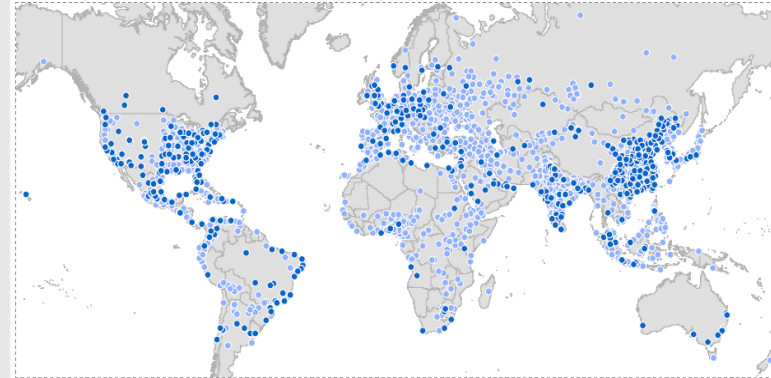
We need to build the equivalent of one Birmingham a week around the globe for the next 20 years if we are to house the growing urban populations.

THE FARRELL REVIEW INTRODUCTION

9

The City 600: MGI's Cityscope identifies the world's fastest-growing megacities and middleweights

- The City 600 (600)
- Additional cities in MGI Cityscope (~1,400)



- McKinsey paper 21st century growth and wealth creation:
- http://www.mckinsey.com/insights/urbanization/urban_world:

SOURCE: McKinsey Global Institute Cityscope 1.0

20 YEAR PATTERN OF GLOBAL GROWTH
"Patient Money"



Climate Alliance

Climate Alliance represents \$21 Trillion Dollars of global investment awaiting climate proofing

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

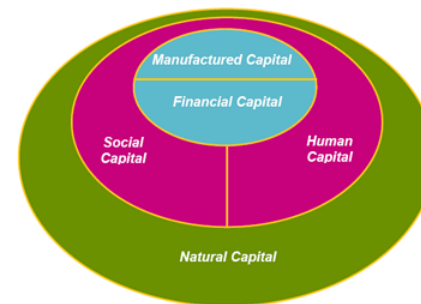




SUSTAINABLE DEVELOPMENT GOALS



2015

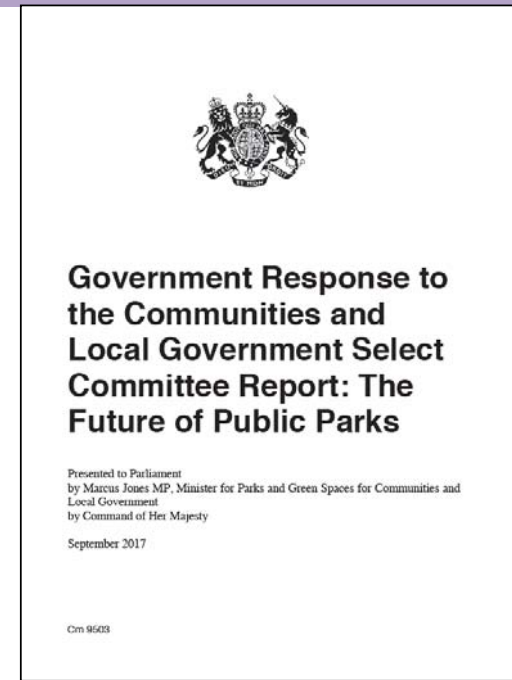
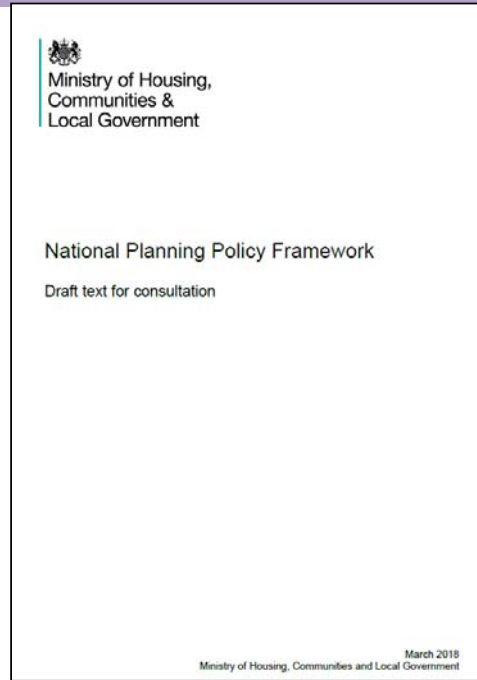
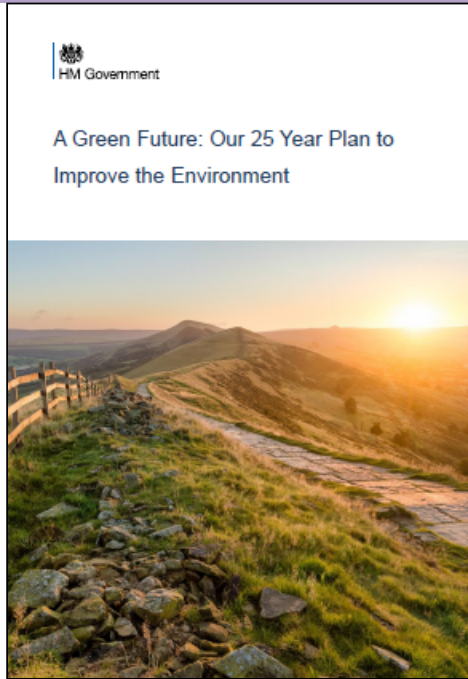


