

Commercial Solar PV Solutions

2024

Why grey is the new green

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Solar PV Market

The UK contributes around 1.5% of the global solar photovoltaics (PV) total. Progress has been made with more than 50% of the UK's electricity stemming from zero-carbon alternatives. However, solar power accounts for less than 5% of the UK's energy mix.

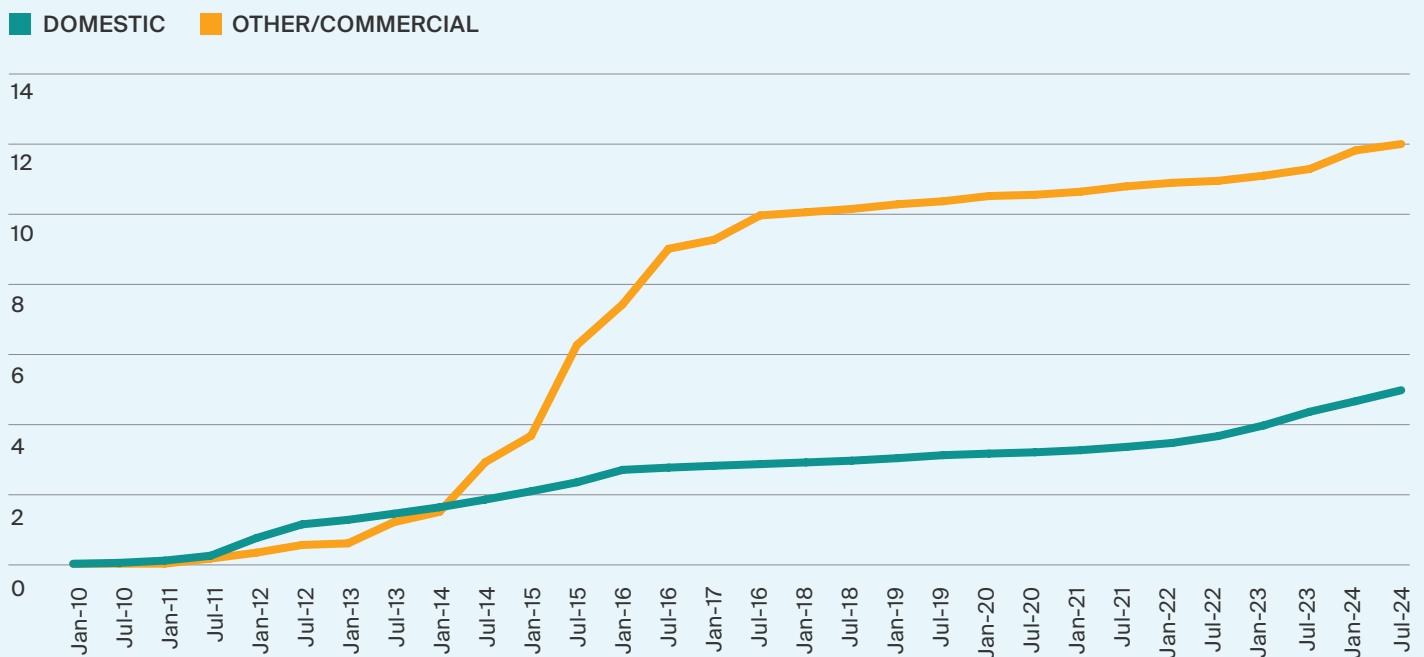
The latest data from the Department for Energy Security and Net Zero (DESNZ) in the UK Solar Deployment database reveals a total installed capacity of 16.5GW as of the start of June 2024. However, the ambition reaches far beyond with plans to more than quadruple this capacity to 70GW within the next 12 years. The ultimate goal is to completely decarbonise

the electricity grid, requiring all power generation to be sourced from renewable resources.

Commercialising land for solar farms will be required to reach these ambitious targets. However, with concerns of local food security and land use changes required to achieve various goals, there is substantial generation capacity lying within commercial properties.

Fig 1. Solar powering up

The cumulative capacity of installed photovoltaics in the UK, gigawatts (GW)



Source: Knight Frank Research, DESNZ.

Why is grey the new green?

Utilising land that has already been developed such as rooftops and car parks, presents a viable solution to simultaneously build renewable energy capacity and address competing land uses. Conventionally, solar cells are grouped together into solar panels, which can be positioned on rooftops, on the ground or raised above the ground as solar car ports.

Unlocking Revenue Opportunities

Crucially for commercial property owners, the installation of PV systems presents opportunities to generate additional revenue.

In owner-occupier arrangements, the introduction of solar PV will diminish the dependence on grid electricity and provide direct cost savings.

For leased properties, it is common for landlords to enter into a direct Power Purchase Agreement (PPA) with tenant(s) at a reduced rate compared to their current grid rate. This provides direct cost savings to occupiers whilst balancing investment returns. Tailoring system sizes based on current and future electricity consumption profiles allows for optimised financials, balancing on-site consumption with grid export.

The latter allows property owners to capitalise on an additional income stream. Whilst the Feed in Tariff (FiT) Scheme closed to new applicants in 2019, the Smart Export Guarantee (SEG) provides competitive export tariff rates.

