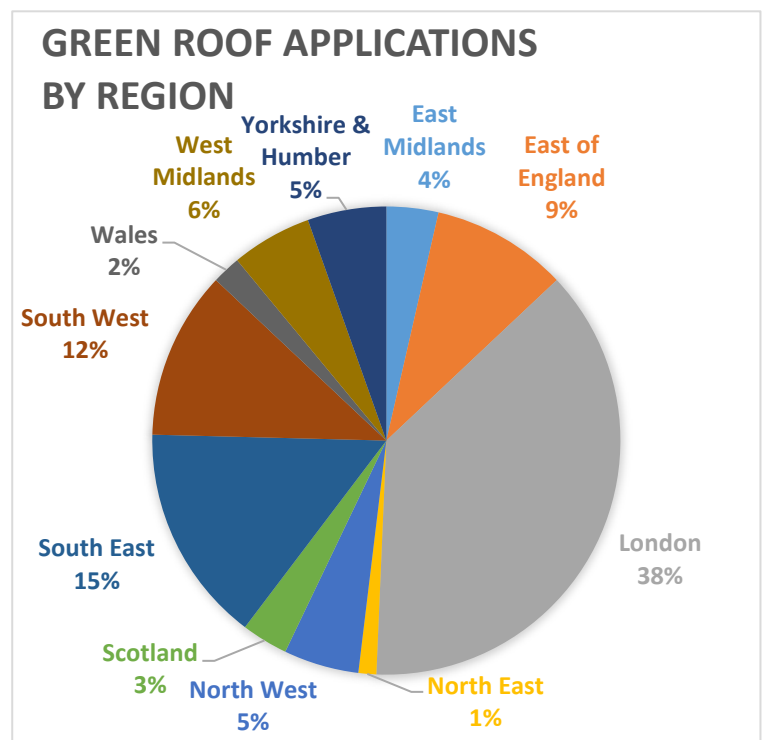
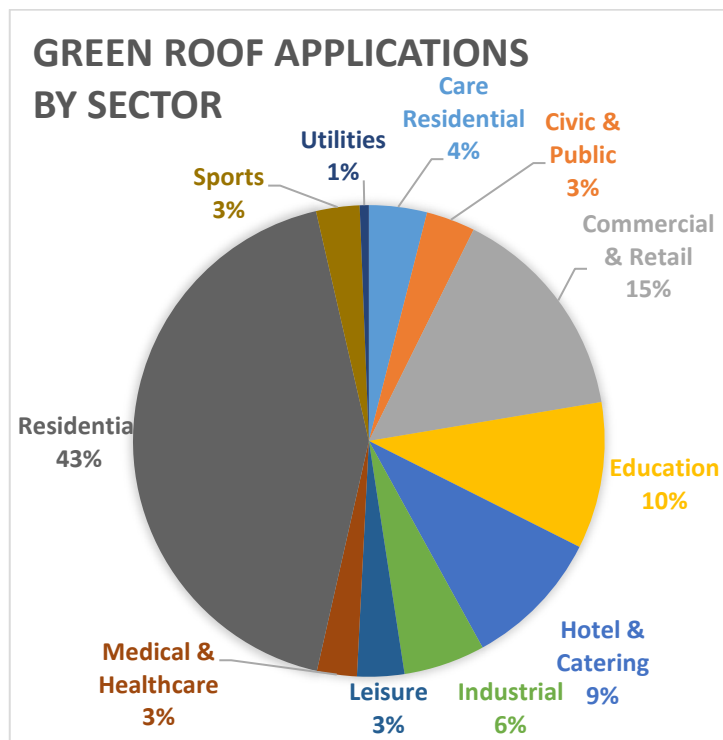


# The Ultimate Guide to Green Roofs



This PDF guide contains a summary of the green roof resources that can be found on our [Green Roofs Hub](#)

