

Hybrid Parks...more than just a pretty picture?



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The Task...



...to investigate the possibility of identifying an economic value for Hybrid Parks...



Northwich Woodlands

cheshirewestandchester.gov.uk



Cheshire West
and Chester

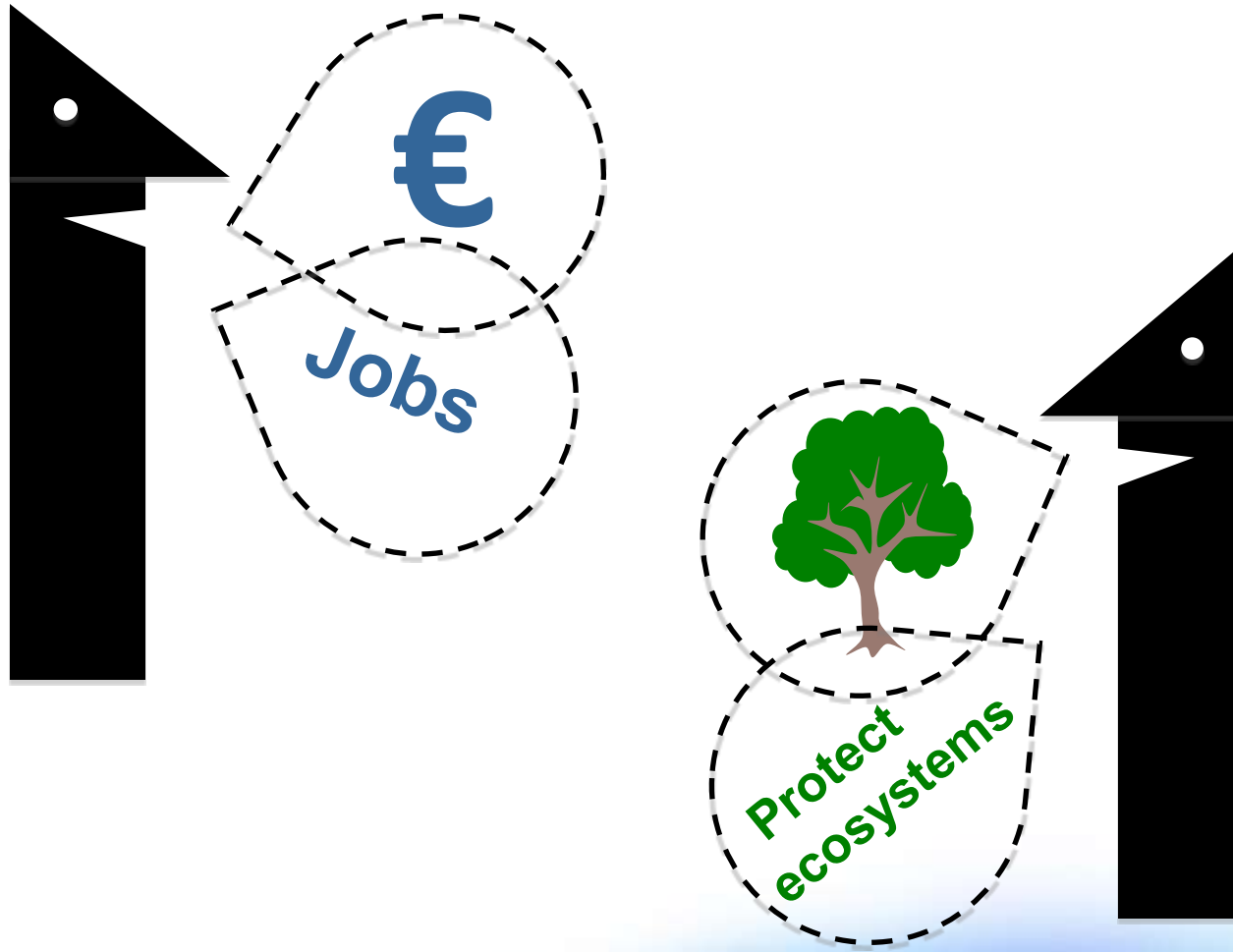
Northwich...a case study

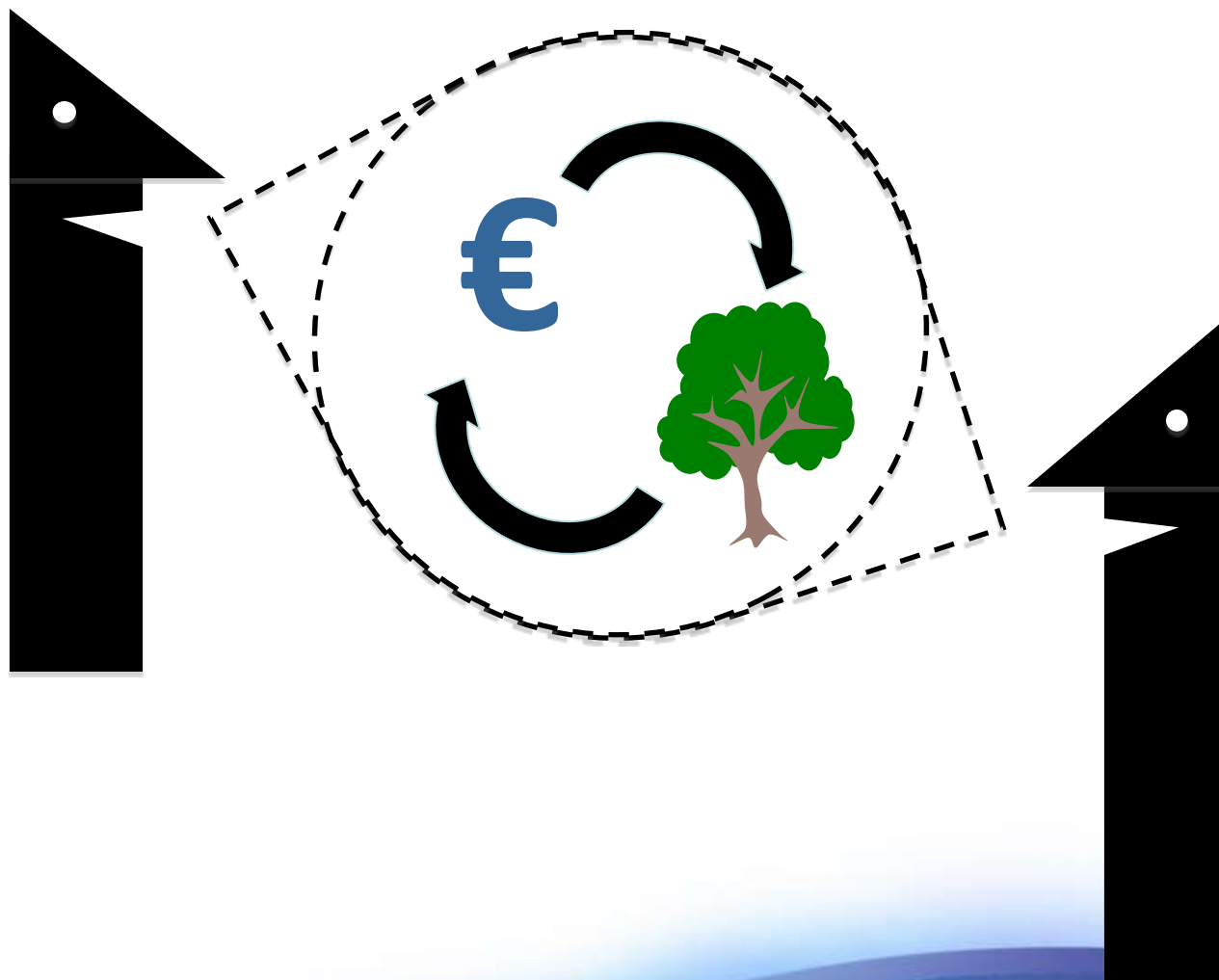


Headlines...

