



**HILLINGDON**  
LONDON

# Carbon Figures for Hillingdon's Trees

A Report into Hillingdon Council's Tree  
Canopy Cover and relative Carbon Values

Prepared by Treeconomics

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## Authors

John Rose - Treeconomics

Katie Screech - Treeconomics

# Canopy Cover

Canopy cover is a basic metric for measuring the extent to which we share our space with trees. Canopy cover can be defined as the area of leaves, branches, and stems of trees covering the ground when viewed from above. It is a two-dimensional metric indicating the spread of tree canopy across an area, and it can be used to gain a basic understanding of the ecosystem services provided by the urban forest.

## Using this report

Canopy cover is a simple way to compare the distribution of trees and woodland across a geographical area. Understanding existing levels sets a benchmark against which future gains/losses can be measured.

This exercise should capture the extent of the majority of trees, but would exclude the vast majority of hedgerows.

In urban areas, the canopy is built up of three main elements: trees in private gardens, trees in parks, and street trees. These match approximately to recognisable land use designations giving a good indication of which policy options offer the greatest opportunity for canopy growth.

Headline Figures		
Total tree Canopy Cover	20.7%	
Council Land tree Canopy Cover	32.4%	
Annual Carbon Storage (t)	184,000	£182 million
Annual Carbon Sequestration (t/yr)	7,300	£7.24 million

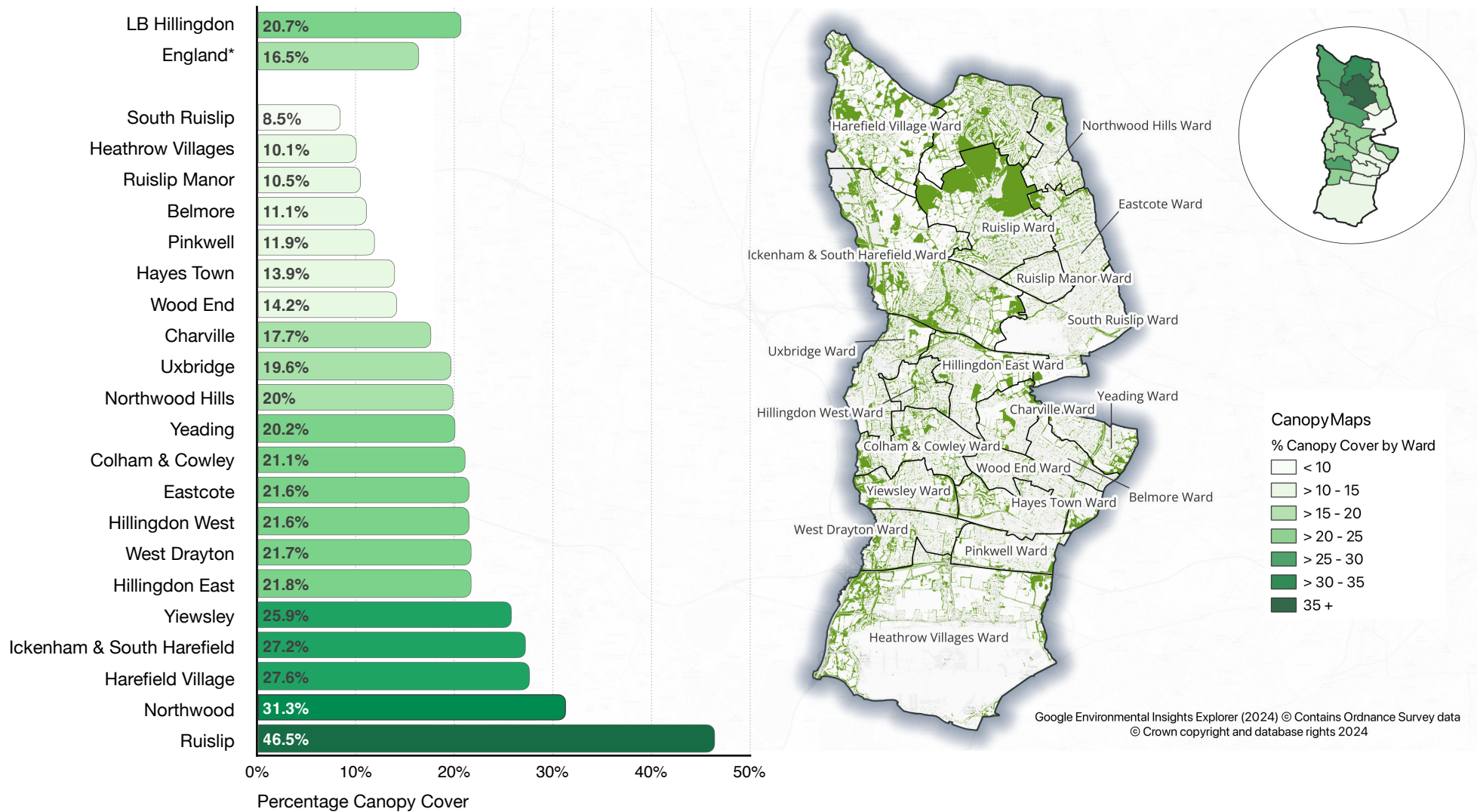
**Table 1. Headline Figures for Hillingdon’s Urban Forest**  
Ecosystem Services are high level estimates based on national averages linked to local valuation bands.

