#### SUSTAINABILITY SERIES

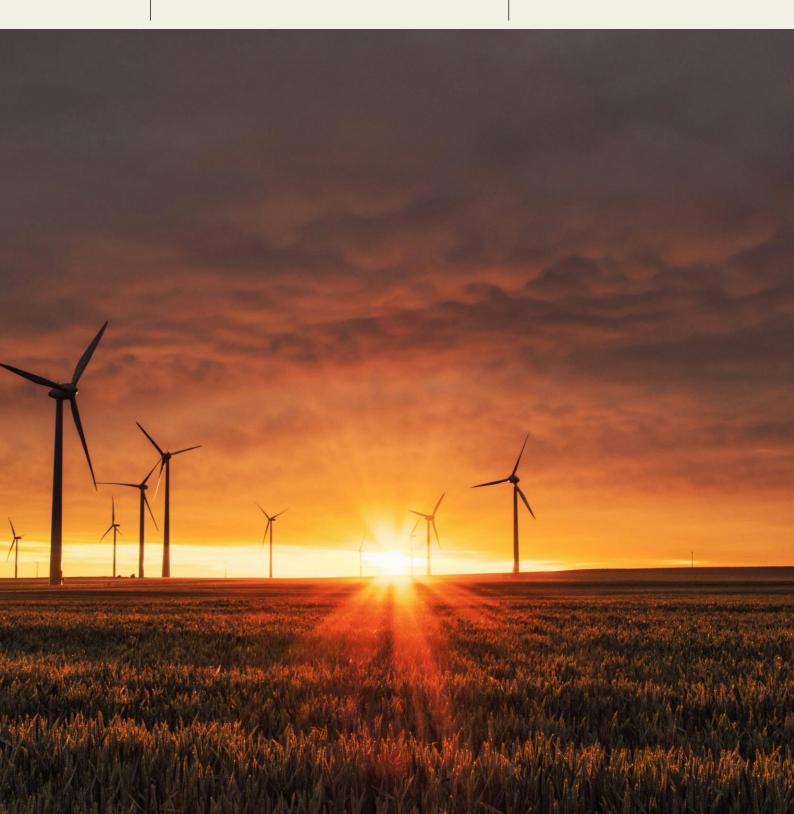


# Powering the future: The UK's renewable energy investment market

September 2025

Exploring the evolving market opportunities within the renewable space for investors, operators and developers

knightfrank.co.uk/research



# The quick take

The UK's renewable energy transition is gathering pace, opening new opportunities for investors, operators, and developers. With capital flowing into wind, solar, and battery storage, we explore the key market dynamics, emerging technologies, and future policy landscape, while also addressing the challenges that could shape the sector

#### **KEY TAKEAWAYS**



64% low carbon electricity in 2024

Low-carbon sources, including renewables and nuclear, surpassed fossil fuels as the dominant source of electricity in 2018, reaching almost two-thirds by 2024 (**page 2**). With a government target of this reaching 95% by 2030, renewable energy generation is expected to continue rising. Supportive policies, such as the *Clean Energy Industries Sector Plan* (**page 9**), aim to galvanise clean energy industries across the UK and sustain momentum in the transition.



The NESO connection reform includes quotas by technology type and region. In the battery storage market, the 'ready' pipeline of projects – those built or with permission granted – exceeds the 2035 targets by more than 20 GW for transmission and 6 GW for distribution, according to data from Regen (**page 4**), whereas solar and wind quotas are largely unmet. The reforms may offer clearer opportunities for those ready to connect as well as more certainty around project timelines.

# 8X average ratio of £/MW for solar

Solar has the greatest multiple between operational and ready-to-build (RTB) with the former, on average, eight times the latter (**page 7**) over the past decade. However, the gap has widened in recent years, potentially due to the ending of subsidies, with the average £ per MW for RTB assets averaging £132,000 compared to £1.1 million for operational (8.8 times) in the 2020-25 period. As planning and grid reforms come to the fore and construction and energy market prices stabilise, this may reduce.



**1.4** years median planning time

There remains significant hurdles to overcome. Planning approvals range from a median of 1.4 years for onshore wind to six months for battery storage (**page 3**). For those in planning limbo, the timelines extend with the median time since submission reaching 1.5 years for onshore wind and 1 year for large-scale solar. These timescales are further compounded, with 60-80% of projects granted currently 'awaiting construction', which will then be added on to the time to construct.



