

Explaining Natural Capital and Biophilic City as the future of Parks

“Metanoia”



Birmingham City Council

Leader- leading global green city;

Planning-

150,000 population;
80,000 new homes;

Green

Commission

- Green Vision;
- Carbon Roadmap - 60% carbon reductions;
- Natural Capital



Nick Grayson

Climate Change & Sustainability Manager,



Birmingham City Council

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"We the mayors and governors of the world's leading cities. ask you to recognise that the future of our globe will be won or lost in the cities of the world."

Copenhagen Climate Change communiqué,
December 2009



**STERN 1% GDP
GLOBAL 2006**

UK Statistics 2012

% of UK population living as urban ?

% urban areas not built form?

% total of England built on?

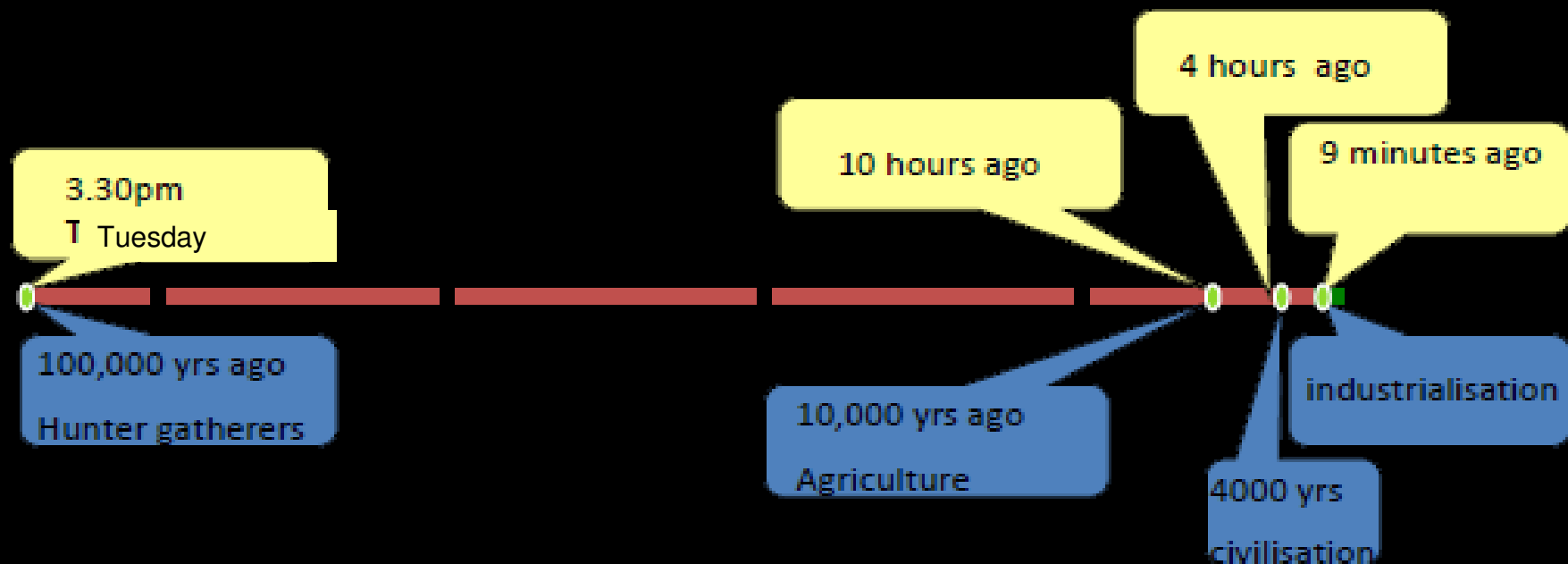
% GHG & natural resources – global cities?

"A Week in December" ?

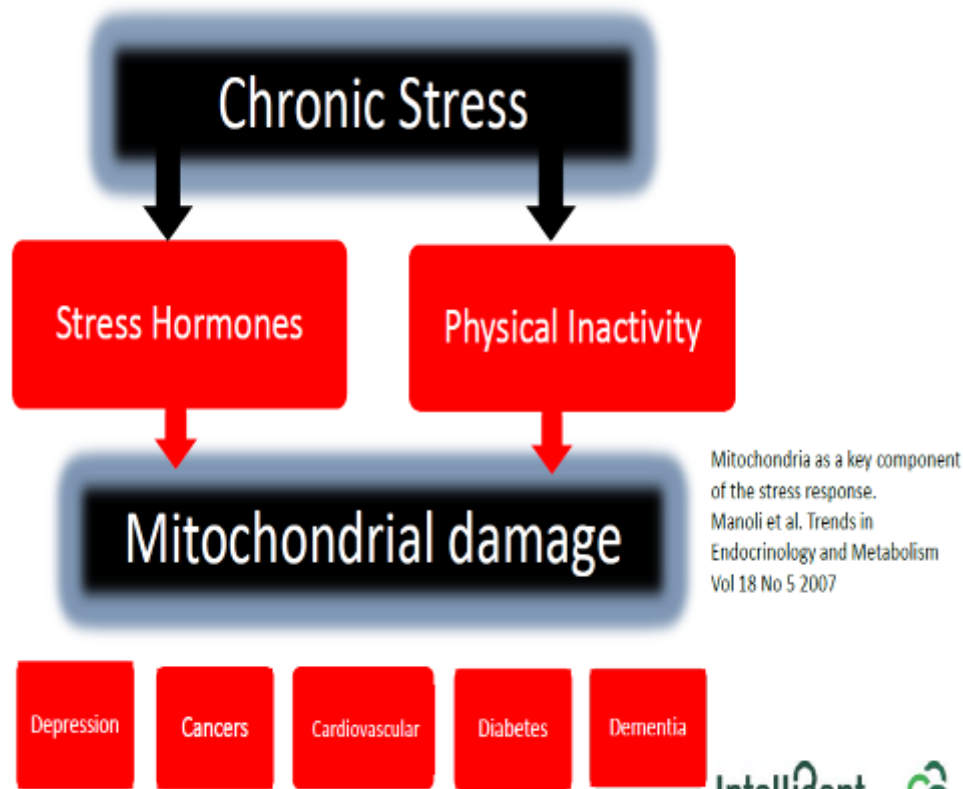
BOSF June Conference -Birmingham 2014

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If we take an hour to equal 1000 years then from **Tuesday** now is 100,000 years; the time from the origin of mankind to today.