**Carbon storage:** The total amount of carbon bound up in the above ground and below-ground parts of woody vegetation.

**Carbon sequestration:** The annual removal of carbon from the air by trees in the form of carbon dioxide. This amount is sequestered annually, and adds to the amount of carbon stored.



# Tree Canopy Cover by Ward



**Figure 1. Canopy cover by ward**

\*Doick et al, 2017. England Canopy cover measured over 283 towns and cities by Forest Research

# Street Canopy Cover by Ward

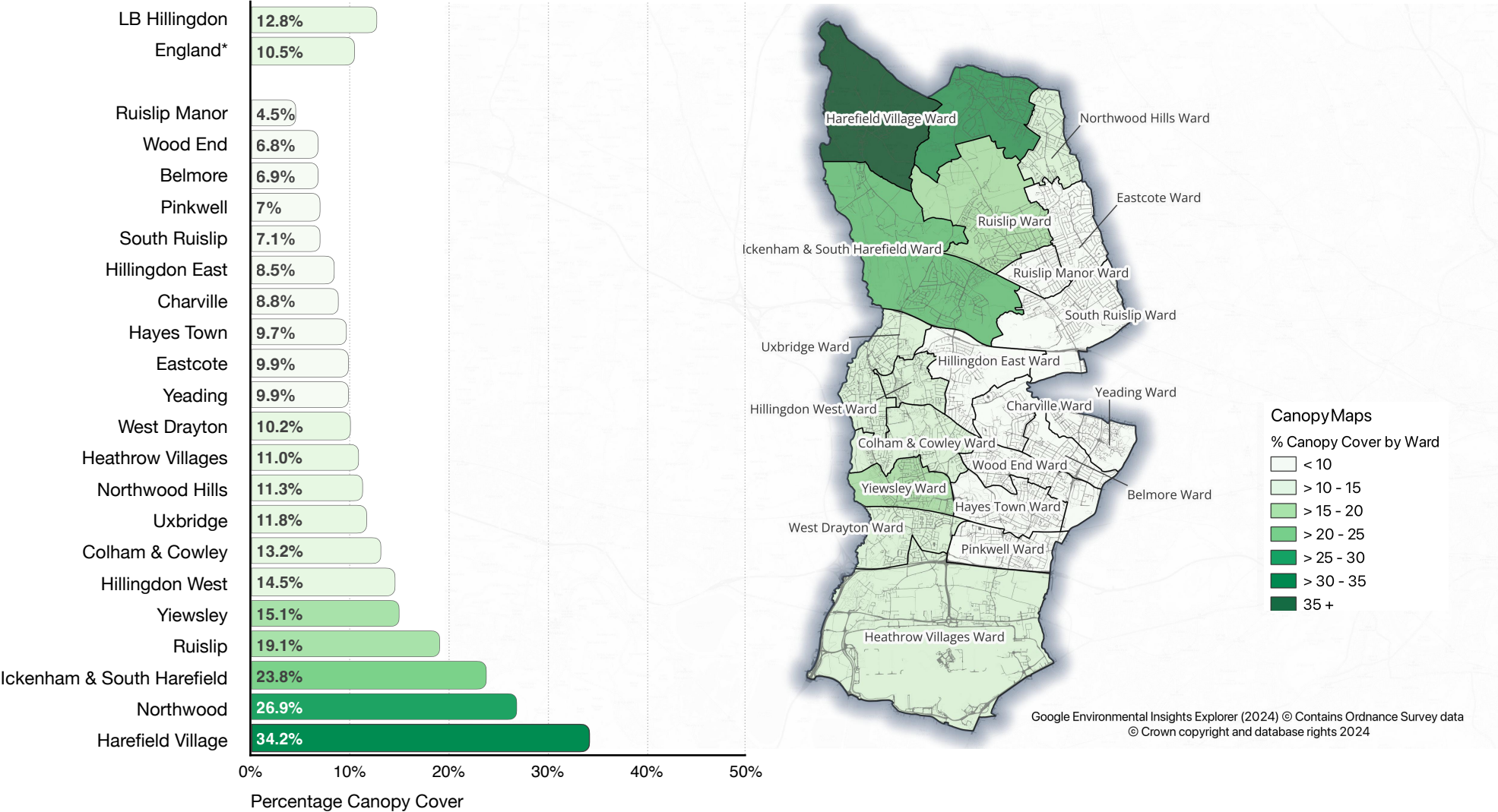


Figure 2. Street Canopy Cover by Ward.

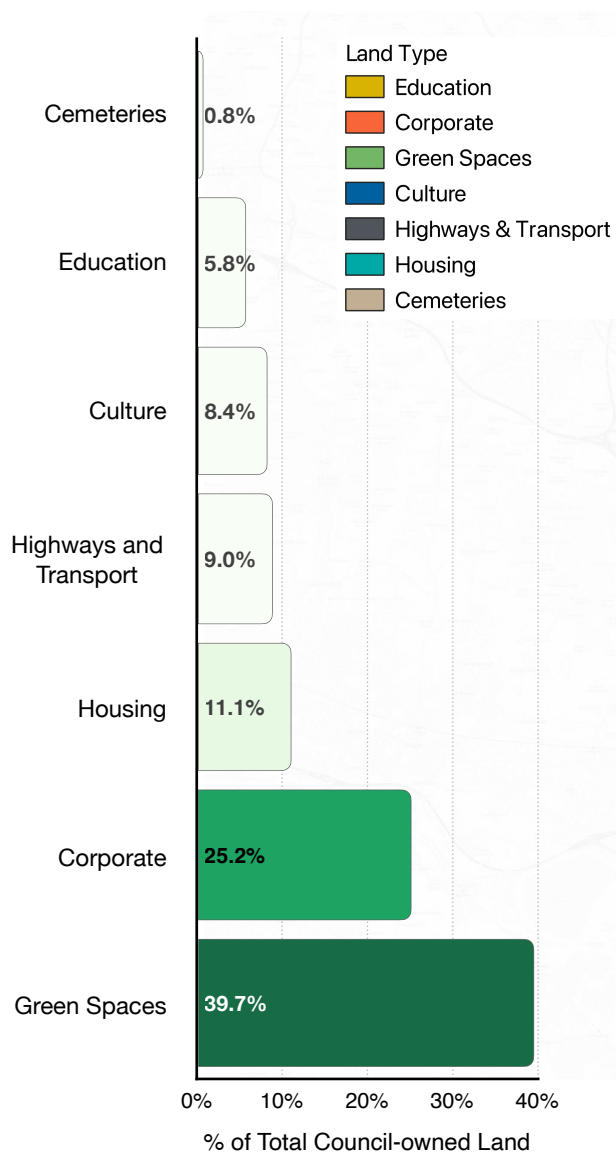
NB. Canopy cover measures tree presence but may not reflect street-level reality for residents. Ward boundaries, influenced by large woodlands, can skew figures. To address this, Street Canopy Cover focuses on trees overlapping roads and pavements, offering a more accurate tool for street tree decisions.