Source: Forum for the Future (2013)
Five essential capitals for human wellbeing



COP21 • CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

The Opportunity



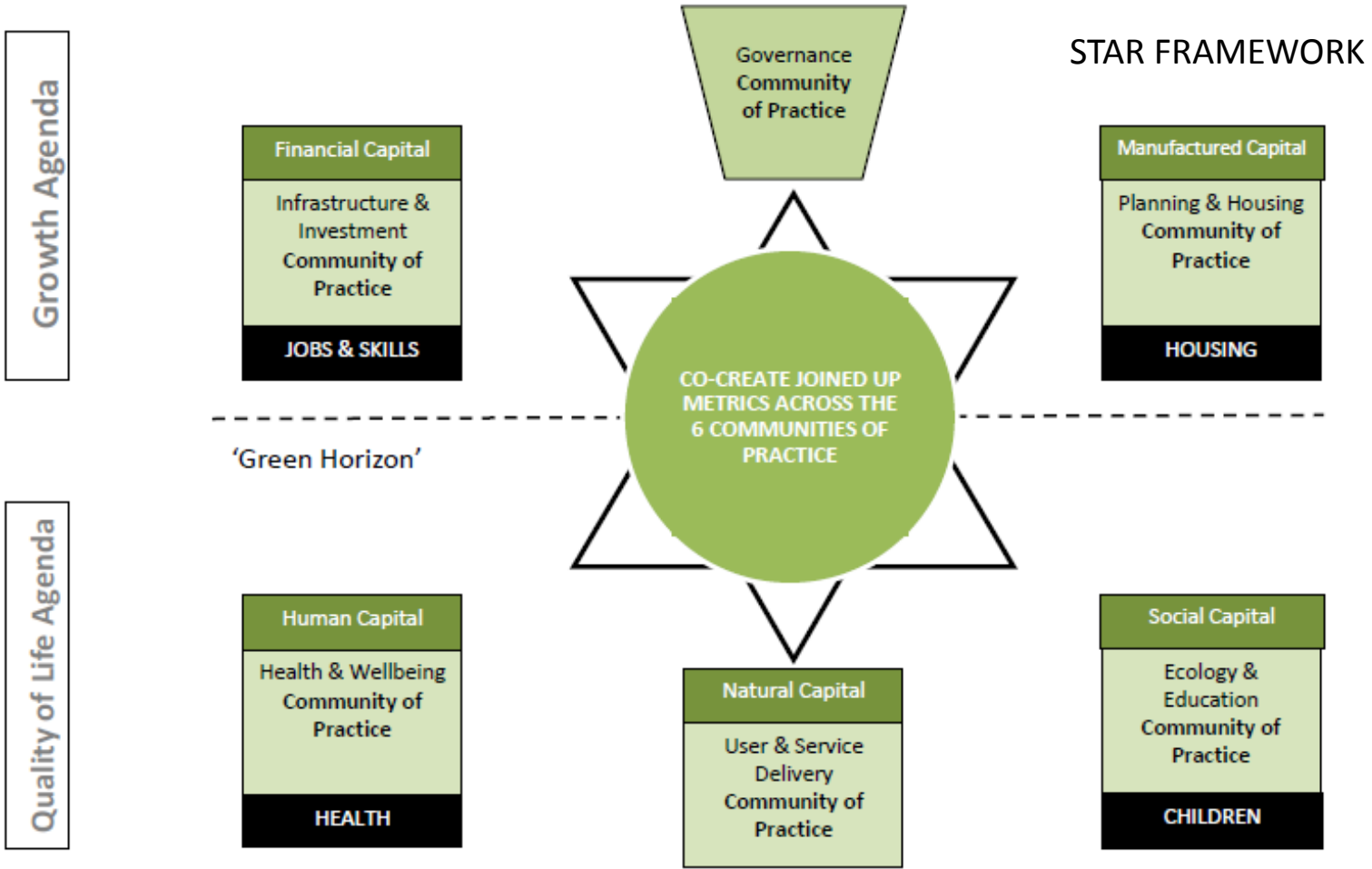
URBAN GREEN SPACE IS THE BIGGEST CONNECTION