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Intelligent
Health



Non-communicable diseases represent a new frontier in the fight to improve global health. Worldwide, the increase in such diseases means that they are now responsible for more deaths than all other causes combined.

Secretary General United Nations 2011

BUCCANEER – Birmingham Urban Climate Change Adaptation

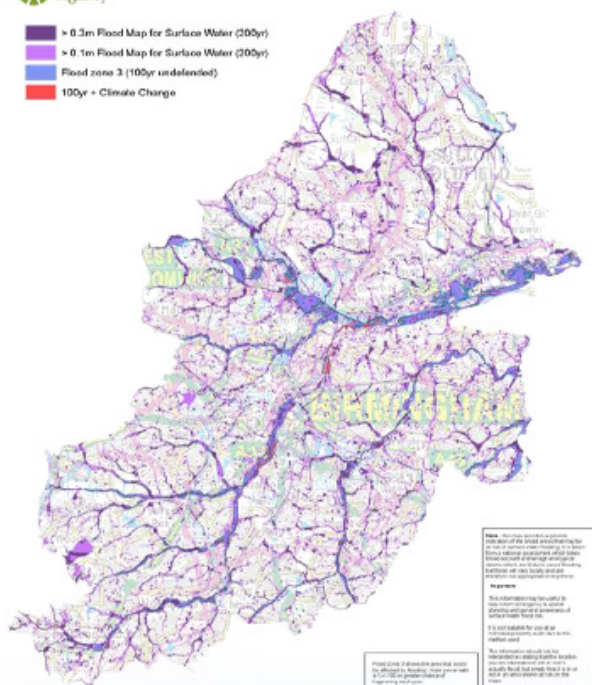
Neighborhood Estimates of Environmental Risk

Assessing the risks to Birmingham

Modelled Annual Mean Nitrogen Dioxide Concentrations 2008

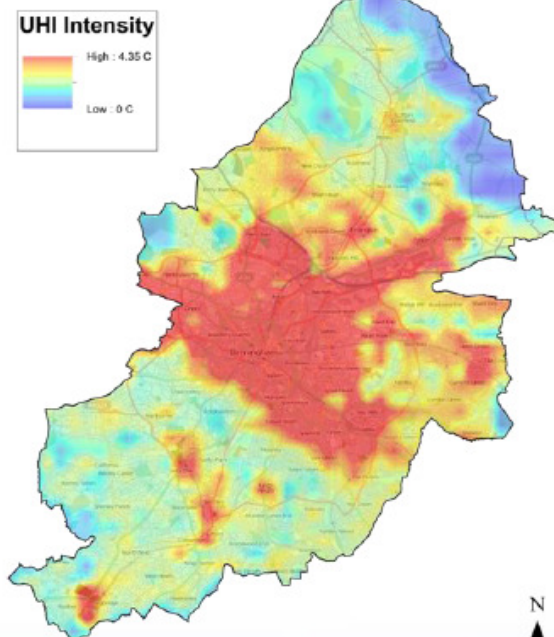


Pluvial and Fluvial Flood Risk (March 2011)

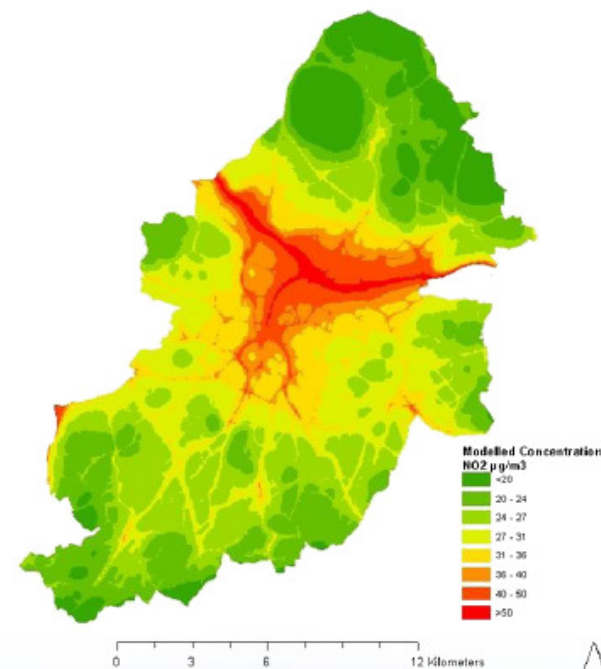


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**Birmingham's Estimated
Heatwave Urban Heat Island
(18th July 2006, 01:00)**