Ward	Total Size (Ha)	Canopy cover (%)	Carbon storage (t)	Carbon sequestration (t/yr)
Belmore	225	11.1%	1,921	76
Charville	266	17.7%	3,620	144
Colham & Cowley	460	21.1%	7,454	297
Eastcote	362	21.6%	6,001	239
Harefield Village	871	27.6%	18,490	736
Hayes Town	384	13.9%	4,106	164
Heathrow Villages	2,352	10.1%	18,187	724
Hillingdon East	459	21.8%	7,679	306
Hillingdon West	200	21.6%	3,315	132
Ickenham & South Harefield	1,322	27.2%	27,614	1,100
Northwood	644	31.3%	15,480	616
Northwood Hills	287	20.0%	4,423	176
Pinkwell	320	11.9%	2,925	116
Ruislip	865	46.5%	30,915	1,231
Ruislip Manor	176	10.5%	1,426	57
South Ruislip	674	8.5%	4,414	176
Uxbridge	425	19.6%	6,415	255
West Drayton	350	21.7%	5,820	232
Wood End	356	14.2%	3,898	155
Yeading	251	20.2%	3,894	155
Yiewsley	323	25.9%	6,415	255
Total	11,571	20.7%	184,412	7,342

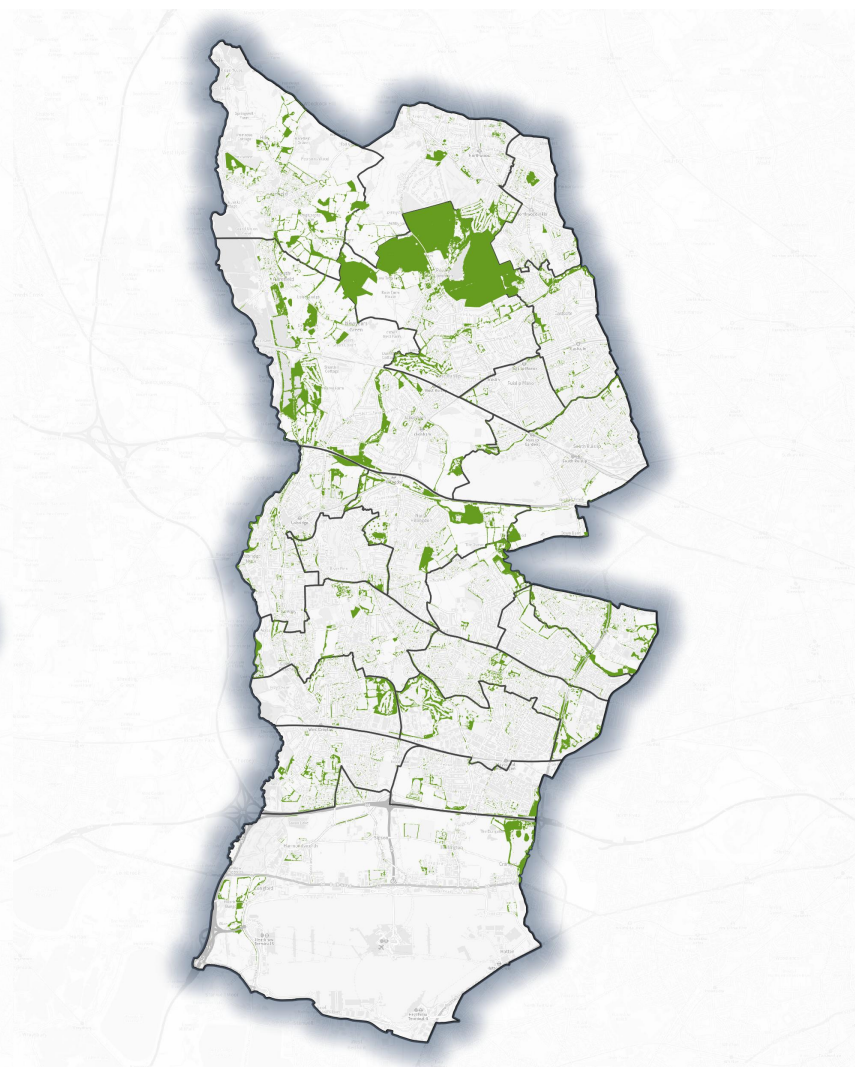
Table 2: Ecosystem service benefits nominally provided by the urban forest in each ward