Department for Environment, Food & Rural Affairs (Defra)
Department of Health (DH)
Department for Education (DfE)
Department for Culture, Media & Sport (DCMS)

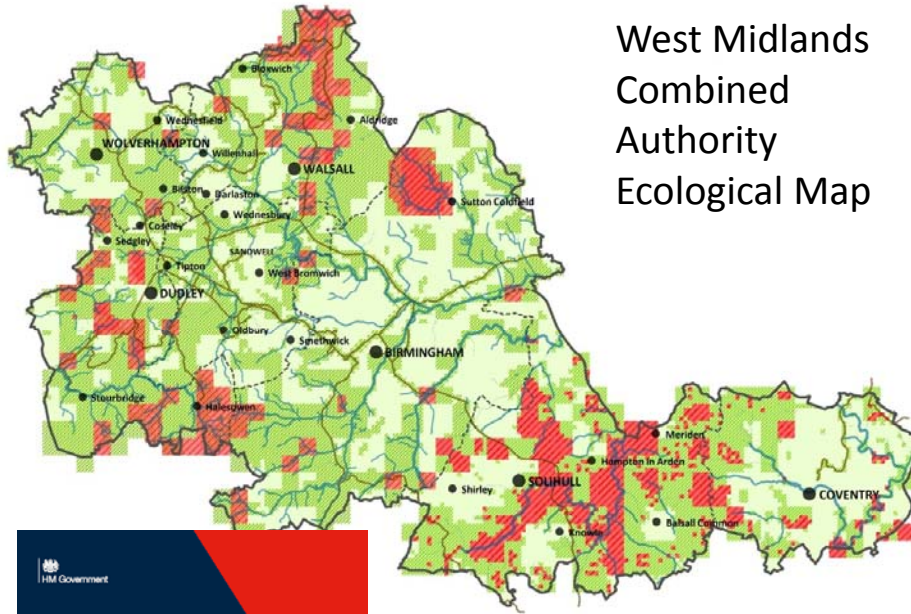


Home Office (HO)
Department for Business, Energy & Industrial Strategy (BEIS)
Department for Work and Pensions (DWP)