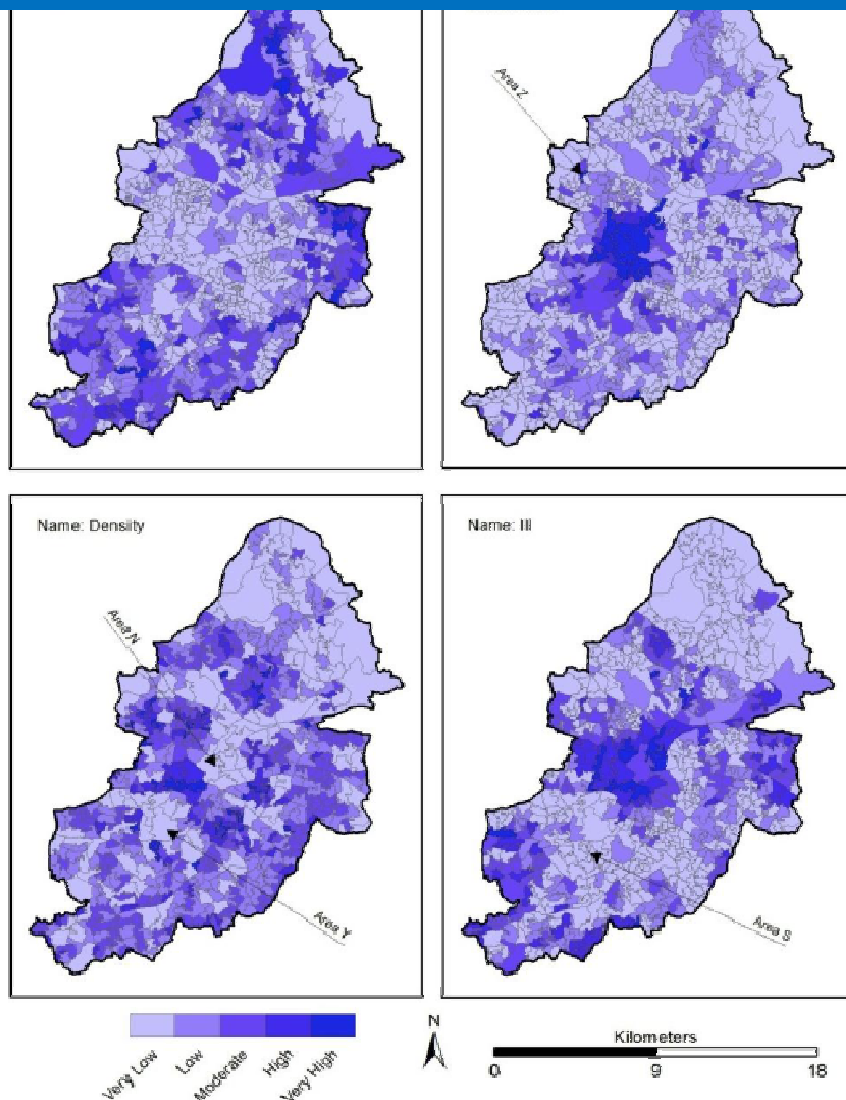


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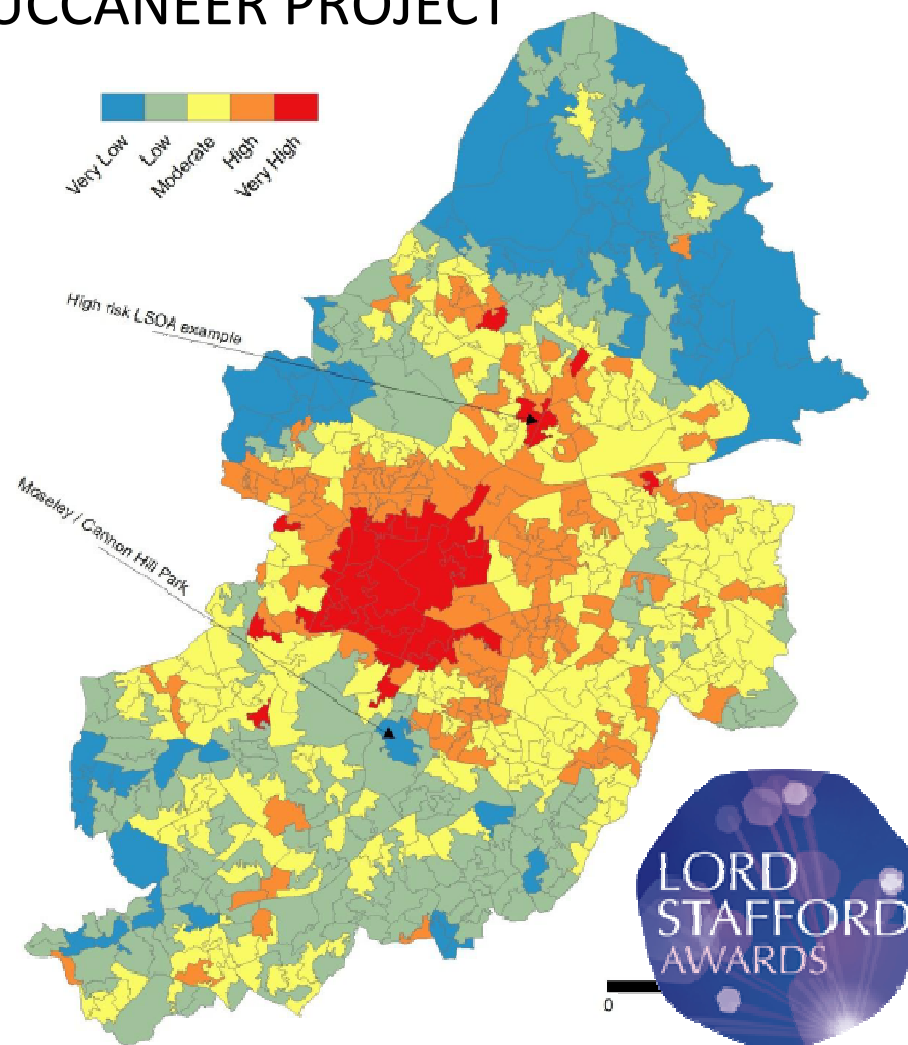


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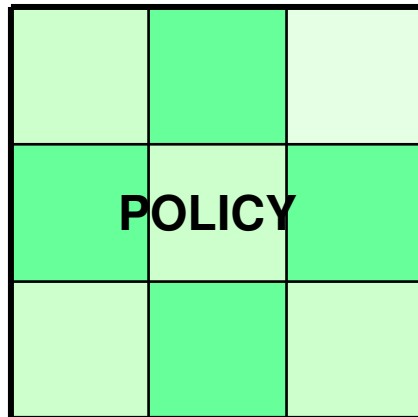


BUCCANEER PROJECT

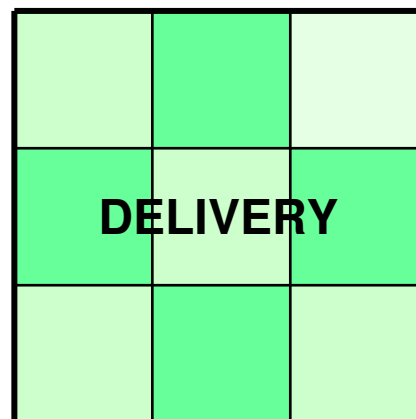
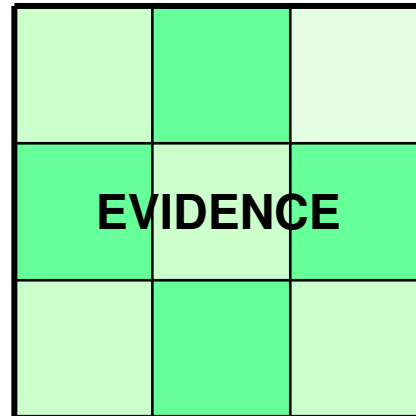