£4.4bn in M&A transactions in 2024

The growing appetite for investment in renewables is demonstrated by the level of mergers and acquisition transactions for ready-to-build and operational assets. The capacity, in GW, for onshore wind, solar and battery storage transacted reached a peak of more than 6 GW in 2023 and just shy of 5 GW in 2024, according to data from Clean Energy Pipeline (**page 6**). This equated to a record £4.4 billion in 2024. However, 2025 could exceed the record, at least in capacity terms, with 4.4 GW transacted in the first half of the year.



18 in public announced CPPAs in 2024

From just three deals in 2019, the UK saw 18
Corporate Power Purchase Agreements (CPPAs)
publicly announced in 2024, the highest to date
(page 8), although many more may be
unpublicised. In 2025 thus far, eight such
agreements have been announced, and this is
likely to continue to grow with governmental
support. For investors and renewable asset owners,
CPPAs lock in long-term, stable revenue, often at
fixed prices, making projects easier to finance and
less exposed to market swings.

1

# Market snapshot

The UK's renewable energy transition is undeniably gaining momentum, presenting a burgeoning investment asset class. Here, we explore the underlying market dynamics, highlighting key drivers for further growth and where opportunities and sticking points lie

#### GREENING THE ENERGY SECTOR

The UK has made a legally binding commitment to reach net zero by 2050, with an ambitious interim target of a 68% reduction in greenhouse gas emissions by 2030, compared to 1990 levels. Central to achieving these goals, and a focus of the current government, is the decarbonisation of the energy sector and within that, an electricity system powered entirely by low-carbon sources, such as renewables and nuclear.

Progress is already underway, yet the pace must accelerate to stay on track. Low-carbon energy (bioenergy/waste, primary electricity from nuclear and renewables) accounted for 23% of the UK's total energy consumption in 2024 and 33% of production. These are both up from 20% and 24%, respectively, five years ago, according to the Department for Energy Security and Net Zero (DESNZ). However, fossil fuels, particularly gas, still account for a large share of our overall energy mix.

Electricity generation, however, tells a more positive story. Twenty years ago, low-carbon sources (renewable and nuclear) made up just 23% of the electricity mix. By 2018, electricity generation from low-carbon sources officially surpassed generation from fossil fuels for the first time, accounting for 52%.

In 2024, wind, solar, hydro, and nuclear energy dominated electricity production accounting for almost two-thirds of generation. To sustain this momentum, the UK Government has set a target of raising this to 95% by 2030 with the ultimate aim to be 100% by 2035.

Yet, the challenge ahead is not just making electricity greener but supporting the broader shift to electrification. Most UK buildings and vehicles still rely on fossil fuels. More than 80% of homes rely on gas for heating, and although EV market penetration is rising, it still remains low, accounting for just shy of 3% of all privately owned cars. As buildings and vehicles become increasingly electrified, the demand and pressure on the electricity system will intensify. Indeed, electricity demand is expected to at least double by 2050 - highlighting the need for not only cleaner electricity, but more of it.

#### **EXPLAINER**

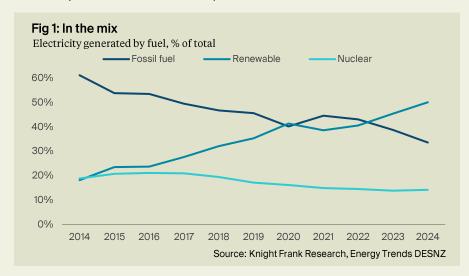
#### Energy vs Electricity: What's the difference?

Understanding the difference between the energy mix and the electricity mix is important. Think of the energy mix as the full menu of fuels the UK uses (oil, gas, coal, renewables, nuclear) for everything: powering homes, fueling cars, heating buildings, and running industries.

Electricity is just one part of that. The electricity mix specifically breaks down how that energy is sourced: showing what share comes from renewables, fossil fuels (most typically natural gas), or nuclear to power our electricity grid.

64%

The proportion of UK electricity generated by low-carbon (renewable and nuclear) sources in 2024



"The challenge ahead is not just making electricity greener but supporting the broader shift to electrification."

## Reshape and reform

With clear goals for expanding low-carbon electricity generation, the government has set quotas for location and technology type, as well as implementing grid connection reforms which have posed significant barriers. We discuss the details and how this creates opportunity for those wanting exposure for the sector

#### TARGETS AND PROGRESS

To expand low-carbon electricity generation, the government has set about making the path clearer, setting targets and removing barriers for development.