The Opportunity



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

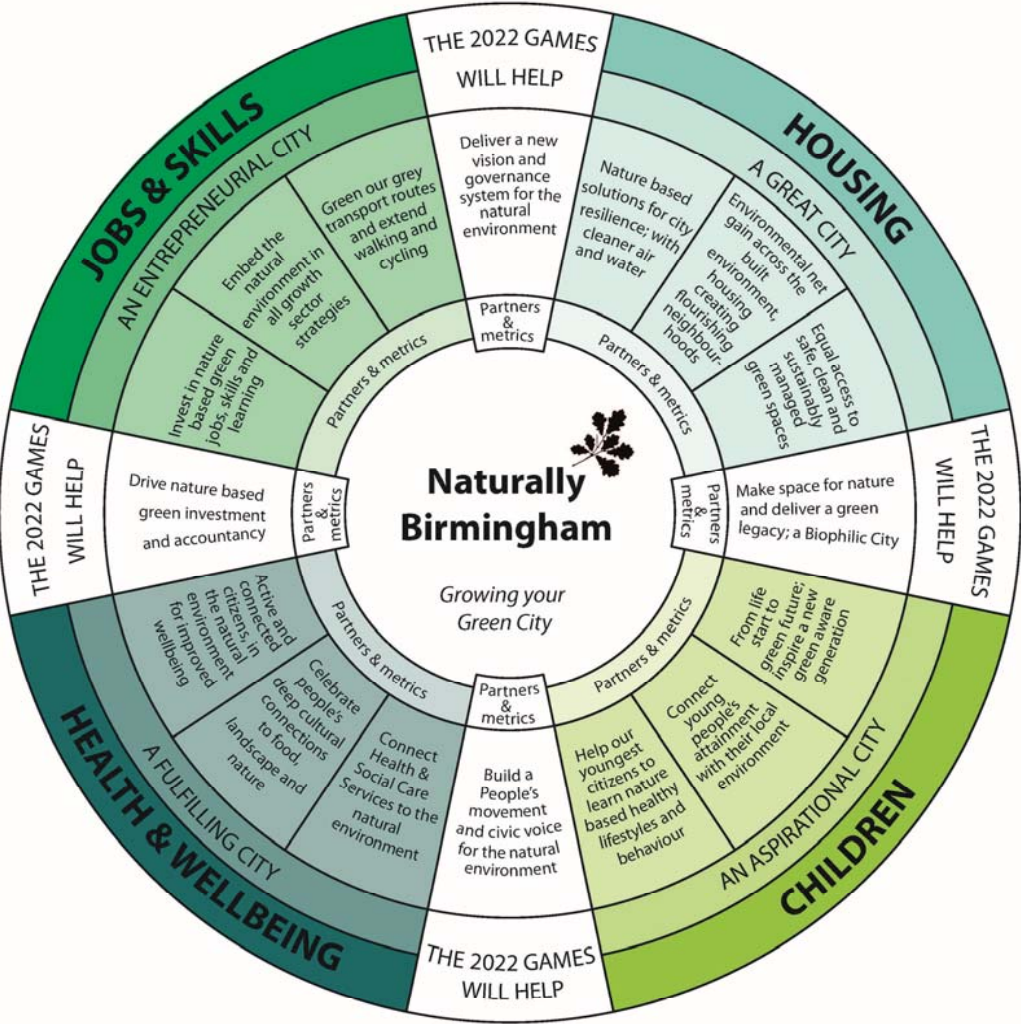


Birmingham Smithfield
Zero Emissions City Framework
January 2017



The Opportunity

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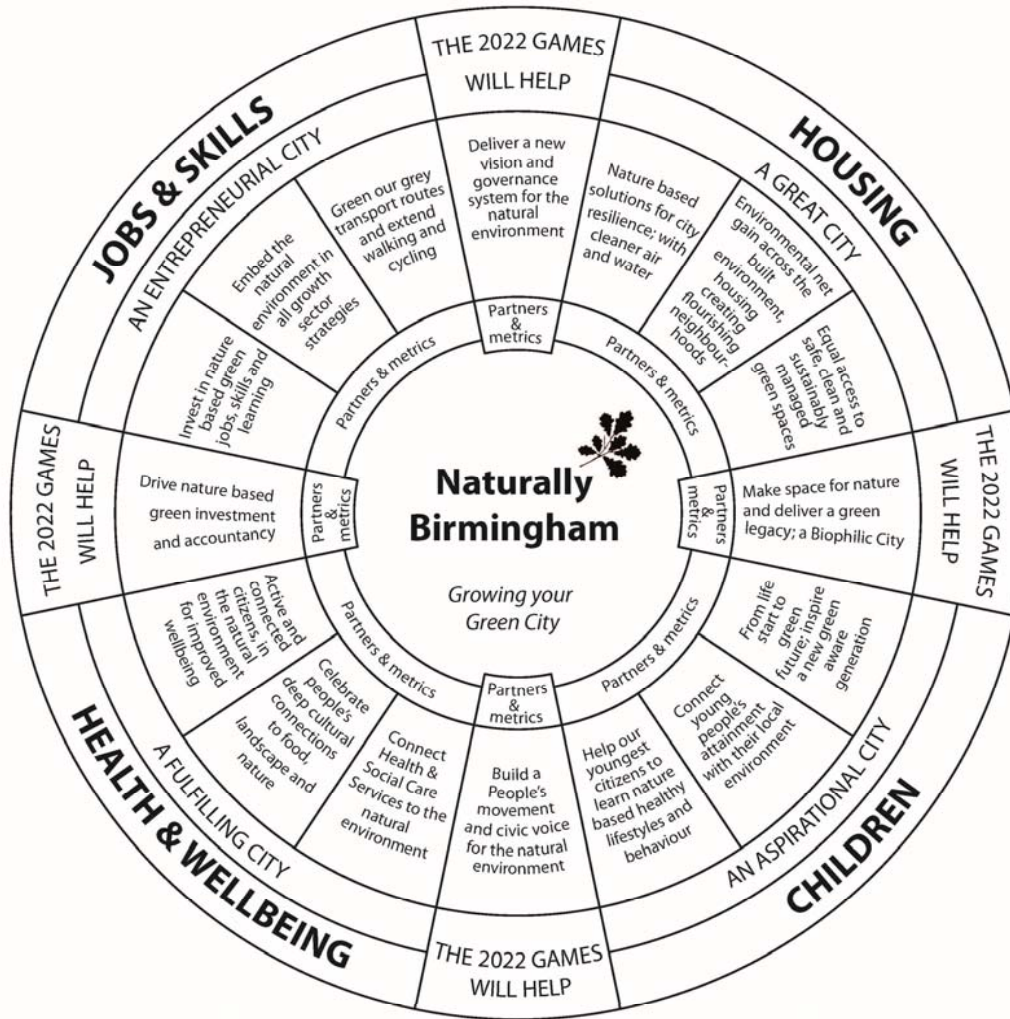


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The Opportunity

The 5 Capitals
Financial
Manufactured
Social
Human
and
Natural

A
Framework
For the
25 Year
Environment
Plan
City & region



Research Findings:

- Municipal Finance
- Municipal Planning
- Municipal Governance

Delivery mechanism for a Biophilic City & Natural Capital Investment Trust

A Systems Change for Parks

Biophilic Cities - Cities that achieve a deep affinity with nature



A Systems Change for Parks

Questions & Answers?

Nick Grayson, Climate Change & Sustainability Manager,
nick_grayson@birmingham.gov.uk

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

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

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

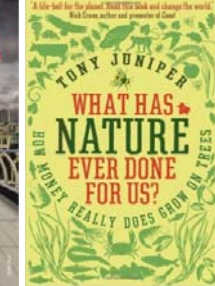
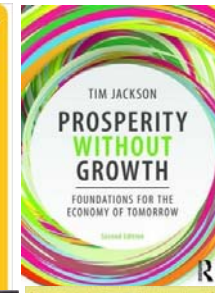
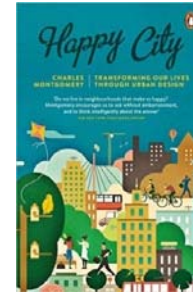
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<http://liveablecities.org.uk/>

<http://biophiliccities.org/>

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

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



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BIRMINGHAM



Birmingham
City Council

