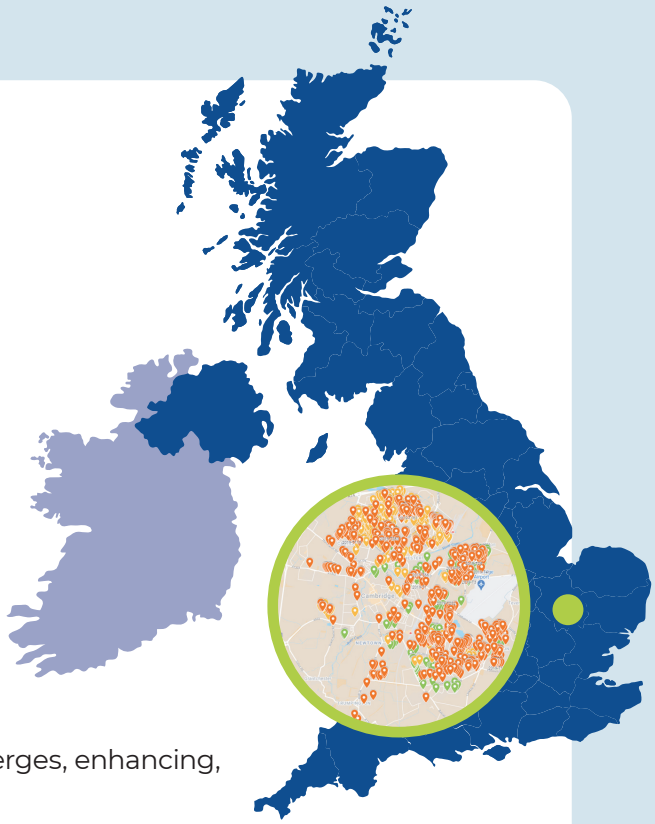
Business Case Factsheet

Whitehill Road estate, Abbey ward, Cambridge

Interreg 2 Seas Mers Zeeën
NATURE SMART CITIES ACROSS THE 2 SEAS

Cambridge
United Kingdom

Project area	Landscape
265163 sq m	City/urban



The project to plant 86 trees in the Whitehill estate is part of Cambridge City Council's Canopy Project to help the city become more resilient to climate change through protecting and enhancing the city's urban forest. The trees will be planted into roadside verges, enhancing, an existing framework of street trees.

Scenario Comparison

BASELINE SCENARIO

2018 TCC, no net gain - i.e. existing canopy loss = existing canopy growth

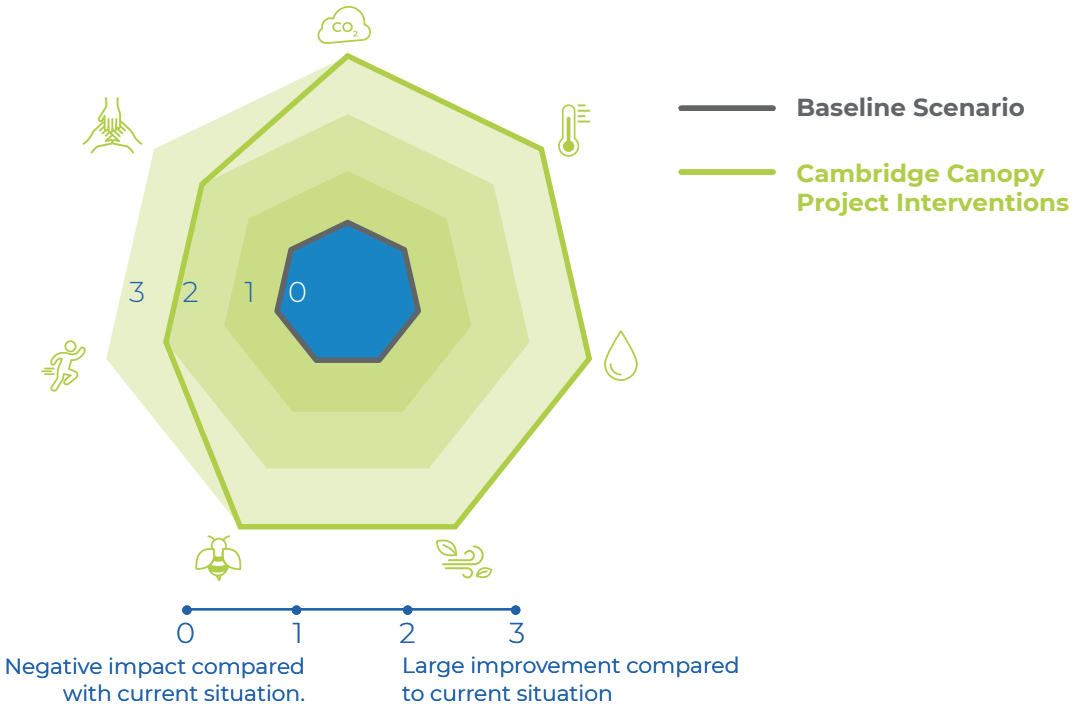
CAMBRIDGE CANOPY PROJECT INTERVENTIONS

Cambridge Canopy Project planting interventions (2020 - 2023) - i.e. 86 new street trees planted 2022/2023 + no net loss (i.e. existing canopy loss = existing canopy growth).