Although deployment has grown rapidly, renewable projects to date have been piecemeal and lacked an overarching strategic direction. With the current grid infrastructure there is often excess renewable generation that cannot be transported to meet demand. The Clean Power 30: Action Plan (CP30) sought to provide a clear path forward with specific capacity targets for each renewable technology, while the Strategic Spatial Energy Plan (SSEP), which is expected in late 2026, will be pivotal in creating a blueprint going forward.

Much has already been set in motion, but achieving it is no small feat (see Fig 2). Over the past decade, the UK has seen a wave of new projects being commissioned, and this momentum continues to build. For example, there is 8 GW of offshore wind currently under construction, with a further 16 GW fully approved and awaiting development, according to an analysis of the Renewable Energy Planning Database (REPD) as of April 25.

Yet, the notoriety of constraints within the planning process and grid infrastructure, leading to long delays and connection dates in the late 2030s, has started to curb the appetite. But plans for this are changing, meaning that investment in the sector could become of greater interest.

#### **BREAKING BARRIERS**

Despite this strong pipeline, the UK's electricity infrastructure is struggling to keep pace, creating POWERING THE FUTURE:

significant bottlenecks.

Obtaining planning permission varies widely by project type: onshore wind projects have a median approval time of 1.4 years, whereas large-scale (10MW+) solar projects, for ground/ground & roof, have a median approval of 10 months, according to analysis of the REPD applications submitted in the past 10 years. For battery storage projects, the median is six months.

However, this is only half the picture. These figures represent only projects which have obtained planning; therefore, it is also important to look at those in planning limbo - projects where planning has been submitted, but not granted, refused or withdrawn. As of April 2025, the median time since submission reached one year for large-scale ground/ground & roof solar, 1.5 years for onshore wind, and eight months for battery storage, demonstrating the potential for significant delays.

The latest planning reforms are set to change that. Revisions to the *National Planning Policy* Framework (NPPF) will lift the de facto ban on onshore wind farms, align onshore wind applications with other energy developments, and designate onshore wind and solar of 100 MW or more as a Nationally Significant Infrastructure Projects (NSIP).

But planning approval is only the first hurdle, with delays in construction timelines adding further delays. Once approved, battery projects take a median time of two years to become operational, onshore wind takes over two years and for largescale solar it is about 19 months.

Again, these only capture those constructed and operational.

Some 60-80% of those that have been granted planning are currently 'awaiting construction', depending on technology. The median time spent here is already reached 19, 23 and 38 months for battery, large-scale solar and onshore wind, respectively.

Furthermore, with some 10% of approved projects in the past decade marked as 'abandoned' or to go in bringing projects to operation and ensuring a rapid

'expired', there remains some way renewable roll-out.

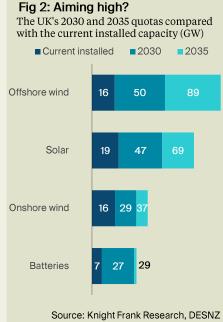
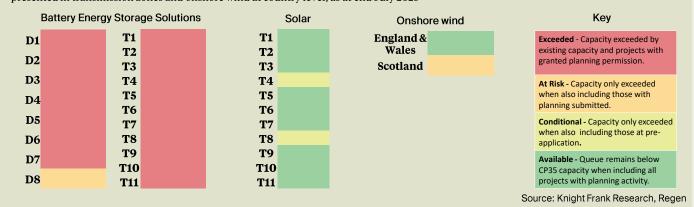




Photo by Julien Maculan on Unsplash

#### Fig 3: Reaching the limit

Mapping battery project development against 2035 targets in distribution (D1-8) and transmission zones (T1-11), solar against combined presented in transmission zones and onshore wind at country level, as at end July 2025



#### REFORMING THE QUEUE

The most prominent barrier remains the UK's congested grid connection queue. A surge in grid connections applications, many of them speculative, combined with a historic 'first come, first served' approach has led to severe delays, with some projects facing connection dates well into the 2030s. However, this is set to drastically change with the National Energy Systems Operator (NESO), together with Ofgem, having set a proposal for reforms to be implemented by summer 2025. Most notably described within CP30, the reforms aim to streamline the process and prioritise projects that are genuinely ready to connect.

