Energy UK

The voice of the energy industry

Energy UK Response Corporate Power Purchase Agreements Call for Evidence

March 6th 2026

Executive Summary

Energy UK is the trade association for the energy industry, representing companies investing billions of pounds to secure our country's current and future energy needs.

From growing start-ups to major electricity generators, grid and infrastructure developers and energy suppliers, our members are driving change across power, heat, transport and flexibility. We provide a collective voice for the sector working with governments, regulators, charities and other organisations to provide crucial insight that shapes policy, offers solutions and promotes best practice. Our broad view across the whole system supports evidence-based positions which are not tied to particular technologies, and are focused on delivering strategic benefits for people, businesses and the economy.

We champion initiatives such as our Vulnerability Commitment, which pushes suppliers to go beyond regulation to support customers with additional needs, and TIDE, the industry's drive for greater inclusion and diversity. Through our Young Energy Professionals Forum, we support the development of future leaders. We are equally committed to our team and are proud to be recognised as a 'Gold' Investors in People employer.

The Contracts for Difference (CfD) mechanism, which has successfully helped to de-risk investment in renewable generation at scale, should remain the primary mechanism to ensure there is sufficient new build large-scale renewable generation to deliver a decarbonised electricity system. By minimising counterparty risk, CfDs offer the most cost-effective route to bring new renewable generation to market. An equivalent CPPA for 10-15 years compared to a 20-year CfD for AR7 offshore would need to be at a £30/MWh premium on AR7 strike prices.

However, long-term contracts between end users that enable new renewable projects to be built - Corporate Power Purchase Agreements (CPPAs) and also utility PPAs (where utilities contract with new renewable projects) - will play an important complimentary role in driving investment in new renewable and flexibility projects and can support business decarbonisation by providing long-term, stable electricity prices.

PPAs bring significant benefits to the power system. They enable additional investment in renewable projects at all scales accelerating grid decarbonisation without adding to the policy costs on electricity bills. They help enhance liquidity in forward markets and enable better risk management by electricity suppliers. They drive investment in flexibility at all levels and timescales, helping to reduce power system costs.

They also help businesses by providing end users with stable long-term electricity prices and could support industrial electrification if competitive terms can be agreed. However, uptake in UK industry is currently low due to high counterparty risk, price sensitivity on the offtaker side and competition with CfDs on the generator side (price, contract duration and low counterparty risk). CCPAs should be seen as an important hedging tool for businesses, rather than a way of reducing costs.

Interest in CPPAs has been growing among businesses particularly in retail and IT sectors that have strong Environmental Social Governance (ESG) commitments. CPPAs with new renewable projects can be combined with Renewable Electricity Guarantees of Origin (REGOs) to provide businesses with the additionality and/or time-matched supply they need to meet voluntary and mandatory carbon reporting requirements.

However the growing number and divergence of different standards and reporting methodologies is creating uncertainty. Changes to the international GHG Protocol may increase demand for CPPAs but this will take time to materialise and may only impact a small proportion of the market that have signed up to Science Based Targets (which remains voluntary for many companies).

High complexity and the resource intensity of entering into CPPAs is an issue for both developers and offtakers, so measures to reduce these issues will be helpful.

The CfE wrongly excludes both virtual CPPAs and utility PPAs:

- **Virtual CPPAs** Physical CPPAs currently dominate the GB market however interest in virtual CPPAs is growing and offer an important alternative way for some companies to meet ESG goals. Virtual CPPAs enable the output from a single generation project to be across end users. Omitting financial / virtual PPAs from the call for evidence is a significant gap. Virtual PPAs are a critical enabler for corporate participation in renewable energy markets, particularly for organisations with geographically dispersed or international electricity demand. This expands both the scope of customers that could benefit from CPPAs and the range of potential providers of risk management through CPPAs. Virtual PPAs materially broaden the addressable market for CPPAs by removing the need for physical proximity between generation and consumption. They also provide

an efficient and well understood mechanism for price risk management, offering long term price certainty without the operational complexity associated with physical power delivery. However physical PPAs may be more suitable for some types of project (for example large offshore wind projects) where contracting with multiple PPA offtakers introduces more counterparty risk to navigate increasing cost and complexity.

- **Utility PPAs** play a vital role in the market and can address several of the challenges that have been identified in the call for evidence. Many organisations may not consider a long-term CPPA appropriate, particularly where they operate across multiple sites or face uncertainty over their long-term trading position. Therefore, a licensed supplier is better placed to aggregate demand and offer shorter-term arrangements without tying generation to a single end-user for 5–10 years.