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The 9 piece
jigsaw



Green
Infrastructure &
Adaptation
Delivery Group



Key Partners

Climate Risk

Water

Green Infrastructure

Health & Well Being

Biodiversity

The LEP & Business

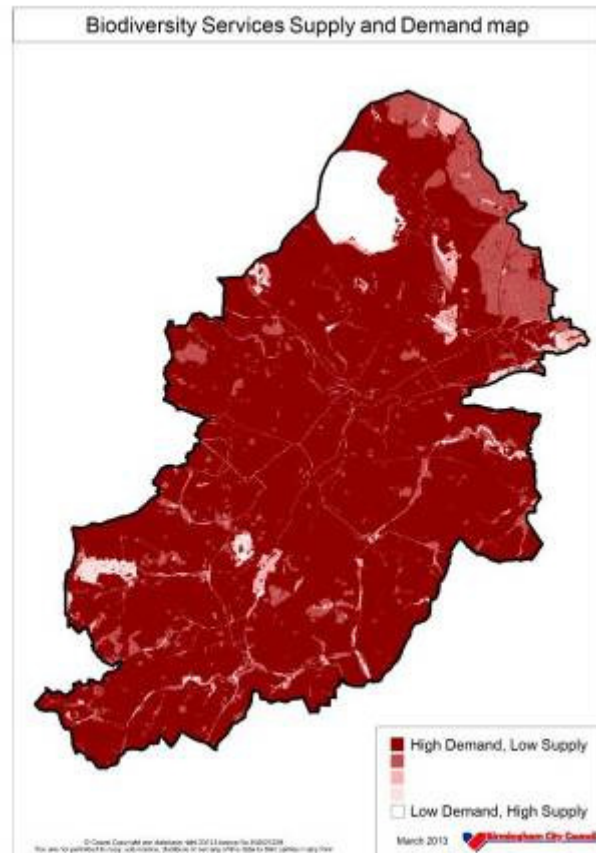
Community + Resilience

Planning

Transport & Infrastructure

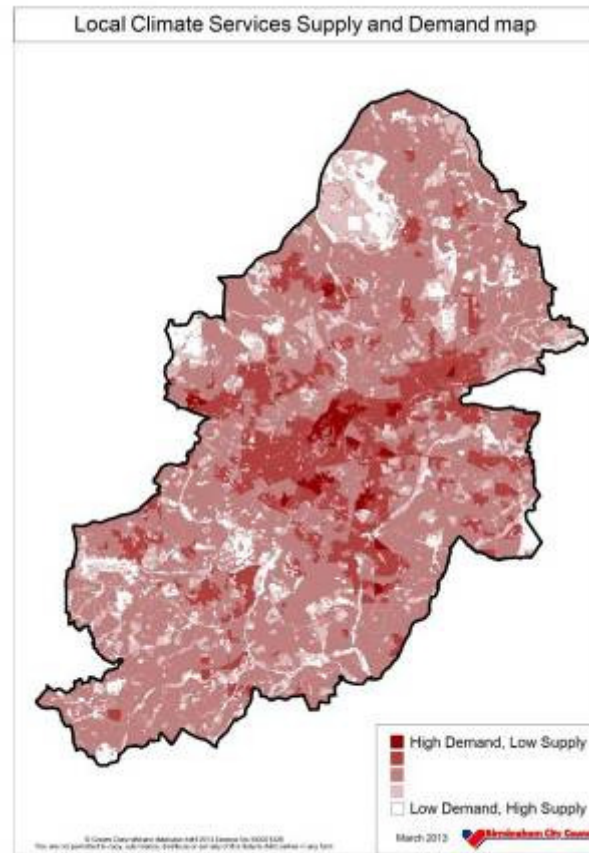
Principle	Outcome
An Adapted City	Retain City's top ranking for adaptation
	<ul style="list-style-type: none"> •Ensure all future growth is adapted •Trees for cooling and thermal insulation •Green roofs, walls and street canyon research
The City's Blue Network	Adopt water sensitive urban design
	<ul style="list-style-type: none"> •Integrated SuDS, flood and water management solutions •Blueprint for enhance walking and cycling offer •Blue Corridor/ network policy with Canal Rivers Trust
A Healthy City	Adopt Natural Health Improvement Zones (NHIZ)
	<ul style="list-style-type: none"> •Integrate the delivery of health and green living spaces •Continue to extend the 'Be Active' offer •Public Health as key partners in Planning
The City's Productive Landscapes	Embrace urban forestry and urban food growing
	<ul style="list-style-type: none"> •Continue to promote allotments •Facilitate community food growing and orchards •Promote the multiple benefits of urban forestry
The City's Greenways	Change gear- to a walking and cycling City
	<ul style="list-style-type: none"> •Create walkable/ cyclable neighbourhoods •Citywide signed routes linked to public transport •Link healthcare activities and prevention programmes
The City's Ecosystem	Birmingham as a Biophilic City
	<ul style="list-style-type: none"> • City to adopt an ecosystem services approach •Partners to lead on District Nature Improvement Area plans •Birmingham to join global Biophilic Cities Network
The City's Green Living Spaces	Birmingham an international City of Green Living Spaces
	<ul style="list-style-type: none"> •Adopt the 7 principles across Planning Framework •Green Infrastructure and Adaptation Delivery Group

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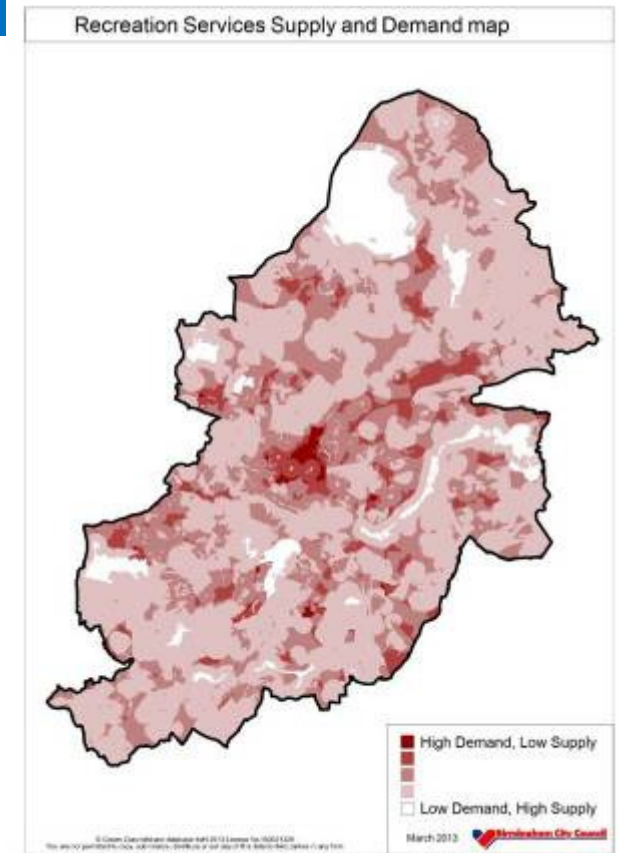
•Biodiversity