A key feature of CP30 is the introduction of technology-specific capacity targets, which set defined limits on how much grid capacity is allocated to each technology type, from solar and onshore wind to battery storage. This targeted approach aims to align grid capacity more closely with national energy goals and system needs, rather than simply processing applications in order of arrival.

For projects already holding planning permission and progressing through the system, the reforms should provide greater clarity and an earlier connection date. However, projects without planning consent or with less mature development timelines face an increased risk of being pushed out of the queue.

Using data from Regen, we've mapped wind, solar, and battery project pipelines against the 2035 targets (CP35) in the <u>Clean Power 2030 Action Plan:</u> <u>Connections Reform Annex</u>, see Fig 3, highlighting zones with room for more projects and those on track to exceed capacity.

The impact could be particularly stark in the battery storage market, where the 'ready' pipeline of projects – those built or with permission granted – exceeds the government's 2035 targets by over 20 GW for transmission¹ and 6 GW for distribution². When adding in those with planning submitted or at pre-application, that rises to 50 GW and 15 GW, respectively.

Almost all zones are over capacity with projects built or planning granted, with the exception of distribution zone D8. Under the new framework, many of these projects may not progress, especially those at an earlier stage or without clear timelines for delivery. Future investment in battery storage will likely be limited to projects that are already in progress, grid-connected, or operational.

Solar has more breathing room. Including projects that are already built, consented, submitted or at pre-application stage, there remains a shortfall of almost 14GW against the quota. The quota would only be exceeded if all projects at the pre-planning stage were also counted, in which case it would be surpassed by 79 GW.

On a more localised level, all but two distribution zones fall into the 'available' category now that distribution and transmission zones have been combined and updated. Capacity isn't maxed out even if including those at preapplication stage. Yet, if all queued projects move forward, it could be.

Onshore wind has significant room for growth in England and Wales, with more than 6 GW still needed beyond the current queue (including all with no planning activity) to meet the 2035 targets. In Scotland, however, the quota is exceeded once those that have submitted planning have been included and therefore is in the 'at risk' categorisation.

The overall effect of CP30 is twofold: it may limit near-term new development opportunities for certain technologies in zones where capacity is already oversubscribed. At the same time, it offers greater certainty for projects already in the pipeline, particularly those with planning approval and realistic delivery timelines. Those operational assets may also see greater interest from those seeking exposure to the sector. These changes are promising and, with their imminent implementation. are expected to have a substantial impact in the short to medium term.

<sup>1</sup> Transmission refers to connections made to the high-voltage transmission network (typically above 132kV, up to 400kV), which transports electricity over long distances from generation sources to substations 2 Distribution refers to connections made to the lower-voltage distribution network (typically <132kV), which delivers electricity directly to homes and businesses.

# On the radar: Investment in renewables

A look at the investment landscape in renewable energy technology and how it has evolved over the past decade

The UK's combination of ambitious net-zero targets, a well-established renewable energy pipeline, and growing opportunities in grid flexibility and storage, continues to create a compelling environment for investment.

Almost 30% of family offices are looking to invest in battery projects, according to The Wealth Report 2025, with 22% and 14% looking for solar and wind opportunities, respectively. This momentum is mirrored in global investor sentiment: the Schroders Global Investor Insights Survey 2024 found that nearly half (46%) of global investors identified renewable infrastructure among the top three asset classes they plan to increase exposure to over the next 12 months.

Andreas Gucklhorn on Unsplash

Border to Coast's £80m commitment to UK green energy and life sciences highlights the sector's rising appeal to institutional investors. Projects which are ready-to-build or operational may prove to be increasingly attractive given the complexity and barriers cited.

This growing appetite is being backed by market activity. Transaction volumes of mergers and acquisitions (M&A) deals for UK clean energy assets have accelerated over the last decade. While records were reached in 2023 for capacity, 2024 saw the highest volume, in £, transacted. The market momentum seem likely to continue given the reforms and policy direction discussed.

#### **EXPLAINER**

#### Charting the market

Investors seeking exposure to renewable infrastructure have a growing number of entry points, each offering different risk and return profiles. Here, we outline the main avenues for investment exposure:

- Development-stage projects: Early-phase opportunities that may still be undergoing site identification, permitting, or environmental assessments. These carry higher risk but may offer higher returns if successful.
- Ready-to-build projects:
   These are projects that have secured planning consent, necessary land agreements and grid connection agreements, making them construction-ready and lower-risk than early-stage developments.
- Land and freehold considerations: The ownership or leasing structure of land associated with a project, which can influence deal complexity, long-term value, and exit strategy.
- Operational assets: Fully constructed and functioning projects that are actively generating energy and typically offer stable, lowerrisk returns.