# Tree Canopy Cover of Council Land



**Figure 3. Council Land Types**



**Figure 4. Canopy Cover within Hillingdon's Council Owned Land\***

\*Council land excludes TfL land along the A40 corridor, as well as locations within Heathrow Airport's boundary

Land categories	Total Size (Ha)	Canopy Cover (Ha)	Canopy Cover (% of land type)	Carbon storage (t)	Carbon sequestration (t/yr)	Carbon storage (£)	Carbon sequestration (£/yr)
Cemeteries	26	6	23.4	472	19	£465,289	£18,527
Corporate	791	90	11.4	6,918	275	£6,824,312	£271,736
Culture	262	109	41.5	8,345	332	£8,231,322	£327,762
Education	181	44	24.4	3,386	135	£3,339,725	£132,984
Green Spaces	1,245	662	53.2	50,874	2,026	£50,183,047	£1,998,232
Highways & Transport	281	50	17.7	3,822	152	£3,770,144	£150,123
Housing	348	55	15.8	4,241	169	£4,183,809	£166,595
Total	3,134	1,016	32.4	78,058	3,108	£76,997,648	£3,065,959

**Table 3: Ecosystem service benefits nominally provided by the urban forest in Hillingdon LB Council Owned Land**



# Methodology

## Data Sources

In the production of this report, Google Environmental Insights Explorer (EIE) was used to collect information on the canopy cover for Hillingdon LB. Google EIE uses high resolution aerial imaging in combination with human driven machine learning to map tree canopy cover present. This is the most accurate data available and is updated regularly although the the data presented in this report will be reliant on the most up to date images at the time.

Council land boundaries were supplied by Hillingdon Council. The original land types were grouped into broader categories (e.g., Housing combines dwelling and non-dwelling housing). This approach was applied consistently across all land types.

## Valuation Method

This information was then used in conjunction with data derived from i-Tree Canopy<sup>1</sup> to ascertain values for carbon storage and carbon sequestration per hectare of tree canopy cover. Once canopy cover and ecosystem services were estimated the monetary value was calculated based upon prices provided by the UK government.

Carbon storage and carbon sequestration values are calculated based on CO<sub>2</sub>e and the Department for Energy Security and Net Zero<sup>2</sup> figures of £269 per metric ton for 2024.

Area tonnage and value allocations are a simple reflection of share of canopy.

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<sup>1</sup> I-Tree Eco (2024)

<sup>2</sup> DESNZ (2024)

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HILLINGDON  
LONDON



Treeconomics Ltd  
Exeter Science Park  
6 Babbage Way  
Exeter EX5 2FN

+44 (0)1392 249 170  
[info@treeconomics.co.uk](mailto:info@treeconomics.co.uk)  
[www.treeconomics.co.uk](http://www.treeconomics.co.uk)