As such Government should consider how any of the options it takes forward to support the CPPA market can work for both physical and virtual CPPAs and utility PPAs.

Addressing the low credit rating of offtakers and making CPPAs more competitive will be essential to enable the market to grow however some of the other measures to strengthen ESG drivers and reduce transaction costs could be important supportive measures.

Government should consider the following measures to tackle key barrier to grow the market:

Barrier 1: Low credit rating of offtaker

- Underwrite CPPA contracts
- Consideration of the creation of a basket or pool of CPPAs for smaller companies to access but only if a market failure can be established

Barrier 2: Unattractive price

- Assess the option of exempting CPPAs from CfD costs, having regard to the distributional impacts on other consumers
- Allowing PPAs to be set against Climate Change Agreement targets
- Increase the use of CPPAs for end-of-life assets

Barrier 3: Need to strengthen ESG drivers

- Introduce new metrics in fuel mix and tariff reporting
- Add a time stamp to all REGOs
- Introduce an Energy Attribute Certificate (EAC) scheme for power CCS
- Improve the accuracy of the carbon emissions associated with different tariffs and suppliers by reforming fuel mix disclosures and tariff reporting
- Consider additionality power procurement standards for data centres

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Barrier 4: High transaction cost and complexity

- Convening, provision of information and technical and legal support
- Government could set out guidance on a 'gold standard' CPPA

Actions to CPPAs a better option for electricity generators

- Removing barriers to efficient private wire systems
- Enabling cross-border CPPAs
- Role for CPPAs in bespoke CfDs for new low carbon generation

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Questions

Q1. To what extent and in what ways are CPPAs attractive for industrial and commercial electricity consumers compared with other electricity supply arrangements?

Pricing remains a challenge

- Demand for CPPAs has fallen since 2022 after wholesale prices fell.
- Some long-term CPPAs can help enable investment in new low carbon renewable and nuclear projects and the agreed price will therefore be linked to the cost of new build assets, and the level of return developers can achieve through other routes such as the renewable CfD. However given that both the tenure and counter party risk for CfDs is favourable, CPPAs with new build assets can struggle to compete.
- CPPAs will also play an important role in keeping renewable projects currently under Renewable Obligation or CfD agreements going into the 2030s at prices lower than new builds reaching but still need price certainty to extend life or repower (due to volatile wholesale prices and price cannibalisation). These may provide more cost competitive CPPAs and bring additional security of supply benefits.
- All CPPAs will be linked to wholesale prices in some way as they may either be directly indexed to them or under fixed prices PPAs either the offtaker (under a pay as generate CPPA) or the retailer providing sleeving (under a baseload CPPA) will need to hedge against any imbalance volumes.
- Negative price risk is a growing issue. Whilst CfDs not do not cover for negative pricing risk at day ahead stage, CPPAs can be structured in a way to cover these risks for generators, however managing these complex risks increases complexity for both sides of the CPPA. Similarly, how constraints are dealt with under physical CPPAs and where risks sit for curtailment is another complexity to factor in.
- Even if the wholesale price achieved is competitive, non-commodity costs a rising proportion and only license exempt supply avoids this.
- Economic incentives for end users may fall if wholesale prices are very low much of the time – paying levelized renewable costs may be unattractive unless CPPA customers are exempt from CfD costs. As in this low average wholesale price scenario CfD top-ups will be larger.

ESG drivers

- Many companies choose to use REGOs[1] with standard supply as way to meet carbon targets.
- Suppliers are legally required to use REGOs to evidence the renewable proportion of their electricity supply, and the Fuel Mix Disclosure regime expressly relies on REGOs as the recognised mechanism for attributing renewable generation to end consumers. The scheme was not designed to provide a material revenue stream to generators, nor to function as an investment driving instrument. Its statutory purpose is evidential, not financial.
- The fact that REGOs trade at low prices is not evidence of market distortion or policy failure. The suggestion that low priced REGOs undermine the competitiveness of CPPAs implicitly assumes that REGOs were designed to deliver additionality or investment signals. No such purpose appears in the 2003-2005 Regulations.
- If the Government considers that REGOs should play a more substantive role in signalling investment, reducing consumer bills, or supporting long term decarbonisation objectives, the current framework should be reviewed to meet these expanded purposes.
- The value of a CPPA for most companies remains questionable in the absence of a widely accepted and easily applicable standard that set them apart from REGO backed supply.
- GHG protocol changes may make CPPAs more attractive for companies in the long-term (and those in their supply chain) but reforms will take time and meeting a set standard is not mandatory (unless the company has a SBTi). Other standards may also drive uptake but many are voluntary and only account for a small proportion of the market.
    - The recent proposed reforms to reporting of scope 2 emissions under the GHG Protocol, which covers indirect emissions from the generation of purchased and consumed electricity, steam, heat, and cooling, is intended to tackle concerns around the additionality and transparency of REGO backed green tariffs. These reforms include associating reporting with physical trading to improve its accuracy, as well as moving towards hourly clean energy accounting. Additionally, there is a proposal to modify Standard Supply Service guidelines so that Government-backed generation funded by all consumers can't be allocated to specific consumers.
    - Similarly, compliance with RE100 procurement standards includes procuring default delivered renewable electricity from the grid supported by EACs (REGOs