The focus of the report has been on ready-to-build and operational assets, yet the market has been growing for all stages.

## £4.4bn

The total volume of mergers & acquisitions across ready-to-build and operational solar, onshore wind and battery projects in 2024

The capacity, in GW, for onshore wind, solar and battery storage (BESS) transacted reached a peak of over 6 GW in 2023 and just shy of 5 GW in 2024, according to data from Clean Energy Pipeline which tracks utility-scale projects.

Capital investment has followed suit, albeit in a slightly differing pattern, reaching a high of £4.4 billion in 2024. While solar has remained the dominant technology type by volume and value, the past four years have seen rapid growth in BESS. BESS alone accounted for nearly 3 GW of capacity transacted in 2023.

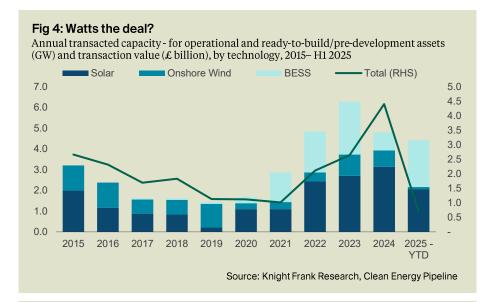
This year may prove to be a record for capacity with more than 4 GW of disclosed transactions in the first half of 2025. BESS has thus far been the dominate technology to transact by capacity. However, given the average relative values, particularly in the ready-to-build stage assets (see **page 7**), overall investment volumes remain below £1 billion.

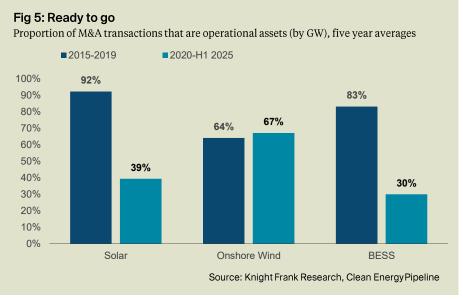
With clearer direction, activity is expected to increase even more in the second half of 2025 and beyond.

#### **INVESTMENT ROUTES**

6

The routes to exposure are shifting depending on technology. The Clean Energy Pipeline data shows a changing market dynamic among different technologies. For example, solar transactions have gone from being predominantly operational (over 90% by capacity) to more than 60% now being classed as ready-to-build, see Fig 5.





#### **MARKET VIEW**



#### Tempo to continue

#### **David Goatman**

Global Head of Energy, Sustainability & Natural Resources

The UK clean energy market is maturing. Yet, the grid continues to set the market tempo. With the connection regime shifting, as pointed to in this report, capital is responding, shown by the M&A activity over the past few years, with record capacity set for 2025. Investors continue to favour de-risked, near-operational assets. However, there has been a significant amount of ready-to-build assets coming to the market this year as developers actively pursue exits or partnership opportunities. We expect this elevated activity to persist until there is clearer visibility on when schemes will connect and start exporting.

In the meantime, connected or imminently exporting assets are commanding a premium, given immediate cash flow and lower delivery risk. For those ready-to-build assets, connection costs are increasingly the swing factor for viability: both contestable and non-contestable scopes are under scrutiny, and early engagement and negotiation can be decisive. Costs and timelines remain highly location-specific, so robust sensitivity analysis and disciplined structuring are essential. Overall, the market is rewarding readiness and certainty and pricing risk to connection above all else.

Onshore has been around twothirds operational consistently over the time period analysed, whereas BESS has followed a similar pattern to solar.

This overall shift suggests that investors are growing more willing to take on construction risk, often driven by the opportunity for higher returns.

#### WHAT'S IT WORTH?

Building on this, we analysed values on an average £ per MW basis to understand how metrics differ across technologies and stages, as well as over time, whilst recognising this only covers data which is tracked by Clean Energy Pipeline and may not represent the whole market.

Valuation levels vary significantly, driven by factors such as asset type, maturity, and market conditions. At the ready-to-build stage, transaction values are generally seven times lower given the outlay required to bring into operation, and additional risk. Since 2019 values have been lower due to the ending of subsidies which is why we have separated the two periods.