## Latest Insight from Barbour ABI: Green roof applications by Region & Sector



\*Data taken from 2016, all stages

**Barbour** ABI

### Key Points

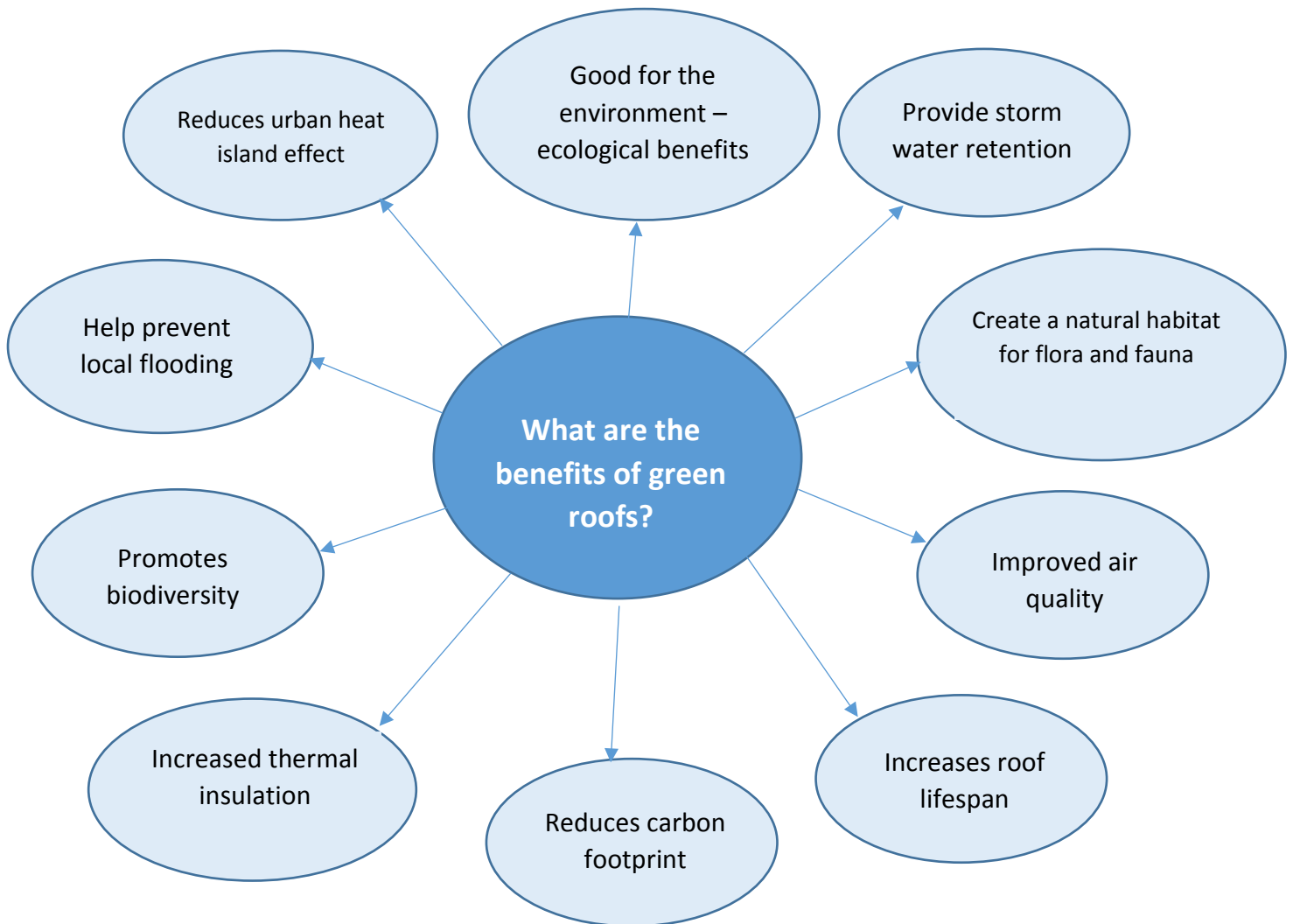
- London and South East dominate the amount of applications submitted, making up 53% of the total regions.
- Residential has almost three times the amount of planning applications compared with second placed commercial & retail
- The project to the right is the £850M Edinburgh St James scheme, which will see a green roof aspect for the residential section.

[Read more...](#)



## Key Green Roof Benefits

Why choose a Green Roof System? – [read the full article](#)



## Checklist: How to specify green roofs

- ✓ Check your roof is suitable
- ✓ Do you have roof insulation?
- ✓ What is the maximum load bearing capacity?
- ✓ Decide what kind of green roof you require
- ✓ Choose the correct waterproofing
- ✓ Choose the correct drainage system
- ✓ Choose your plants
- ✓ How will you maintain your green roof?

View the [complete checklist](#).



## A timeline of green roof technology

### History and Definition of Modern Green Roof Technology



#### 1960s

1961: Reinhard Bornkamm, a researcher at Berlin's Free University, publishes his work on green roofs.

1969: The Styrofoam base of this German government-sponsored green roof remained functional until it was replaced in 1990.

#### 1970s

1971: Landscape architects Gerda Gollwitzer and Werner Wirsing publish *Roof Areas Inhabited, Viable, and Covered by Vegetation*, an early treatise on modern green roofs.

1975: The Landscape Research, Development & Construction Society, which has established widely followed green-roof standards, is founded.



#### 1980s

1984: Sheraton Great Wall Hotel in Beijing got a Roof Garden, which is considered as the first modern green roof in Mainland China today.

1986: Friedensreich Hundertwasser's public housing project in Vienna features trees and flowers on the building's roof and balconies.



#### 1990s

1993: Swiss Architect Peter Vetsch builds nine concrete residences buried in earth and grass.

1995: In Fukuoka, Japan, Emilio Ambasz transposes a 100,000-square-foot park in the city center onto 15 terraces of a new government building.

1997: William McDonough creates eco-friendly headquarters for the Gap (San Bruno, CA), including a 69,000-square-foot green roof.

1998: After seeing green roofs in Germany, Chicago's Mayor Richard M. Daley directs municipal funds toward green-roof development.

1999: Green Roofs for Healthy Cities, an Canadian organization of public and industry groups, is formed to promote the construction of green roofs in North America.



#### 2000s

2000: Church of JCLDS in Salt Lake City's terraced green roof includes a three-acre meadow.

2001: William McDonough and landscape architects Conservation Design Forum install the country's first municipal green roof on Chicago's city hall.

2003: New York's first green residential high-rise includes two green roofs.

2005: A green roof design covering 1500m can be found at the Royal Bank of Scotland in Edinburgh

2009: Cardiff county council installed 270 m<sup>2</sup> of wild flower turf on the Interpretation Centre near the castle



#### 2010s

2010: Sheffield began a program for creating roof top safaris, hoping to attract rare wildlife such as the black redstart back to the area.

2011: Red Rose Forest's Little Green Roofs project created 10 new green surfaces across Greater Manchester

2011: Green roofs have been incorporated in Manchester's busy Oxford Road district at the Metropolitan University and are designed to reduce urban heat and do their bit to combat climate change.

2013: Stevenson Square in Manchester's vibrant and creative Northern Quarter was given a green makeover with 11 new street trees and a green roof.



[View the full timeline](#)

## Further Information

The complete Barbour Product Search green roof resources can be found on our [Green Roofs Hub](#).

[7 amazing green roof designs](#)