[1] The REGO scheme was established under the Electricity (Guarantees of Origin of Electricity Produced from Renewable Energy Sources) Regulations 2003 and forms a core part of the 2005 Fuel Mix Disclosure (FMD) framework.

in the UK), as long as these are then retired by the utility and supplier to avoid double-counting and legitimately claim the environmental benefits of the supplied energy.[2]
    - Another example is the UK Green Building Council's 'deep green' tariff. In this case, the supply arrangement provides electricity bundled with REGOs from the supplier's own or PPA-contracted renewable generation. The supplier must also ensure either supply volume exceeds UK renewable electricity generation and that new or repowered renewable capacity meets the demand of new green customers over time OR show that at least 75% of their supply comes from renewable generators which are less than three years old when acquired or contracted.[3] UK GBC guidance for built environment is the most complete and comprehensive attempt to address renewable energy procurement. Nonetheless, it gives built environment industry a very high-level introduction to procurement and the expectations at the end of it. It does not help with the "how".
- In addition all Greenhouse Gas (GHG) accounting and target setting frameworks such as Science Based Target Initiative (SBTi), 24/7 Carbon Free Coalition, and possibly the GHG Protocol plan to introduce vintage limit for Energy Attribute Certificates (EACs). SBTi requires EACs from generation commissioned or repowered in the past 10 years, shifting to 5 years by 2035. Standards that require maximum age of asset may reduce corporate demand for CPPA for life extension or repowering projects.
- The Carbon Border Adjustment Mechanism (CBAM) is driving big off takers toward hourly matching for clean electricity to minimise exposure to CBAM costs. Both should be considered together with role of EU regulations in influencing business decisions.
- There may be less perceived value for CPPAs from a decarbonisation / ESG perspective as the electricity system decarbonises (however, this the need for new capacity will depend on the scale of potential increases in future electricity demand and there may still be demand for time-matched CPPAs that reflect operational carbon emissions even in a heavily decarbonised system).
- Those with strong ESG targets may increasingly want to buy in local area to minimise emissions/costs but no way of tracking source of power under virtual CPPAs.

Depends on company type, size and level of expertise

- Companies may not want to fix prices for long durations and may struggle with wholesale market forecasting (where there are inconsistencies with third party published curves and where CPPAs are referenced to market prices).

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[2] RE100 (2025), RE100 Technical Criteria
[3] UK Green Building Council (2023), Renewable Energy Procurement Report 1

- CPPAs are considered complex and costly and only suitable for large, sophisticated customers with a dedicated energy team. They are more attractive to larger companies who understand their future demand well, have flexible contracts and can sleeve in volumes. Smaller companies prefer fixed contracts and can't add in CPPA volumes to these.
- Larger companies may be more comfortable signing long-term agreements, smaller companies may struggle to resource negotiations and take on risks.
- Interest will also depend on the counterparty risk of company as it impacts the price of the CPPAs offered.
- Only lower cost renewable projects are likely to be attractive to price sensitive industrial and commercial customers eg solar in the South where network charges are low and some onshore wind projects in optimal sites.
- Negotiating process and time to agree deals is a significant issue. There are multiple components that must be evaluated when structuring a corporate PPA. These include the allocation of risk, the regulatory framework, the commercial terms, and the technical delivery arrangements. Each component should be addressed through a clear, methodical approach to ensure the agreement aligns with the parties' legal obligations and commercial objectives. This expertise sits behind a paywall, be it consultants, lawyers etc. who are drawing on previous experiences.
- The lack of standardised approaches to signing CPPAs slows innovation in this space as every deal is bespoke (this gets worse as companies move away from a baseload PPA to shaped or something more exotic, as the number of people who can advise a corporate gets a lot smaller).
- A single company may sign a range of CPPAs that then have to be moved with them if they move supplier, these can range from fixed, fixed CPI linked and index linked. All of these have to been taken into account when securing new arrangements.