Solar has the widest gap between ready-to-build and operational values. Across the period analysed, operational solar projects averaged eight times the value of ready-to-build, a difference largely driven by trends in recent years. It is worth noting that some subsidies ended in 2019 and may be a contributing factor.



Photo by Leon Skibitzki on Unsplash

In the 2015–19 period, ready-to-build solar assets averaged £234,000 per MW compared with £1 million for operational projects - a ratio of 4.4 to 1. For the most recent 2020–H1 2025 period, this gap had widened, with ready-to-build solar assets falling to £127,000 per MW while operational projects rose to £1.1 million, an 8.8 to 1 ratio.

BESS has the lowest multiple, at 5.3 times. While the differentials vary year-to-year, similar to solar they have extended from 2.8 to 1 in the first period to 5.2 to 1 most recently.

Onshore wind is the only technology to reverse this trend with the multiple narrowing from 7.3 to 4.8.

Overall, this trend has been driven by the lowering of the values on ready-to-build sites (with the exception of onshore wind), possibly due to increasing volatility, and therefore risk, in energy and construction prices.

As the market matures, investor confidence grows, and policy barriers are removed, reforms (see **page 8**) could help stabilise prices and narrow these gaps.

Fig 6: Development premium?

Average £ per MW in M&A transactions, 2015-2019 and 2020-H1 2025

	RTB/pre-construction		Operational	
	2015-2019	2020-H1 2025	2015-2019	2020-H1 2025
***************************************	£234,000	£127,000	£1.0m	£1.1m
竹	£186,000	£328,000	£1.4m	£1.6m
	£225,000	£96,000	£627,000	£501,000

Source: Knight Frank Research, Clean Energy Pipeline

"Solar has the widest gap between ready-tobuild and operational values. Across the period analysed, operational solar projects averaged eight times the value of ready-to-build"

# Future gazing trends

From community-led projects and corporate PPAs to the latest solar technologies, we explore the trends shaping the future energy landscape

#### **GOING CORPORATE**

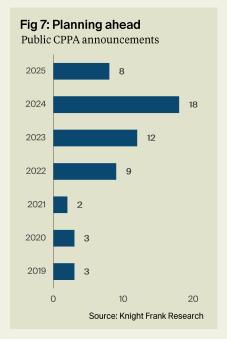
Investors and developers can secure greater value through derisking projects with corporate PPAs (CPPAs, see box) which have been growing in prominence.

We have analysed public announcements of CPPAs, recognising that many may be unpublicised therefore limiting market transparency, over the last seven years and found that both the number and diversity of deals have grown significantly.

From just three deals in 2019, the UK saw 18 CPPAs publicly signed in 2024, the highest to date. This is only likely to continue growing, with eight such deals tracked so far in 2025, as the government committed to growing the market in the *UK's Modern Industrial Strategy*.

Over the years, solar has been the dominant energy source, averaging two-thirds of deals, rising to three-quarters in 2025.

For investors and renewable asset owners, CPPAs lock in long-term, stable revenue, often at fixed prices, making projects easier to finance and less exposed to market swings.



#### **EXPLAINER**

#### **Corporate PPAs**

Corporate Power Purchase Agreements (CPPAs) are fast becoming a key driver of investment in renewable energy (<u>read more here</u>).

The CPPA is a financial contract between a renewable energy developer and a corporate buyer. It guarantees a fixed price for renewable electricity, plus Renewable Energy Guarantees of Origin (REGOs), without needing a physical link to the project.

They matter for investors and developers because of:

- Revenue certainty: Long-term, fixed-price contracts underpin stable cash flows, reducing exposure to volatility.
- Project bankability: Securing a PPA improves credit profiles, making it easier to raise debt and equity financing.
- Accelerated deployment: Demand from corporates seeking credible, additional renewable power is unlocking new project pipelines.
- Asset value uplift: CPPAs can enhance valuations at both development and operational stages, supporting exits and refinancing.
- Risk mitigation: CPPAs shift market price risk and support predictable returns.

The opportunity? With over 90 UK corporates and hundreds more globally committed to 100% renewables, demand for high-quality CPPAs is increasing. For investors and developers, they offer a direct route to scale renewable portfolios and demand.