Alternative Funding

Many developers are also interested in funded opportunities for deployment of solar PV. These investors will fund all upfront costs and lease roofspace or land from the landlord for a typical lease period between 10 and 25 years reflected in the PPA tariff. Some landlords are considering this option for long-standing assets.

EPCs and Green Credentials

The addition of solar PV can significantly improve a building's EPC rating as opposed to corporate PPAs, particularly for retail assets. Credits will also be awarded under BREEAM In-Use based on on-site renewable generation versus grid import.

In turn, solar PV can reduce the scope 2 emissions for landlords assets and increase green premiums as more tenants are interested in reducing their operational carbon footprint.

Asset Value

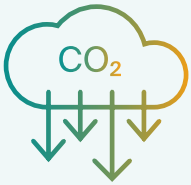
The addition of solar PV can not only improve the green credentials of an asset but it can ultimately drive up the value of the property through capitalising income from 3 main streams:

- PPA
- Export
- Subsidies



Benefits of Solar PV for Landlords

According to Net Zero Tracker, an independent group that follows corporate pledges, approximately half of the world's largest publicly listed companies have a net zero target. As a result, landlords are looking for further ways to reduce their Scope 1, 2 and 3 emissions. The addition of solar PV to the built environment has numerous benefits for landlords and tenants.



Reduction in
scope 2 emissions



Long-term
price stability



Free electricity for
owner-occupiers



Cheaper electricity
for tenants



Increased
asset value



Reduced dependence
on the grid



Attract new tenants
or lease extensions



Additionality*



*To what extent the procurement contributes to creating additional renewable capacity or supporting technologies/infrastructure (e.g. storage)

How can Knight Frank help landlords

Knight Frank support clients through every step of their PV journey and pride ourselves on the ability to advise and provide services across the full project lifecycle. Our inter-disciplinary approach includes services across Valuation & Advisory, Lease Advisory, Capital Markets, Planning and Asset Management.

Knight Frank directly manage thousands of properties for landlords through our Property Asset Management team. This existing working relationship with occupiers provides an invaluable platform for engagement to ensure solar PV systems best meet landlord objectives as well as the electricity needs of tenants.

Portfolio Reviews and Commercialisation Strategies

Knight Frank can undertake portfolio-wide reviews to assess the potential PV deployment for clients including modelling financial and carbon savings. At this stage, we can support asset prioritisation to streamline projects to construction and completion.

Step-by-Step Support

1	Feasibility studies and cashflow
2	Electricity consumption analysis and system optimisation
3	Grid review and applications
4	Permitted development and planning application
5	Occupier engagement, HoTs and lease negotiation
6	Power purchase agreements
7	Tender analysis and management
8	Contract management
9	Programme and construction management
10	Ongoing reporting
11	Transactions and valuations

Valuations

Our Knight Frank PV Valuation experts provide an extensive range of valuations, development appraisals, market appraisals and consultancy services specific to the chosen funding avenue. Knight Frank take projects from inception to completion as well as value and manage disposals and acquisitions.



Case Studies

Landlord Funded – Business Park
Private Equity Client

Scope

- Advised on five office buildings in the UK for landlord funded solar PV and EV charging
- Solar PV connected to landlord supply providing clean electricity and direct LL savings
- Tenants sub-metered and recharged at a % of market rate
- EV charging boosting onsite solar consumption

Services

- End-to-end including feasibilities, grid applications, surveys, tender, legals and occupier engagement, project management as well as ongoing reporting.

Outcome and Next Steps

- Ongoing quarterly and annual reporting on system performance and recharge calculations
- Organisation of maintenance visits
- Feasibilities on ten further buildings



“We are delighted to have worked with Knight Frank on developing rooftop solar PV arrays across a number of properties at an important south east business park asset. The project has delivered a healthy ROI and significant decarbonisation of the assets. Knight Frank were crucial to the projects’ success and advised us from initial feasibility through to commissioning and ongoing management.”

Landlord Funded – Industrial *Institutional Client*

Scope

- Full project delivery for landlord funded solar PV on a 750,000 sqft FRI Single-let Industrial unit
- Solar PV commercialised via PPA to tenant

Outcome and Next Steps

- Ongoing quarterly and annual reporting on system performance and recharge calculations
- Organisation of maintenance visits

Services

- Feasibility (maximised and optimised systems and cashflows)
- Prepared and submitted grid and permitted development applications
- Site surveys and managed structural assessments
- Occupier engagement – packs and presentations
- Tender, contracts and project management
- Reviewed system warranties and insurance discussions regarding fire safety and premiums
- PPA and lease negotiations

Valuation

Private Equity Client, Italy

Scope

- For a renewables expert to complete asset valuations of their rooftop solar PV systems for logistics assets across Northern Italy.

Services

- Using cashflow and generation figures provided by the client, Knight Frank provided specialist valuations for the PV systems on the rooftops on two of their buildings.
- Knight Frank Renewables team also prepared a theoretical valuation based on market rates and projected generation for a third building.



How can we support you?

Please reach out to hear more about how we can support with on-site renewables and decarbonisation.

For more information please contact:



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