•Education



* Local Climate

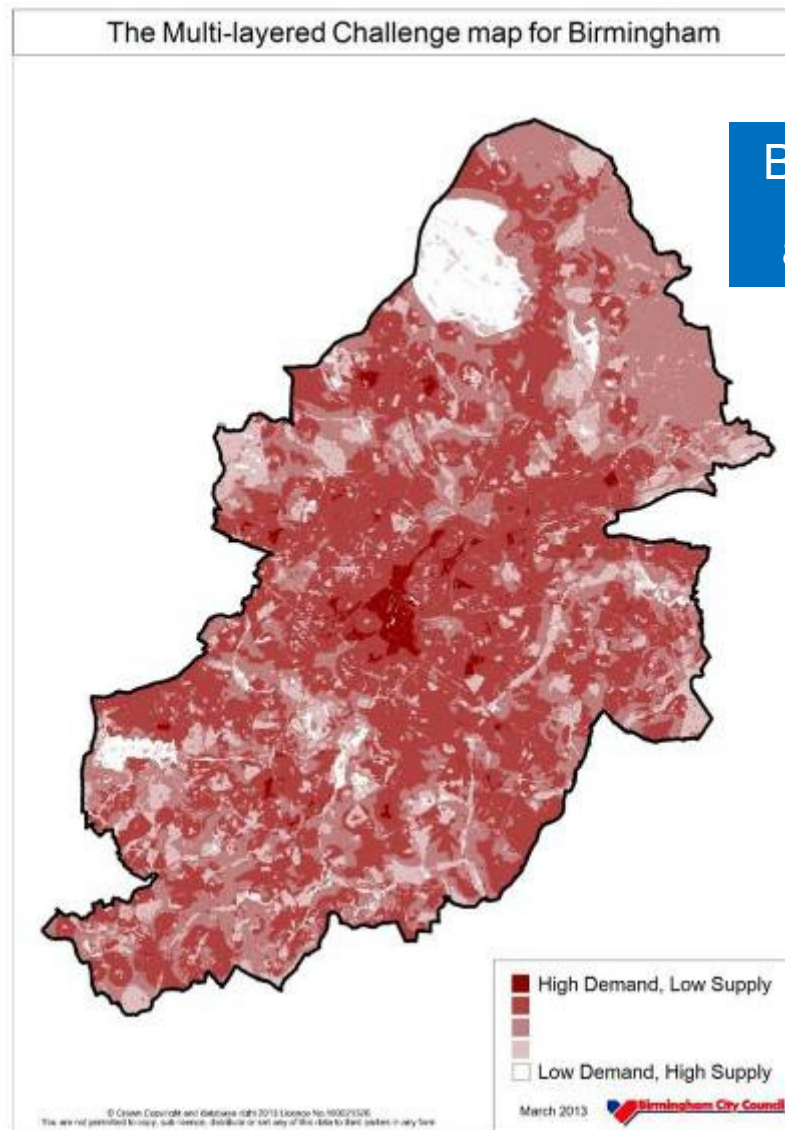
* Aesthetics & mobility



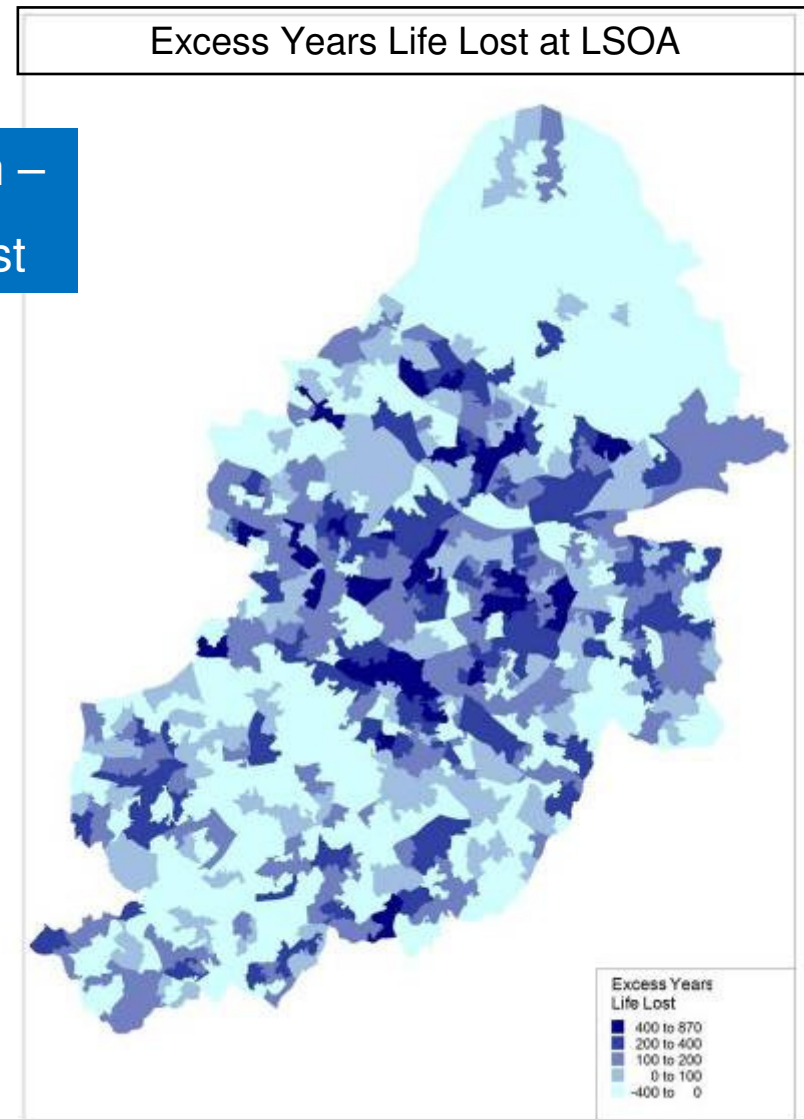
* Recreation

* Flood risk

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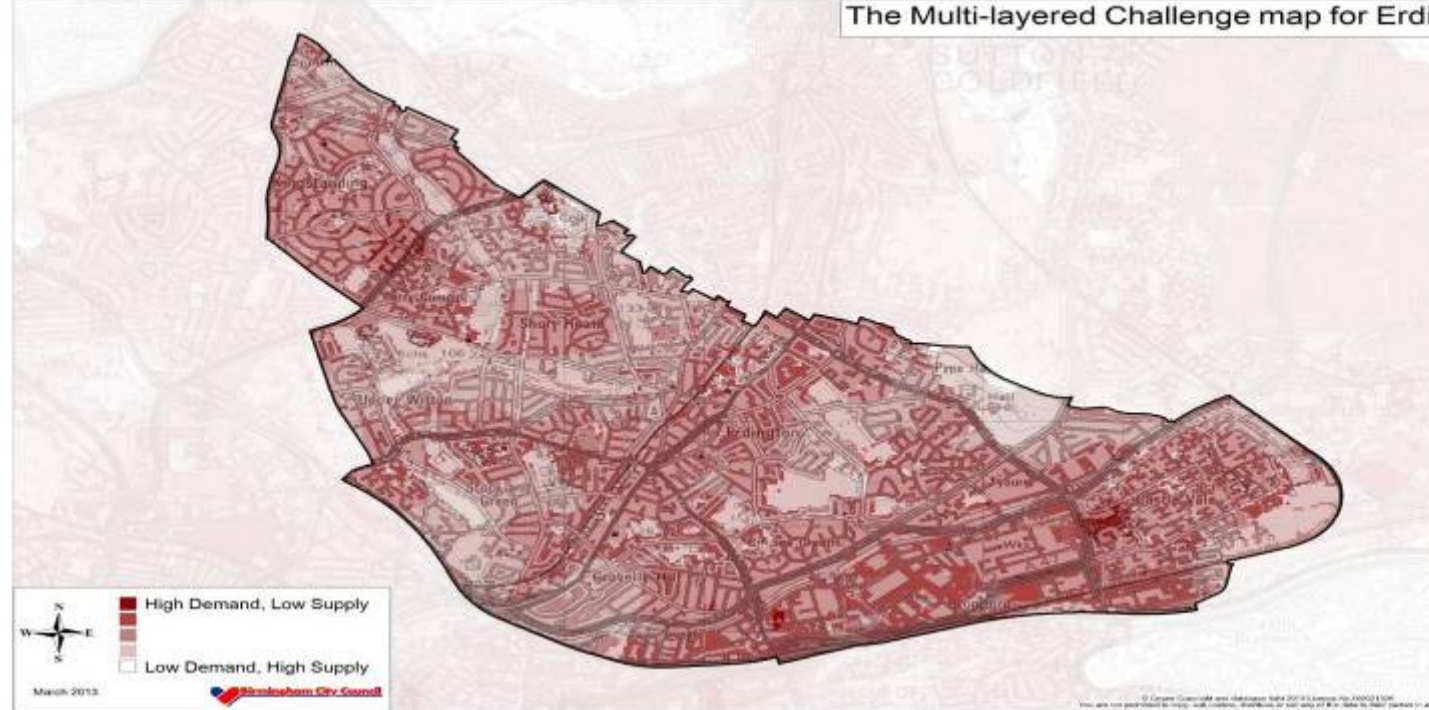
Birmingham –
a global first



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Birmingham Development Plan 2014	Your Green and Healthy City (SPD) 2014	Birmingham's Health & Well Being Strategy 2013	Birmingham's Green Living Spaces Plan 2013
Embraces the Birmingham Forest	Sustainable Development Policy	Social determinants of health & climate change	Embeds 7 Key Principles

The Multi-layered Challenge map for Erdington



COMMUNITIES

Will have access to District Plans;