#### **MARKET VIEW**



**Expand and accelerate** 

**Charlie Smith** 

Associate, Energy, Sustainability & Natural Resources

The UK's CPPA market has expanded rapidly in recent years, becoming one of the most dynamic in Europe. Major corporates have been at the forefront of this growth, with technology companies like Amazon signing large-scale wind and solar deals, and retailers such as Tesco and Sainsbury's committing to long-term renewable supply contracts. Tesco's landmark 15-year deal with Quinbrook's 373 MW Cleve Hill Solar Park demonstrates this and is the largest corporate solar PPA in the UK to date, expected to power the equivalent of 144 large stores.

The acceleration in CPPAs has been driven by both commercial and regulatory factors. Onshore wind and solar projects supported through CPPAs can now achieve higher returns than those with government-backed Contracts for Difference (CfDs) agreements in certain regions. This means developers may increasingly look to CPPAs to achieve more competitive strike prices than those offered through the government auctions, particularly in the current environment of volatile wholesale prices.

#### Green means go? The UK's policy landscape

While the landscape continues to evolve, the direction is clear: the transition to clean energy will not wane. In fact, regulatory certainty, ambitious targets, and growing investor confidence mean we are likely to see acceleration. Key policies include:

- Net-Zero Commitment: The government's legal commitment to achieve net-zero emissions by 2050.
- <u>Clean Energy Industries Sector Plan</u>: Part of the UK <u>Modern Industrial Strategy</u>, this positions clean energy at the heart of economic growth with proposed funding for green technologies, including renewable energy, workforce development, and regional investment.
- <u>The CP30 Action Plan (CP30)</u>: Outlines the government's strategy to decarbonise the electricity system by 2030.
- <u>The Great British Energy Act 2025</u>: Launching Great British Energy (GBE), a publicly-owned energy company designed to supercharge investment in low-carbon technologies.
- Onshore Wind Strategy: 40 'radical actions' to restart onshore wind development across the UK, aiming to deliver 27–29 GW of capacity by 2030.
- <u>UK Solar Roadmap</u>: Measures to accelerate a threefold increase in capacity by 2030. These include streamlined planning, a reduction in Transmission Impact Assessment Thresholds from 5MW to 1MW, exemption from CP30 capacity limits, and greater use of under-utilised grey space such as car parks.
- <u>Review of electricity market arrangements (REMA)</u>: National pricing reforms to improve the effectiveness of the pricing model. Measures include changes to the Transmission Network Use of System (TNUoS) and connection charging regimes for generation and demand, a lower mandatory Balancing Mechanism (BM) participation threshold and a shortening the imbalance settlement period.
- *Strategic Spatial Energy Plan*: Expected in late 2026, this will provide a national blueprint for energy infrastructure deployment.
- Contracts for Difference: The UK's primary renewable energy support scheme, guaranteeing a fixed price for electricity generated by low-carbon sources, providing revenue certainty see explainer box on **page 10**.

#### STRIKING IT RIGHT

The Contracts for Difference (CfD – see box on **page 10**) mechanism, which has been in place since 2014 is also favourable for enabling longerterm stability on revenue for renewable projects.

The seventh CfD round, AR7, which is underway with successful bids expected to be announced in Q4, includes a number of changes, most notably the period of contract

lengths has been extended to 20 years from 15 for solar, onshore wind, offshore wind and floating offshore wind.

The CP30 Action Plan committed to improve transparency and predictability in the timing and scale of ambition for the CfD and that the government will continue to hold annual allocation rounds. This provides some ongoing certainty for investors and developers on the opportunity to secure stable revenue, improving viability.

18

Corporate PPAs in 2024, from just three in 2019

#### **BEYOND THE ROOFTOP**

At the same time, new deployment models are gaining traction, from agrivoltaics integrating solar PV into farmland - to the growing trend of solar canopies in car parks. In our report, A new SPV: Solar power *value*, we explored how grey spaces, such as rooftops and car parks, are becoming critical to the future of solar, this was pointed to in the UK Solar Roadmap. Innovations such as bifacial panels, which capture sunlight from both sides, and lightweight, flexible panels are opening up even more possibilities for unconventional surfaces. Solar canopies, for example, not only generate clean energy but also provide added benefits like shelter and cooling, boosting their appeal for businesses and communities.



#### **EXPLAINER**

#### **Contracts for Difference (CfD)**

The Contracts for Difference (CfD) scheme is the UK government's primary mechanism for supporting the transition to low carbon electricity generation. These CfDs incentivise investment by providing developers with direct protection from volatile wholesale prices.