Sleeved and unsleeved

- Sleeved CPPAs are more attractive for those with base-load demand though offtakers can buy unsleeved for some proportion of demand even if their total demand is fairly flat.
- Larger companies with a good understanding of demand or with demand that matches renewable output may prefer to buy lower cost unsleeved CPPAs.
- Technological advancements may help with this by enabling greater understanding of both demand and generation and the growing emergence of commercial platforms that pool volumes on both sides.
- Financial CPPAs can be used to split the power generated from a single project across multiple offtakers. This can help with smoothing of supply and demand and make it easier for offtakers to access unsleeved CPPAs but they are limited by the credit rating

of the smallest buyer/ability of largest buyer to take on additional volumes if some of the pooled offtakers fail.

Onsite grid connected

- There has been significant growth in behind the meter PV solutions for use within building or sites where systems are sized for a proportion of total on-site demand (and therefore likely to require limited level of export volumes which are less valuable).
- Some retailers and specialist providers fund, install, and operate onsite PV systems with no upfront capital required from the customer. The customer pays only for the electricity generated at an agreed kWh rate, which is typically below grid prices. Contracts for power and maintenance can last for between 15–25 years.
- Other technical options include solar and BESS co-located systems, fuel cells, gas turbines and in future SMRs and MMRs.
- Barriers include space and site constraints, landlord/tenant issues (including hard to contact landlords and business tenancy durations). The majority of commercial and industrial sites tend to be leased not owned.
- To enable the high upfront investment, many schemes will need 15-year agreements, and this can prove challenging in sectors where there are high levels of insolvency.
- There are also issues with identifying who is responsible for the insurance for equipment and different standards used across insurance different providers.
- Co-located solar and BESS systems can be useful for providing businesses with firm output.
- However the business case for BESS is less clear and is based on stacking of wholesale price arbitrage, avoided peak capacity market (CM) costs, red band Distribution Use of System (DUoS) costs and national and local flexibility market revenues. The attractiveness will depend on electricity usage profiles and where the site is located and whether it can benefit from local flexibility Distribution System Operator (DSO) markets.
- Spill PPAs for exports (where excess energy can be used by another offtaker) can help widen access to businesses with low credit (both host and offtaker) and are also useful for offtake companies with unreliable demand profiles.
- The planning permission regime is being improved but there are still issues e.g. for solar car park canopies.[4] Developers still have to apply for both solar and batteries separately.

Private wire (grid connected)

[4] Energy UK (2025), Energy UK response to solar on car parks and electric vehicle charging

- Private wire schemes offer a growing opportunity for large industrial and commercial (I&C) customers and data centres to invest in the additional generation and flexibility needed by the wider electricity system and can help speed up grid connection by reducing the connection capacity required. Options include solar and BESS co-located systems, fuel cells, gas turbines and in future SMRs and MMRs.
- There is growing interest in private-wire schemes, but uptake is reduced due to complexity and need for 15-year agreements which creates risk due to the possible insolvency of the offtaker over that period.
- These schemes are only commercially attractive for larger schemes, where the wire connection is relatively short and straightforward. Crossing wires over public highways and third-party land carries certain additional risks and costs.
- The complex licensing regime is a major blocker to private wire schemes. Uncertainty regarding license exemptions under the Electricity Act 1989 in Great Britain stems from an outdated regulatory framework (the 2001 Class Exemptions Order) that struggles to accommodate modern, complex energy systems like private wires, co-location, and smart local energy systems.
- The 2025 Energy UK report *Powering the Cloud* noted the need for changes to licence exemptions to encourage the use of clean private-wire networks incorporating generation and storage that could optimise and standardise network connection processes across network operators.[5]
- Private wire projects can help optimise the use of generation on a local level, reducing system size and operational costs. However private wire systems are not an alternative to the need for new, reinforced or upgraded distribution and transmission networks and they still rely on back-up generation capacity when local demand is higher than supply or when there is a fault. Grid connection is important for the economics of most private wire projects so they can export power when local demand is lower than generation.
- There are issues with data centres, large commercial hubs, energy intensive industries and larger community energy schemes getting grid connections to enable investment in new demand connections alongside private wire schemes as companies have to apply separately for an import and export licenses.
- Obtaining planning permission is even more complex as you need to submit separate planning applications for different projects.
- These private wire scheme can provide offtakers with reduced CPPA prices due to the avoided policy and network costs. They may however be negative distributional impacts

