

Project area:  
Intended audience:

Blue-green infrastructure community engagement process  
Local Authorities, Local Enterprise Partnerships, Business Improvement Districts

### Introduction

As part of a blue-green strategy for city centres and business districts, retrofitting green roofs offers a major advantage in not requiring more land. However, this will require the approval of building owners and occupiers. Although many positive aspects of green roofs have the potential to directly and indirectly benefit the owners and occupiers of city centre buildings (Lamond *et al.*, 2014), roofs are not widely adopted by UK owners and occupiers. This factsheet presents findings from research around owners and occupiers of non-domestic buildings that sought to understand their perceptions, motivations and concerns regarding green roofs.

### Findings

Green roof owners were not primarily motivated by costs and benefits. Awareness and understanding were not high among those without green roofs. Concerns over costs and risks dominate, whilst potential benefits are often not perceived, believed or felt relevant. For those with green roofs, the focus was on wanting to be 'environmentally good', suggesting that the wider potential benefits were more important.

### Implications

Findings indicate that building-level gains and losses are not where the conversation needs to start. Advocates could focus on a broader influencing of attitudes, rather than seeking to change behaviour through suggested monetary gain. If we want to see more green roofs, they will need 'mainstreaming'.

- Raising their profile, helping them seem more possible and desirable, shifting perceived norms and best practice.
- More conversations around their wider values, explicitly addressing the spread of benefits and so fair allocation of costs.
- Large-scale, high-profile municipal authority projects, connected with professional and public education and training programmes, could improve understanding and increase appreciation. Local Authorities, Business Improvement Districts and others could work together to raise awareness and demonstrate their feasibility.

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*'If the Council did a building with a green roof - that would sort of generate people's interest'*

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*'I don't think there's a high-enough profile; it needs to go up to Council, be advertised on TV – it'd raise awareness'*

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## Perceptions of multiple benefits by occupiers in the CBD

**Extended roof life:** One fifth of CBD respondents agreed greening could extend roof-life. Uncertainty or lack of belief in the rest of the sample might mean building-owners prefer traditional roofing.

**Thermal Buffering:** Greater awareness and appreciation of thermal buffering was exhibited by both groups. All respondents with such roofs appreciated this, whether or not it had been a direct consideration on installation.

**Reduced Maintenance Costs:** A number of CBD respondents felt maintenance should be covered by their Local Authority, pointing to a need to consider who benefits, who should pay and in what proportions.

**Stormwater attenuation:** Green roofs can reduce stormwater run-off. Less than half of CBD respondents felt they could help, potentially discouraging those in flood-risk areas from considering.

**Aesthetics:** The majority of CBD respondents felt green roofs may improve city aesthetics. Some questioned who would see them, however, and several felt the change would be negative, moving away from tradition.

**Biodiversity:** The great majority of green roof owners appreciated the potential for improving biodiversity. A quarter of the CBD sample said they wouldn't help in a city-centre, or expressed ignorance. Another quarter accepted they could increase biodiversity but pictured undesirable insects. These groups apparently didn't associate biodiversity with the urban environment.

Findings based on interviews with 10 owners/occupiers with green roofs across the country and 25 owners/occupiers in the Newcastle CBD without green roofs (Everett and Lamond, 2019)

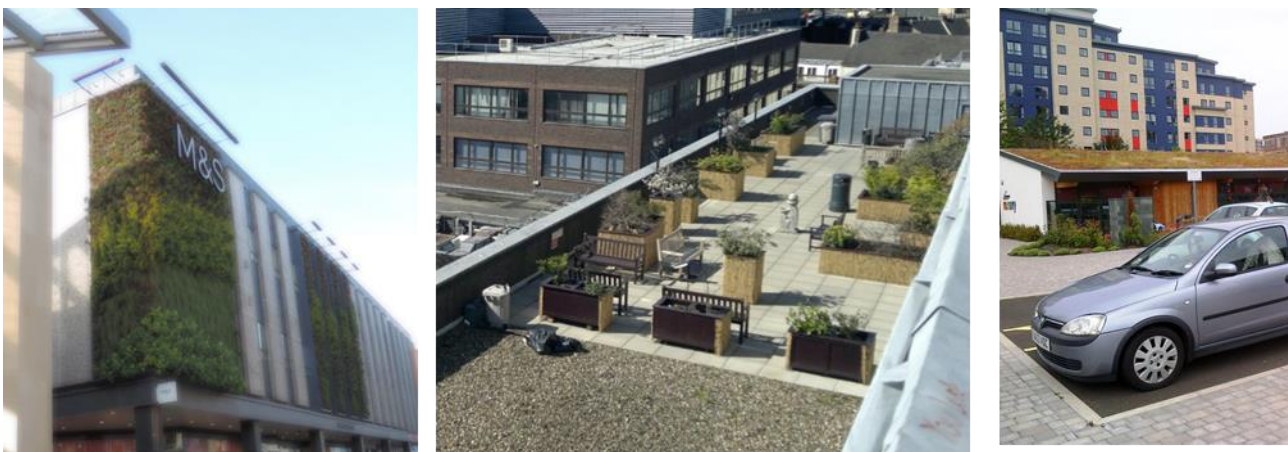


Figure 1: Green Roofs and walls in Central Newcastle

**References:** Lamond, J. E., Wilkinson, S. and Rose, C. (2014) Conceptualising the benefits of green roof technology for commercial real estate owners and occupiers, paper presented at *20th Annual Pacific Rim Real Estate Conference*, Christchurch, New Zealand.  
Everett, G. and Lamond, J. (2019) Green roofs: Perceptions in the Newcastle, UK CBD. *Journal of Corporate Real Estate*, 12(2), 147-164.

**Research team:** University of the West of England: Jessica Lamond ([jessica.lamond@uwe.ac.uk](mailto:jessica.lamond@uwe.ac.uk)), Glyn Everett



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