- **Contribution to GVA** – this is a contribution to the economy through increased profits, reduced costs, salary etc. For Northwich Woodlands the valuation toolkit identified a value of **€14m**
- **Impact on property value** – Green infrastructure has been shown to have a positive impact on land and property values, in the case of Northwich Woodlands, despite few residences close by the value is estimated at **€11m**
- **Other economic benefit** - contribution to the broader economic context such as the value in terms of improved health or the value that society puts on biodiversity – areas where there is no “market” to provide a pricing mechanism. For Northwich Woodlands the toolkit identified a value of **€36m**
- **Annual costs of ~ €250,000 and initial investments of €12.5m**

Overcoming the “language” problem







EVAPOTRANSPIRATION



CLIMATE CHANGE
ADAPTATION -
URBAN COOLING



£ REDUCED
AIRCONDITIONING
COSTS/HEALTH

CARBON
SEQUESTRATION



CLIMATE CHANGE
MITIGATION



£ MARKET VALUE
OF CO₂ STORED

PARTICULATE
FILTERING



IMPROVED AIR
QUALITY



£ REDUCED
HEALTH COSTS



Identifying the benefits...

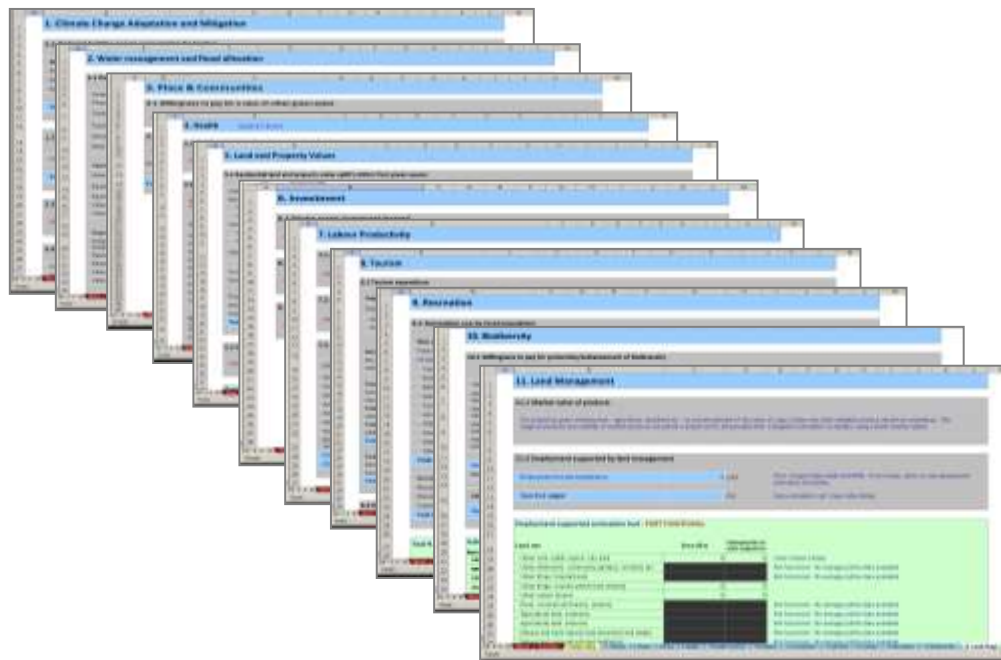


The Toolkit...

www.bit.ly/givaluationtoolkit



User Guide



Spreadsheet-based
Calculator

+

‘The Green Infrastructure Valuation Toolkit provides a framework to identify & broadly assess the key benefits of proposed green infrastructure investment & existing green assets.’