[5] Current private wire exemptions assume 100% load factors and are capped at 100MW total customer demand under licence exemption C. To better optimise network connection and encourage private wire generation the threshold should take into account likely load factors so that larger schemes with lower load factors could be installed to serve individual data centres. This would also enable larger private wire generation and storage systems that serve a number of data centres could be installed and run at higher load factors.

if they are applied too widely as they reduce the pool of customers paying for wider system and policy costs that need to be recovered.

Off-site (grid connected)

- These fall into two categories, those under license exemption supply and larger projects under sleeved or unsleeved arrangements outside of license-exempt supply.
- There has been a huge growth in interest in license exempt supply and code modification P442 has made this much easier. Supply from generators <5MW and consumption have to be half-hourly matched and doesn't have to be in the same region.
- Proposed code modification P441 should be explored as it would be for generation and supply in the same substation region.
- As with private wire schemes there are concerns around distributional impacts if the uptake of license exempt supply is too high.

Onsite and private wire fully isolated

- These schemes may not be economic however as would need to be sized at a minimum of double capacity to allow for faults and they would not earn revenues from exports and system services.
- As outlined above license arrangements make this difficult.
- As with private wire schemes there are concerns around distributional impacts if build out of isolated private wire systems is too high.

Q2: To what extent can CPPAs support the development of new electricity generation capacity?

Whilst the CfD and nuclear RAB are likely to remain the lowest cost way of bringing forward low carbon capacity at scale, CPPAs play an important role:

- Smaller projects eg on-site solar are very suitable for CPPAs, larger offshore projects may prefer CfD for some or all of capacity.
- Enable additional renewable deployment beyond that enabled by CfD allocation rounds.
- Unlikely to be suitable for larger, very capital-intensive projects such as offshore wind where Government contracts significantly lower cost of capital. Large projects require a number of different offtakers to match volumes increasingly transaction complexity/costs (but conversely this can help spread the risk of defaults).
- Useful alternative route to market for projects with grid connections that didn't secure a CfD and don't want to wait for future rounds.
- Provides a route to market for smaller renewable projects outside the CfD.

- Provides revenue stabilisation for the merchant tail of a renewable project.

There are however a number of issues that developers face when using CPPAs to enable investment in extending lifetimes or bringing additional capacity to market:

- Need for sufficiently long contract terms in order to secure finance. Realistically CPPAs need to be 10 years minimum to service debt requirements – ideally longer.
- This is very difficult unless a CPPA only forms a portion of the corporates energy use or the corporate has a very set fixed budget for their own business and can take the risk on a fixed price energy product. Most offtakers may be wary of agreeing a long-term price so many will only sign short-term CPPAs.
- Eligible developers will tend to prefer CfDs due to lower counterparty risk of offtaker (LCCC) and longer-terms (now 20 years) compared to those available in CPPA market.
- Counterparty risk of some companies especially smaller ones may limit ability to raise finance for new projects.
- Changes to the GHG Protocol will drive demand for CPPAs across larger companies with SBTis but this and other standards do not differentiate between supported and unsupported projects and may not support projects at the end of their contracts (see below).

Q3. Actions to support CPPA market growth and make CPPAs a better option for electricity buyers?

Key barriers to tackle include:

1. Low credit rating of offtaker
2. Unattractive price
3. Need to strengthen ESG drivers
4. High transaction cost and complexity

Policy solutions to tackle these barriers are set out below. Addressing the top two barriers i.e. low credit rating of offtakers and making CPPAs more cost competitive will be essential to enable the market to grow however some of the other measures to strengthen ESG drivers and reduce transaction costs could be important supportive measures.