Each plan could inform community funding applications and priorities;

Direct link to Nature Improvement Area schemes;

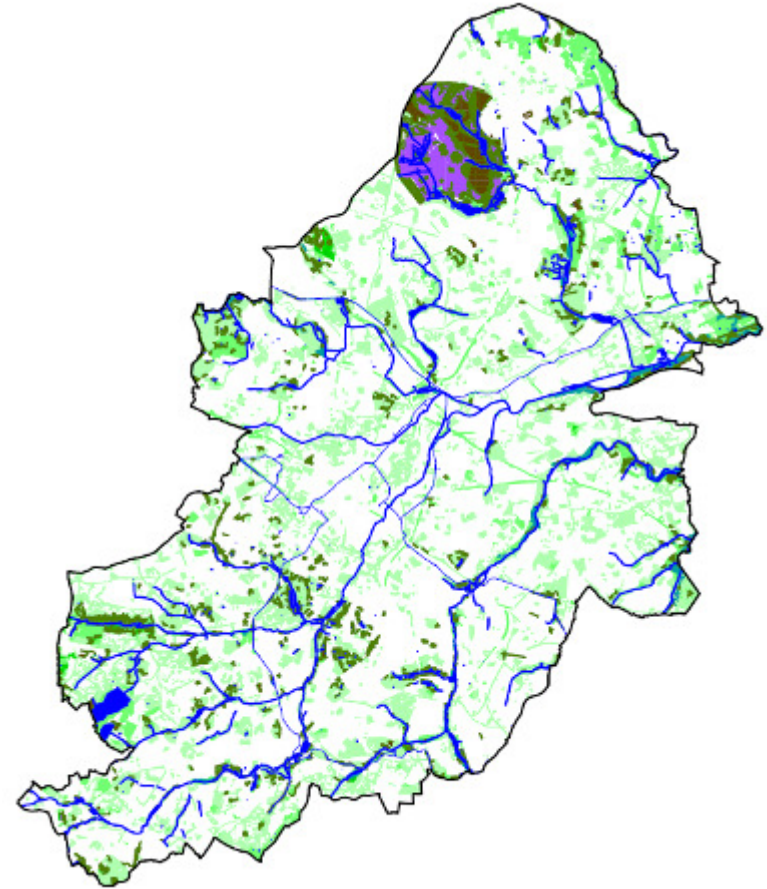
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Take the **Green** out of Birmingham – Millions £

Flood damage costs	42.5
Lost development sites	3,600.0
Air quality (particulates)	21.8
Community cohesion (vols.)	0.82
Recreation value	81.2
Recreation spend	136.0
Health & well-being – mental	174.0
- inactivity	126.5
- current savings	5.85
Property value (5%)	640.7
Tourism lost	1,275.0
Ecosystem services	11.66
Grand total	6,1163.03

Total green budget circa £20M

Return on Investment 300:1



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WHAT DOES YOUR CITY NEED TO BE RESILIENT?