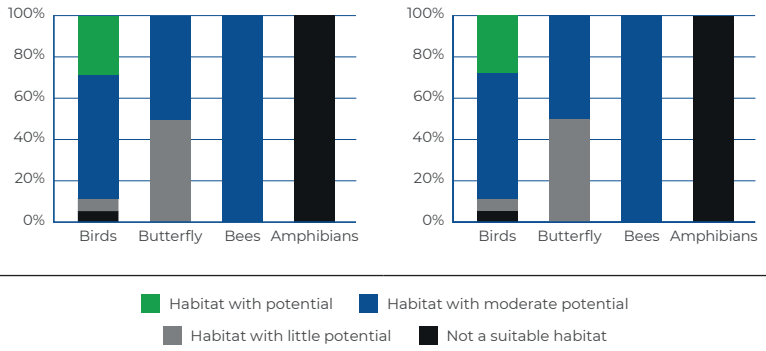
Ecosystem Services

- Food
- Physical and mental health
- Micro climate regulation
- Materials
- Noise pollution
- Recreation, and Tourism by external visitors
- Education and raising awareness
- Aesthetic appreciation
- Social cohesion
- Habitat for biodiversity
- Attractor for companies and investments
- Real estate prices
- Carbon sequestration
- Air filtering
- Water retention and infiltration

Selected Parameters



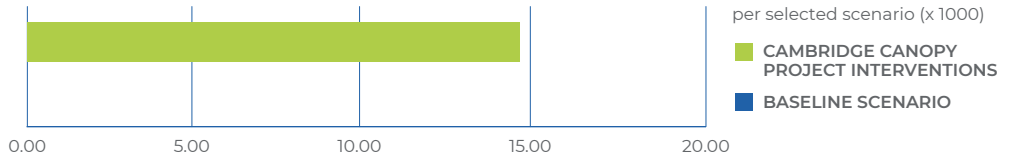
Scenario Comparison

		BASELINE SCENARIO	CAMBRIDGE CANOPY PROJECT INTERVENTIONS
	Water retention	76974.60 m^3/yr	78481.81 m^3/yr
	Air Filtering	657.50 kg/yr	718.56 kg/yr
	Carbon Sequestration	35686 kg/yr	36159 kg/yr
	Micro-climate Regulation	Outdoor: 1.7°C red. Indoor: °C red.	Outdoor: 1.72°C red. Indoor: °C red.
	Habitat for Biodiversity		
		SW - Index 1.51	SW - Index 1.57

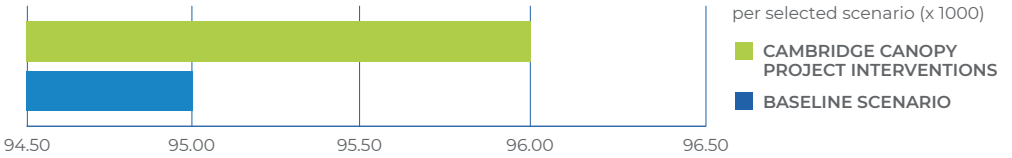
	BASELINE SCENARIO	CAMBRIDGE CANOPY PROJECT INTERVENTIONS
Physical and mental health		
Does this scenario provide an environment that help people relax and reduce stress?	To a limited extent	To a great extent
Does this scenario provide green elements in a densely urban area?	To a limited extent	To a great extent
Does this scenario improve shading in the area to improve thermal comfort?	To a limited extent	To a great extent
Social cohesion		
Does this scenario make local residents likely to feel more happy/proud to live in the locality and therefore less likely to move away?	To a limited extent	To a great extent
Does this scenario help to reduce anti-social behaviour?	To a limited extent	To a great extent
Does this scenario contribute to a sense of place and visual identity?	To a limited extent	To a great extent
Does this scenario support people, and/or groups of people, who are socially or economically marginalised?	To a limited extent	To a great extent

Financial Information

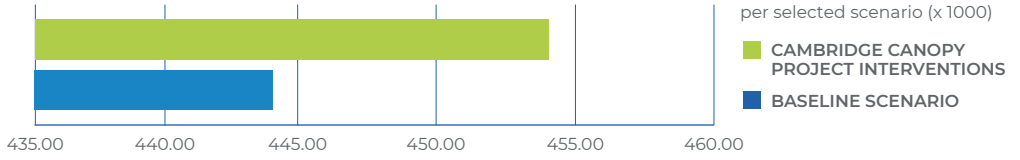
Initial Investment **€ 0,00** **€ 14,620.00**



Maintenance Costs (euro) **€ 95,027.34** **€ 96,007.74**



Monetary Benefits (euro/year) **€ 444,182.20** **€ 454,272.69**



Conclusion

The investment required to plant and manage an additional 86 trees within an existing framework of street trees will be recouped over two years via the ecosystem services and benefits that flow from them. The trees will provide their benefits to the community for at least thirty years.

This factsheet presents the Business case and data generated for the green infrastructure scenarios using the Nature Smart Cities Business Model. The factsheet design has been adapted for external promotion.

For more information and to access the Business Model visit: https://www.uantwerpen.be/en/centres/environment-sustainable-development/research/projects/nature-smart-cities/