Barrier 1: low credit rating of offtaker

Underwriting CPPA contracts

- CPPA contracts expose developers to the credit risk of the consumer. As such, CPPAs are not an option for many consumers, particularly smaller businesses for whom credit worthiness is an issue, or larger businesses who are very electricity price sensitive.
- Due to issues with credit worthiness of offtakers, UK CPPAs are concentrated on short term durations, reducing the use of longer term PPAs that could help bring new generation to market.
- The Government could introduce a credit guarantee (as introduced by the Spanish, Italian, French and Norwegian Governments) to help a wider set of end users to enter into CPPAs to secure long-term electricity prices. This would help shield them from price volatility and improve confidence in electrification as future operating costs are more certain.
- Energy UK members have highlighted that the number of CPPA offtakers is severely limited by issues around credit rating. When offtakers fall below investment grade, extra collateral is needed to compensate, which can disincentivise both offtakers and investors. Some utilities use insurance products to cover this risk, but it can be expensive and difficult to insure all offtakers.
- The guarantee could be administered through a self-funding investment vehicle limited in size by risk appetite/limiting Government exposure ie it would be separate to the CfD mechanism. Any indirect interactions with the CfD mechanism would need to be carefully considered and a more detailed assessment of the balance of risks versus benefits will need to be carried out, before making a final decision.
- Any costs associated with administering the guarantee should not fall onto other electricity customers and should be financed through general taxation.

Explore need to create a basket or pool of CPPAs for smaller companies to access

- A basket of CPPAs could be used to combine demand from smaller I&C customers to help manage counter party risk and increase access to a wider set of end users. Both offtakers and generators would sign up to a more standard set of terms and conditions (T&Cs), rather than more bespoke terms as is normal in the CPPA space. This could enable access to small companies that go through Third Party Intermediaries (TPIs).
- Some energy companies already offer this service to small independent generators, providing them with support throughout the process and offering them simple PPAs but this could be extended to offtakers.
- However there are a growing number of platforms being made available and Government should assess how the market is developing to identify any market failures and gaps in emerging commercial offers before considering intervening.
- Aggregation should be market-led in the first instance to retain commercial incentives and ensure access to the expertise required. Government acting as a facilitator itself should only be considered where it is clear it will achieve much greater or more effective

aggregation than the market can provide itself. This is in part linked to how much more interest in CPPAs can be created among generators and offtakers, which is uncertain.
- Government backing to underwrite risks may be required to help enable this due to the low counterparty risk of some of the offtakers and generators, but pooling supply and demand would help mitigate against overall risks.

Barrier 2: Unattractive price

Assess the option of exempting CPPAs from CfD costs, having regard to the distributional impacts on other consumers

- All electricity end users support the construction of new renewable capacity via the Government's Contract for Difference (CfD) mechanism. Annual CfD auctions provide new renewable projects with an agreed price for the electricity produced from their new project for 15 years, enabling investment. Every electricity supplier is then subject to the CfD Supplier Obligation Levy, that funds CfD payments when wholesale prices drop below the strike price.
- Electricity end users entering into a CPPA with a new renewable project that isn't delivered through the CfD auction are enabling additional investment in renewables via an alternative route. CPPA buyers could be exempted from CfD costs to recognise their contribution to wider system decarbonisation and make CPPAs more attractive.
- The exemption could be based on the proportion of a businesses' total supply volume contracted through a CPPA linked to new-build generation assets. Exemptions should be limited to projects where there it can be demonstrated that there is an equivalence of effort needed for decarbonisation eg not just applied for small solar projects.
- Energy intensives end users are already exempted from policy costs and therefore would not benefit from this change, but it would enable them to enter into CPPAs as a way of fixing costs. Similarly, beneficiaries from energy intensive manufacturers in the I8 growth sectors under the British Competitiveness Scheme and data centres in certain AI growth zones will also receive some reduction in policy costs from 2027. The main benefit therefore for offtakers eligible for these schemes would be to make CPPAs more attractive to end users that aren't currently exempt, helping large non-intensive energy users and SMEs.
- Shorter-term PPAs, for example with existing renewable projects are often linked to wholesale prices, with longer-term contracts based more on levelised costs (similar to CfD strike prices). PPA prices have increased in recent years, in line with gas prices and increases to levelised costs for renewable projects driven by supply chain and inflationary costs. Future projections of wholesale prices and typical renewable project costs are uncertain and will depend on a wide range of factors including global drivers such as the price of gas and supply of renewable components. Whilst in recent years

CfD generators have paid back to the LCCC due to high wholesale prices, CfD supplier obligations may rise in the future as the wholesale price falls, making exempt CPPAs increasingly attractive over time. Given these uncertainties, the exemption should be time limited and reviewed at regular intervals to assess market conditions and the relative attractiveness of different routes to market. This assessment should also consider whether the scale of the cost impact on other consumers remains appropriate.

