



BioSolar Roofs

An overview of what they are,
why they matter, and
where they work best



Greenbridge Renewables

Commercial roofs | New-build | Tall buildings | Public sector

What is a BioSolar roof?

A BioSolar roof combines a green roof and solar PV system on the same roof space. The vegetation and the solar installation are designed together so the roof delivers clean energy, biodiversity and wider roof performance benefits.



Green roof + solar PV



Designed as one system



Energy, ecology and
roof performance



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Why BioSolar roofs matter



Dual-use roof space

Generate clean energy while using space for green infrastructure.



Supports biodiversity

Provides habitat and food sources for pollinators and wildlife.



Helps manage rainwater

Absorbs and slows rainfall, reducing runoff and easing drainage.



Can improve roof membrane longevity

Adds a protective layer that helps extend membrane life.



Creates a cooler roof environment around PV

Vegetation helps lower surface temperatures and improves efficiency.



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Benefits for solar performance

Green roof planting can help create a cooler microclimate around the panels.

Lower panel temperatures can support stronger PV performance compared with hotter roof surfaces.



**Cooler local
microclimate**



**Potential PV
efficiency benefit**



**Smarter use of
available roof space**



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Key design considerations



Coordinate the green roof and solar design together



Allow safe access and maintenance routes



Consider shading from growing vegetation



Protect cabling and roof details



Use suitable clearances and layout for long-term performance

Design details should be considered project by project.



Where BioSolar roofs work well

BioSolar roofs are especially attractive where clients want to combine sustainability, amenity and energy generation on the same roof.





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Why Greenbridge?



GRO member



Experience installing BioSolar roofs



Commercial and construction-led
solar expertise



Specialists in complex rooftops
and tall-building solar



Nationwide support for developers,
contractors, consultants and
real estate clients



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Interested in BioSolar roofs?

If you're exploring BioSolar roofs for a commercial, residential or public-sector project, Greenbridge would be happy to talk.

Commercial solar | New-build |
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