Developers must submit a 'sealed bid' in an auction round, of which there have been six, previously every two years but now annually. If successful, this leads to a private law contract with the Low Carbon Contracts Company (LCCC), a government-owned company. Developers are then paid a flat indexed rate for the electricity produced over a 15-year period (see page 9 for AR7 modification). Payments are based on the difference between the 'strike price' (a price for electricity reflecting the cost of investing in a particular low carbon technology) and the 'reference price' (a measure of the average market price for electricity in the GB market).

All successful applicants are awarded the same 'clearing' strike price. This is set at the highest successful bid required to clear the auction but is subject to technologyspecific caps, known as Administrative Strike Prices (ASPs), meaning the final strike price may not match an individual bidder's offer. The ASPs are set prior to the opening of the round per technology. In Table 1, we highlight the ASPs for the most recent AR6 and upcoming AR7 as well as the clearing strike price for AR6.

AR7 expands the volume and types of wind energy projects eligible for entry into the auction round.

Table 1: Strike it right

The Administrative Strike Prices (ASP) for AR6 and AR7 as well as clearing strike price for AR6 based on the awarded contracts (all 2012 prices),  $\pounds/MW$ 

Technology	AR6 ASP	AR6 clearing strike price	Difference	AR7 ASP
Solar	61	50.07	-18%	54
Offshore wind	73	58.87	-19%	81
Onshore wind	64	50.9	-20%	66

Source: Knight Frank Research, DESNZ

#### **PEOPLE POWER**

In the UK, strong public backing for renewable energy is helping to drive innovation not just in technology but in how projects are funded and owned. The latest **DESNZ Public Attitudes Tracker** (Summer 2025) shows that 80% of the public supports the use of renewable energy to generate electricity. Alongside this, government initiatives like the national smart meter rollout aiming to offer every UK household a smart meter by the end of 2025, are helping deepen consumer engagement with their energy use despite some ongoing concerns over the cost of the rollout. Plus, NPPF reforms mean people living near new renewable projects could benefit from initiatives such as community benefit funds (CBFs) or local electricity discount schemes (LEDS), a big win for local support and the clean energy push.

This growing appetite for involvement is fueling a rise in consumer ownership models, with Ripple Energy flipping the script on how renewable projects are funded and owned. Through its people-powered model, households and small businesses become co-owners of wind farms and solar parks, giving them a direct stake in the clean energy transition. It is not just about buying green power, it is about owning the means of production itself.

This shift from passive consumers to active co-investors could reshape how future energy projects are financed, creating a more democratic, decentralised energy system driven by local communities.

#### THE CHARGE IS ON

The UK's renewable energy sector is evolving rapidly, underpinned by strong investment momentum, ambitious policy targets, and a clear pivot toward flexible, gridbalancing technologies like battery storage. Investor focus is shifting upstream, with ready-to-build projects now outpacing operational deals.

Meanwhile, planning and grid reforms, including the *CP30 Action Plan*, are beginning to unlock bottlenecks, though they also introduce new constraints, particularly in oversubscribed battery zones. Innovation is driving new models of investment and ownership, from communityled schemes to CPPAs, supported by positive public sentiment.

Long-term policy certainty is reinforcing investor confidence and creating a more stable foundation for future growth. Together, these forces are shaping a market that is not only scaling quickly but is also becoming more sophisticated, and for those ready to move decisively, the opportunity to power the UK's clean energy future is here.

"Long-term policy certainty is reinforcing investor confidence and creating a more stable foundation for future growth."

We like questions, if you've got one about our research, or would like some property advice, we would love to hear from you.

#### **RENEWABLE ENQUIRIES**



**David Goatman**Global Head of Energy, Sustainability & Natural Resources
+44 20 7861 5109
david.goatman@knightfrank.com



Charlie Smith
Associate, Energy and Infrastructure
+44 20 3871 3854
charlie.smith@knightfrank.com



Charlie Singer Associate, Energy and Infrastructure +44 207 861 1302 charlie.singer@knightfrank.com

#### **RESEARCH ENQUIRIES**



Flora Harley Head of ESG Research +44 20 7861 1436 flora.harley@knightfrank.com

#### **RECENT PUBLICATIONS**



**UK's Modern Industrial Strategy: Clean energy and sustainability takeaways**What the government's Modern Industrial
Strategy's focus on clean energy and
sustainability means for real estate



**A new SPV - Solar Power Value**The potential solar photovoltaics (PV) energy generation opportunities for the UK from car parks and rooftop

Front cover: Photo by Karsten Würth on Unsplash