Valuation Process

- Use of models for each of the 11 benefits
- Information added about the area eg.
 - Total area of the park
 - Number of visitors
 - Population
 - Costs, both capital and revenue



Project Data

	Before	After	
Project area	n.a.	327.2144	ha
Total area of greenspace	0	315.1741	ha
New green space created by the project	n.a.	315.1741	ha
Pre-existing area of greenspace enhanced by the project	n.a.	0	ha
	Before	After	
Tree cover	0	157.4682	ha
Area of new woodland created	n.a.	112.6291	ha
Total area of green roofs	0	0	sq.m
including: area of intensive green roofs	0	0	sq.m
area of semi-intensive green roofs	0	0	sq.m
area of extensive green roofs	0	0	sq.m
Current land use			
Project context eg inner city, urban or rural area (or a mix of all)?			
Land ownership?			
What is the level of deprivation in the area? Refer to IMD data			
Is there currently a lack of green space in the area? Refer to local open space audit results and associated open space standards. Refer to national benchmarks such as ANGST standards. How will this project help?			
Does the site have heritage value? What features are being enhanced/protected/ promoted through the project?			
	Before	After	
Cycle routes	0	10.232	km
Current cycle routes upgraded	n.a.	0	km
Footpaths	0	19.711	km
Footpaths upgraded	n.a.	0	km