ROCKEFELLER FOUNDATION – 100 YEARS- \$100 MILLION - 100 CITIES



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City of Gothenburg, Sweden, 2013,
issues Green Bonds:
500 million Swedish Kroner
(£45,000,000)
1.5 times over-subscribed

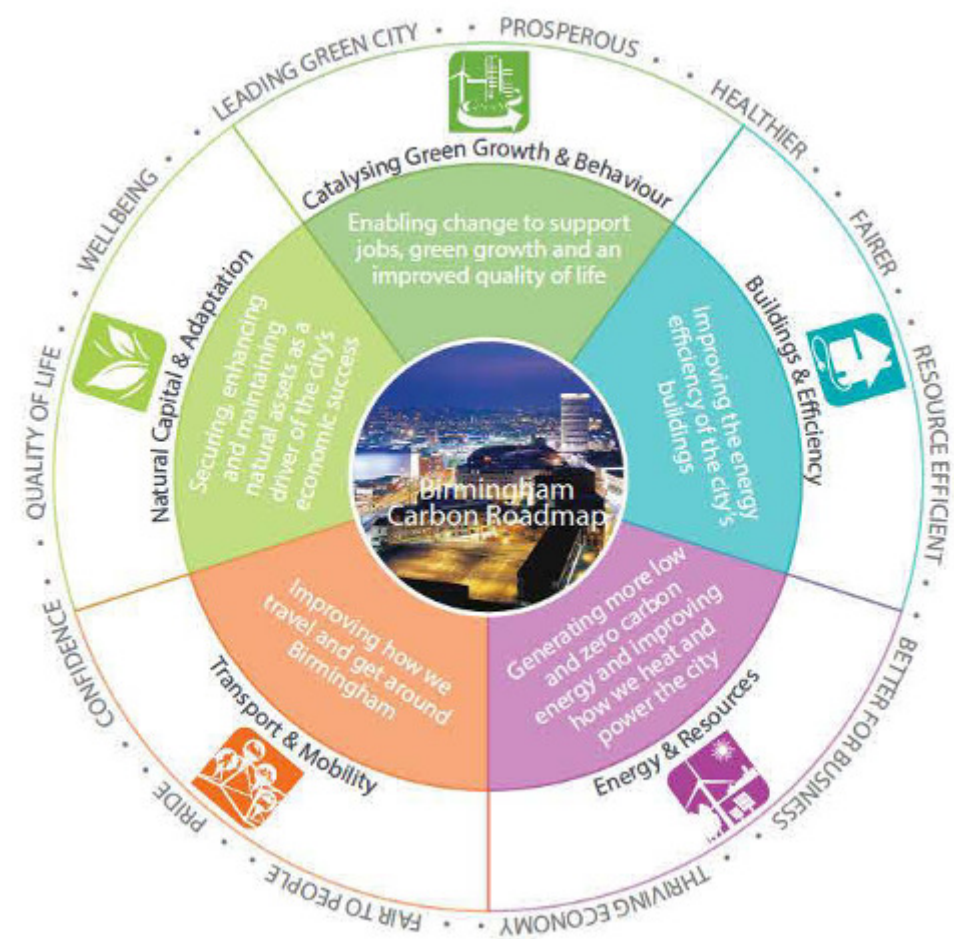


Seimens lodges 6 billion euros with
European Central Bank- wanting to
invest in climate proofing schemes



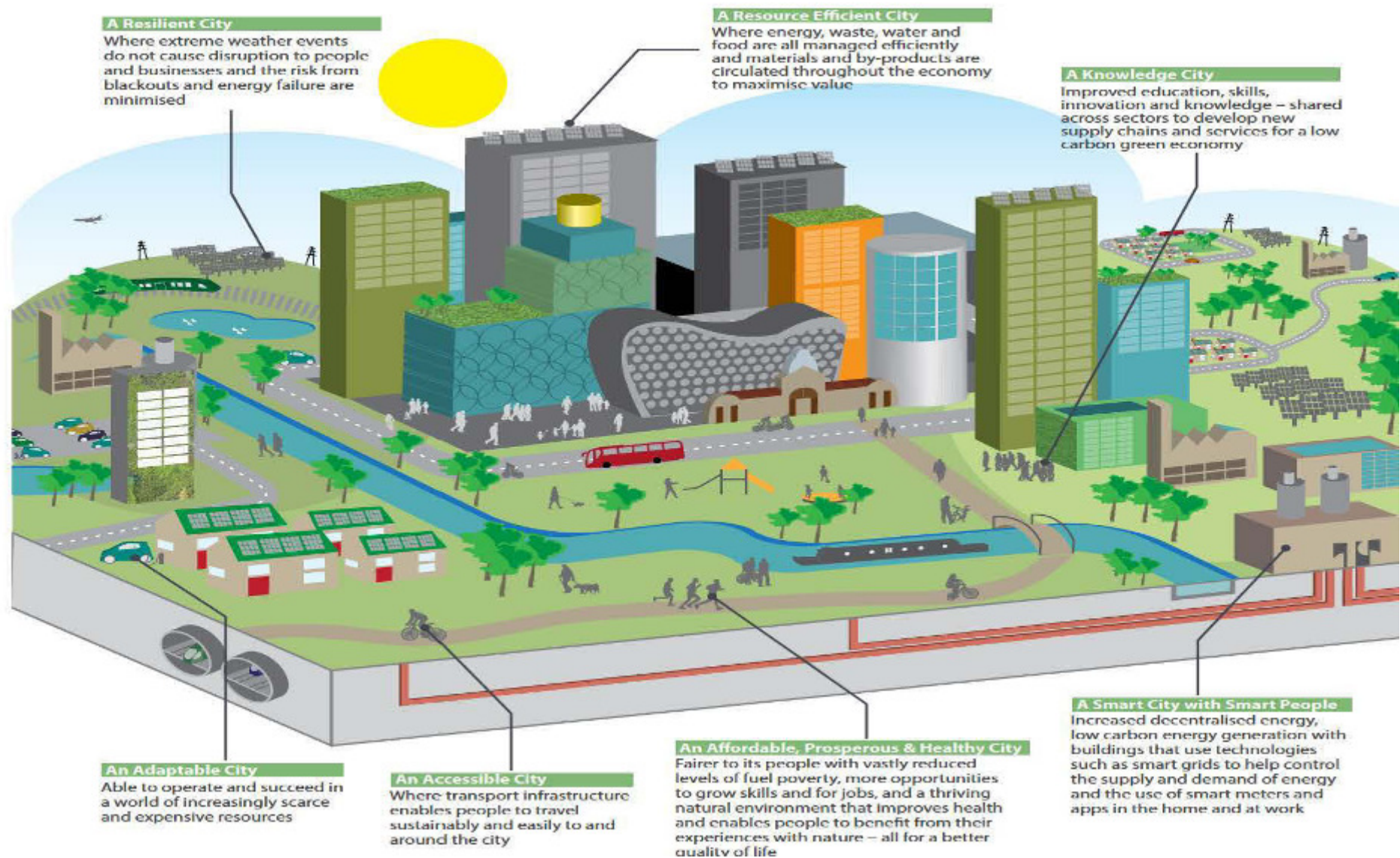
Climate Alliance represents \$21
Trillion Dollars of global investment
awaiting climate proofing