- The exemption could potentially be applied for 'shaped' CPPAs or those that are time matched that reduce balancing and capacity costs, for example by considering exemptions from balancing and Capacity Market (CM) costs.
- Instead of using the existing license exemption scheme, a simpler option may be an exemption process like the existing Supercharger scheme for EIIs as it would be less complex, not involving time-matching, volume limits, and avoid lengthy licence exemption processes.
- The exemption could be targeted at specific areas as part of an industrial strategy as prime for economic growth and electrification due to grid capacity and the presence of low-carbon resources. Interactions with the supercharger, BICS scheme and AI growth zone bill discount scheme would need to be carefully managed.
- Any indirect interactions with the CfD mechanism and the likely impact on other energy users would need to be carefully considered and a more detailed assessment of the balance of risks versus benefits will need to be carried out, before a final decision is made.

Allowing PPAs to be set against Climate Change Agreement targets

- Climate Change Agreements (CCA) are agreements made between industry and the Environment Agency to reduce energy use. In return, operators receive a discount on the Climate Change Levy (CCL), a tax added to business electricity and fuel bills.
- In 2025 the Government announced that the CCA scheme will zero-rate the emissions from electricity that is sourced from on-site renewables. This should be expanded to CPPAs with off-site renewable projects to enable a wider set of businesses to benefit particularly given common space and site restrictions that limit the scale of on-site solutions.
- In the short-term this could help make CPPAs more attractive for new participants as they could avoid some of their CCL payments. In the long-term it could be combined with more granular accounting of the carbon intensity associated with their electricity supply to drive investment in flexibility.

Increase use of CPPAs with end-of-life assets

- Generators approaching the end of their subsidy period face a few options including: decommissioning, life extension (i.e. continue operating as they currently are if they're able to obtain planning permission and extend land leases), partial repowering, full repowering, or retrofitted to be eligible for other subsidies (e.g. biomass systems transitioning to producing gas instead of electricity).
- Without viable long-term offtake arrangements, some operators may opt for decommissioning or curtailment rather than reinvestment. For example, ageing wind and Anaerobic Digestor generators can face increasing operational, insurance and feedstock cost pressures.
- A key role for CPPAs is in providing stability for renewable and other low carbon projects at the end of their Government contracts to ensure they remain on the system providing significant security of supply benefits. This would also offer offtakers a competitive rate of up to £30/MWh or more below new build.
- This could be a significant enabler for life extensions on older Renewable Obligation (RO) plant many of whom will struggle to continue to operate much past their support scheme, and then need to be replaced with more expensive new build.
- However the role of CPPAs with life extension projects is undermined by additionality requirements in some standards as noted above which limit the age of asset. There are also wider barriers due to uncertainty around leasing extension, planning and wider issues.
- Despite being opened up to repowered projects AR7 did not award any contracts for repowered sites. This may be due to a lack of wider end-of-life strategy that will resolve operational and market barriers.
- Government should develop an end-of-life strategy that considers both market design and wider technical and operational challenges.
- Additional challenges in securing CPPAs for life extension projects include higher risk of underperformance due to older equipment therefore new contracts may need to be developed that deal with these risks.
- CPPAs for lifetime extensions are naturally a good complement to new build because of the possibility to offer shorter duration contracts. They could therefore fit well into the range of projects eligible for any government support or intervention without competing heavily with new generation projects.

Barrier 3: Need to strengthen ESG drivers

REGO and green tariff reform

- **Introduce new metrics in fuel mix and tariff reporting** that seek to give consumers more information on source and additionality of their electricity. This could include the age of the assets, whether it has been supported by Government investment schemes and generation type to enable end users to determine whether they are helping to contribute to grid decarbonisation. Metrics on whether it is under Government support would drive demand for CPPAs with new, unsupported generation and end-of-life projects. This change would enable green tariff labelling guidance to be updated and made more consistent and allow customers to make more informed decisions when choosing tariffs/suppliers. There would also need to be rules around how retailers attribute different sources of electricity to different customers, so if they ringfence new or unsupported generation for some customers they then take account of this when reporting on average emissions for other customers (to avoid double counting).

- **Add a time stamp to all REGOs** – this would enable the REGO to identify the half hour of the electricity generated and would be an important enabling accounting step to make both existing voluntary and possible future mandatory accounting of the operational carbon costs associated with electricity use easier such as those proposed under the GHG Protocol reforms. The current regime includes the location of a generator and its age but not the time when the power is generated.