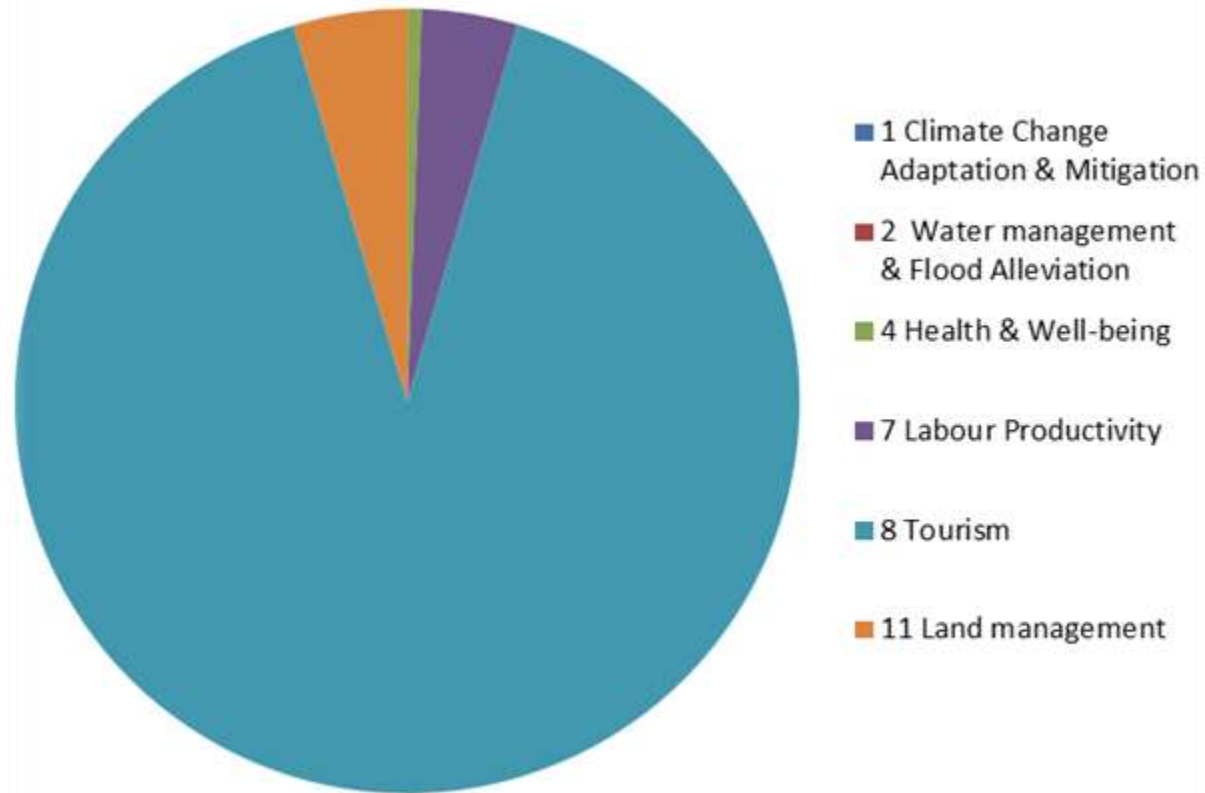


Cost Benefit Assessment

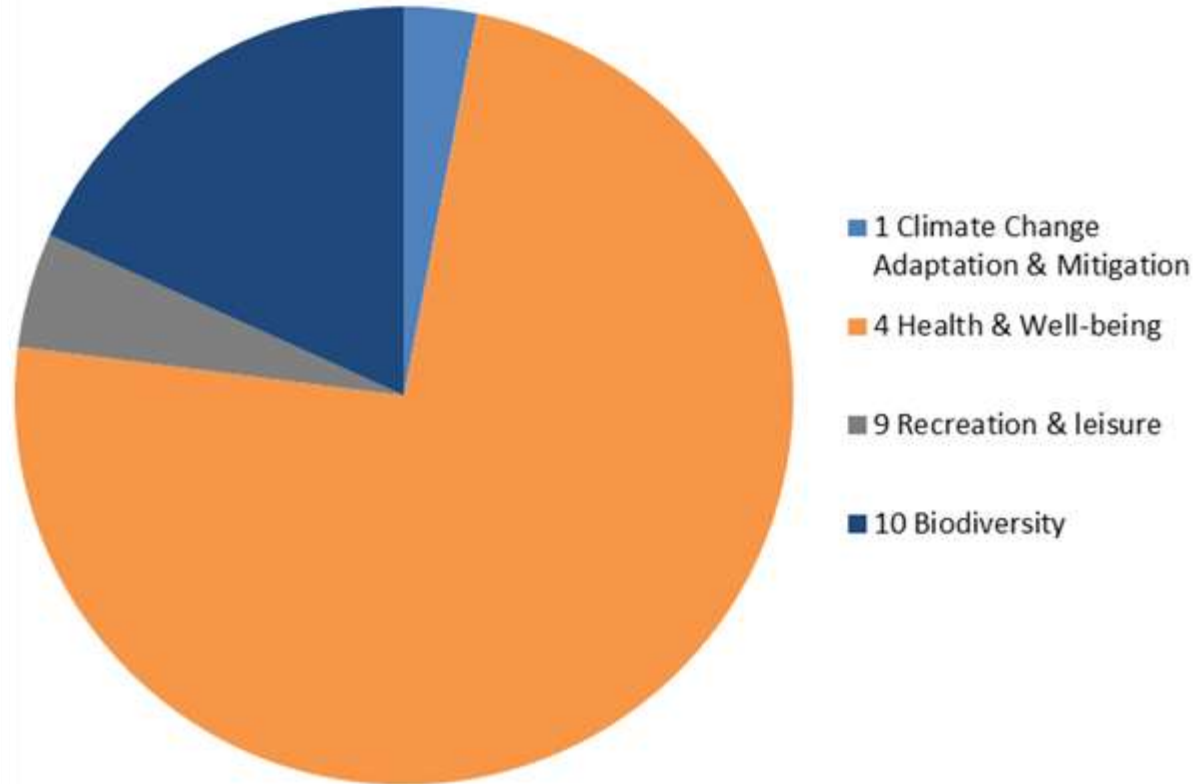
BENEFITS	BENEFIT MONETISATION		
	GVA value	Land and property value	Other economic value
1 Climate Change Adaptation & Mitigation	£583	n.a.	£1,166,537
2 Water management & Flood Alleviation	£0	n.a.	n.a.
3 Place & communities	n.a.	n.a.	n.a.
4 Health & Well-being	£109,690	n.a.	£28,607,077
5 Land & Property Values	n.a.	£9,167,226	n.a.
6 Investment	n.a.	n.a.	n.a.
7 Labour Productivity	£748,739	n.a.	n.a.
8 Tourism	£17,203,397	n.a.	n.a.
9 Recreation & leisure	n.a.	n.a.	£1,843,564
10 Biodiversity	n.a.	n.a.	£7,046,322
11 Land management	£888	n.a.	n.a.
TOTAL ECONOMIC VALUE OF BENEFITS	£18,951,726	£9,167,226	£36,819,935
These three figures should not be added together, as they represent different kinds of value			