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Development Tool & Community Infrastructure Levy e.g. 1% Biophilic City

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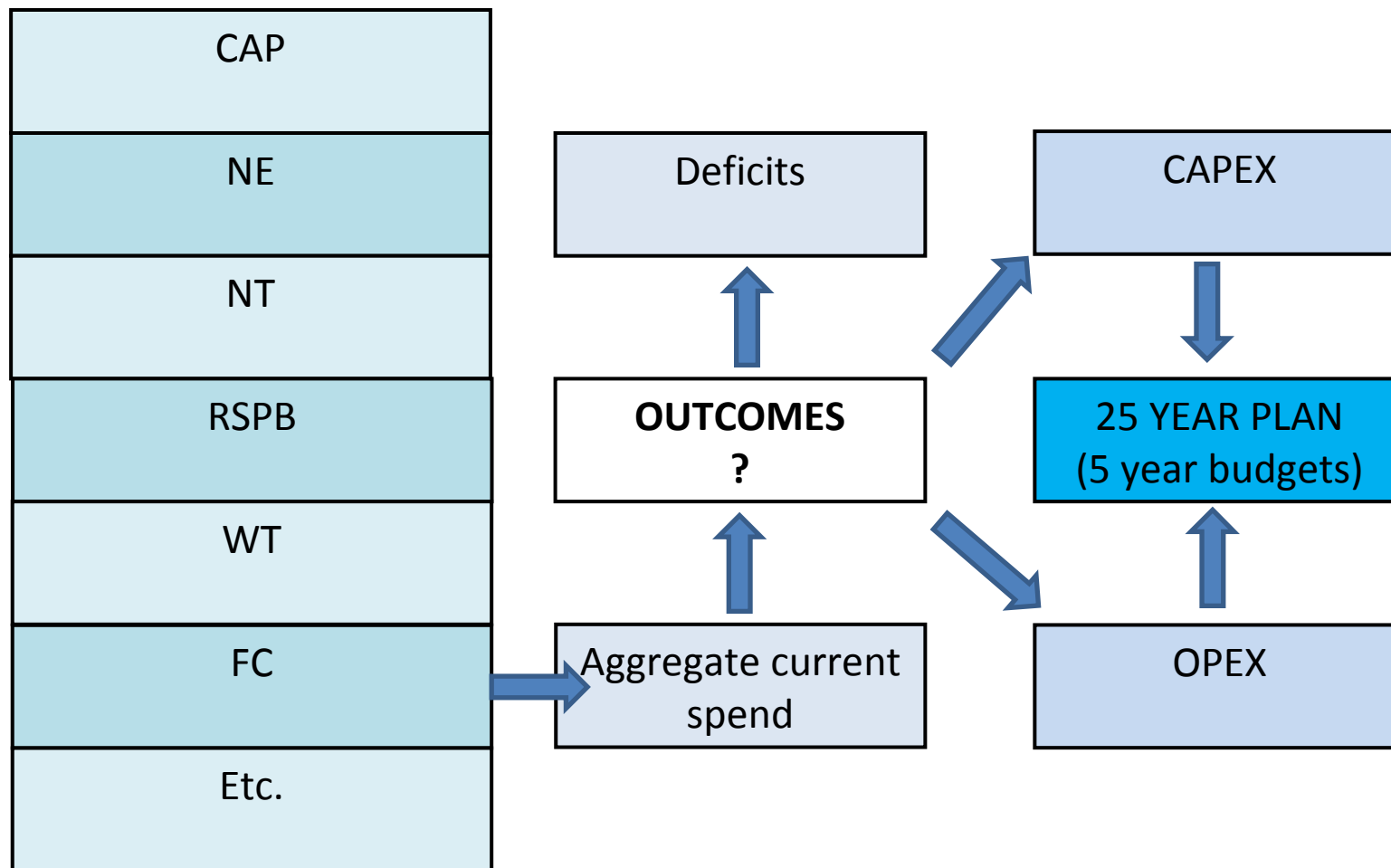


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Who is Responsible?

What is the equation?

How is it delivered?



NATURAL CAPITAL COMMITTEE NATIONAL PLAN

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Future Cities Catapult



EPSRC

Engineering and Physical Sciences
Research Council

I-Build Project

Natural Capital Committee



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NATURAL
CAPITAL
COALITION

With a foreword by HRH The Prince of Wales



Accounting
for Sustainability
Practical Insights

Edited by
Anthony Hodgwood,
Jeffrey Uhlmann
and Jessica Fries



Who we work with

Chief Financial Officers (CFOs) and
finance teams

Accounting community

Investors

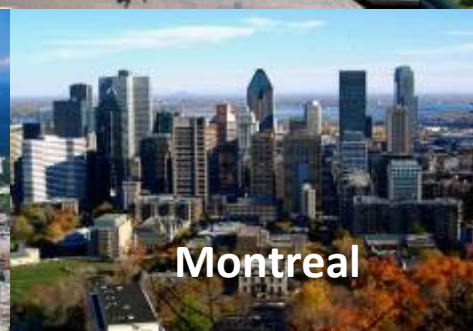
Policy makers, regulators and
governments



world business council for
sustainable development

Birmingham: The UK's First Biophilic City

BiophilicCities - Cities that achieve a deep affinity with nature



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www.birminghamclimate.com <<http://www.birminghamclimate.com>

http://birminghamclimate.com/ie_index2.html

http://www.local.gov.uk/health/-/journal_content/56/10180/3510483/ARTICLE

<http://greencity.birmingham.gov.uk/>

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

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

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

<http://www.theguardian.com/cities/2014/apr/03/birmingham-san-francisco-oslo-global-green-biophilic-cities-club>

<http://biophiliccities.org/>

http://www.landscapeinstitute.co.uk/PDF/Contribute/PublicHealthandLandscape_CreatingHealthyPlaces_FINAL.pdf



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ceep
Partnership for Environmental Economics & Policy

Business Council for
Sustainable Development
United Kingdom