GVA value



Other economic value



Health & Wellbeing benefits...functions, tools & outputs

Benefits groups	Functions	Tools	
1 Climate Change Adaptation & Mitigation	Shelter from wind	1.1 Reduced building energy consumption for heating	1440 kWh/yr energy saved
		1.2 Avoided carbon emissions from building energy saving for heating	292 kgCO ₂ /yr not emitted
	Reduction of urban heat island effect	1.4 Reduced peak summer surface temperatures	25.0 °C in surf. temperature reduction
	Cooling through shading and evapo-transpiration	1.5 Reduced building energy consumption for air cooling	0 kWh/yr energy saved
		1.6 Avoided carbon emissions from building energy saving for cooling	0 kgCO ₂ not emitted
	Carbon storage and sequestration	1.7 Carbon stored and sequestered in woodland and forests	270 kgCO ₂ sequestered
2 Water management & Flood Alleviation	Interception, storage and infiltration of rainwater	2.1 Energy and carbon emissions savings from reduced stormwater volume entering combined sewers	34,573,173 L/yr water diverted from sewers
3 Place & communities	Catalyst for community cohesion and pride	3.2 Increase in volunteering	400 new volunteers

4 Health & Well-being	Provision of attractive opportunities for exercise	4.2 Reduced mortality from increased walking and cycling	1.4 lives saved per yr
	Air pollution removal	4.6 Avoided costs for air pollution control measures	0.11 t/yr of carbon monoxide removed 0.19 t/yr of sulfur dioxide removed 0.46 t/yr of nitrogen dioxide removed 0.82 t/yr of PM10 removed 0.88 t/yr of ozone removed

8 Tourism	Tourism attraction	8.1 Tourism expenditure	100000 Visitor days
		8.2 Employment supported by tourism	41 FTE jobs
9 Recreation & leisure	Provision of recreation opportunities	9.1 Recreational value for use by local population	50000 Local users
10 Biodiversity	Provision of recreation opportunities	10.1 Willingness to pay for protection or enhancement of biodiversity	181 Ha of land w/ biodiversity value added
11 Land management	Land management	11.2 Employment supported by land management	5 FTE jobs

Things to remember...

- The valuation toolkit is a work in progress...but thanks to Hybrid Parks is in considerably better shape than it was!
- The valuation process is not an exact science and the values generated are indicative only.
- The process is significantly more cost effective to run than a full scale economic impact assessment...which is also not an exact science!

The real benefits lie with the potential to influence policy makers, decision makers and investors about the significance and value of green infrastructure.

What next?...

- Final report submitted to Hybrid Parks lead partner.
- Identify ways of developing and refining the valuation toolkit further.
- Seek opportunities to collaborate with Hybrid Parks partners to apply the toolkit in other areas for purposes of comparison.
- Look at the possibilities to use the results to engage funders and investors individually and collectively.



A full-page background image showing a sunset over a body of water. The sky is filled with colorful, textured clouds in shades of purple, pink, and orange. The sun is low on the horizon, casting a warm glow. In the distance, several industrial smokestacks are visible, with some emitting smoke. The water in the foreground reflects the colors of the sky. The foreground is filled with tall, dry grasses and reeds.

Thank you for listening...