- **Introduce an Energy Attribute Certificate (EAC) scheme for power CCS** Unlike renewable generators, power CCS currently lacks a recognised certificate scheme (equivalent to REGOs) that would allow corporate buyers to claim low carbon electricity. Developing an Energy Attribute Certificate (EAC) scheme for power CCS would give corporate buyers a credible and standardised way to claim the low carbon attributes of electricity generated with carbon capture. International examples, including new CCS-EAC methodologies now in use in the United States, demonstrate growing corporate demand for low carbon, firm electricity and the willingness of buyers to pay meaningful premiums for certificates that credibly evidence low carbon attributes. Introducing a CCS-EAC mechanism would create a level playing field for power CCS with renewables, unlock new procurement options for corporates, and improve liquidity, choice, and competition in the UK CPPA market. By creating a voluntary revenue stream for low carbon attributes, EACs would strengthen the commercial case for new power CCS projects, enabling lower subsidy requirements and higher levels of debt finance. This increased investor confidence and positive impact on power CCS deployment could support the UK's ability to bring forward low carbon capacity to achieve its Clean

Power 2030 target. Any EAC design should consider how potential Scope 2 changes could affect the market value of CCS-backed power, to avoid inadvertently disadvantaging CCS in corporate clean power portfolios.

- **Improve the accuracy of the carbon emissions associated with different tariffs and suppliers by reforming fuel mix disclosures and tariff reporting**. One way of doing this would be a move to annual or monthly "full disclosure" of power. Full disclosure has been adopted in the Netherlands and Austria. All suppliers have to prove the source of their electricity on an hourly or sub-hourly basis whether renewable or not over an agreed accounting period. Full disclosure is however unlikely to be sufficiently granular to meet demand for better time-matching of renewable output and demand nor does it deal with concerns over additionality however (see point 1 above). Government should therefore consider introducing some time matching metrics into fuel mix and tariff reporting to help improve transparency and create a new additional revenue stream, driving investment in flexibility and operational benefits including demand side response (DSR) at all levels. As with additionality metrics, guidance would need to be developed on how retailers attribute different sources of electricity to different customers, so if they ring-fence low carbon time matched generation for some customers, they then take account of this when reporting on average emissions for other customers (to avoid double counting). Introducing time-matching guidelines into fuel mix and tariff labelling guidance would allow for greater consistency and allow customers to make more informed decisions when choosing tariffs/suppliers (as currently different methodologies are being used to define time matched products). Different accounting periods could be used depending on the green product/tariff to ensure consumer costs are managed. Whilst necessary, a change of reporting metrics could erode confidence in existing green offers and hence confidence in the retail market so this will have to be carefully managed. Different approaches to reforms of tariff reporting may be required for different end user groups to balance the level of detail required eg by some corporates with the need for simplicity eg for domestic consumers.

- **Consider additionality power procurement standards for data centres** as being applied in Ireland (see example in question 4). This could be widened to low carbon power to drive investment in SMRs and MMRs and power CCS as well as renewables. Location, flexibility and heat usage requirements could also be considered to help reduce overall energy system costs and costs to consumers. Building on its 2025 report, *Powering the Cloud*, Energy UK is developing a set of minimum and best practise sustainability metrics for data centres. [6]

[6] Energy UK (2025), Powering the cloud

Barrier 4: High transaction cost and complexity

- **Convening, provision of information and technical legal support** Government should consider ways to provide information to businesses about the potential hedging and ESG benefits of entering into CPPAs and consider appointing a third party to provide independent technical and legal advice to enable a wider set of businesses to navigate the process without needing to appoint specialist advisors. This could include advice on business case development, signpost to standard templates, how to manage key risks and provide case studies of similar organisations using CPPAs successfully to manage risks.

- **Government could set out guidance on a 'gold standard' CPPA.** This would set out the range of options and benefits/risk involved. This would help lower barriers and restore trust that entering into a CPPA is worth the cost and effort. The guide could advise both generators and offtakers on the procurement process, what support is available and how to deal with complex issues such as negative pricing.

Q3. Actions to support CPPA market growth and make CPPAs a better option for electricity generators?

The measures set out above would drive demand for CPPAs and help generators enter into agreements with offtakers. In addition there is scope to enable cross-border CPPAs, enable more efficient private wire installations and ensure there is a role for CPPAs in bespoke CfDs for new low carbon generation.

Enabling cross-border CPPAs

Overtime the ability to enter into cross border CPPAs may become necessarily if domestic demand is lower than the supply of low carbon power. Enabling this will require:

- Recognition of REGOs and Guarantees of Origin (GoOs) (given that buyers often require bundled products).
- For physical CPPAs there will need to be adequate capacity on interconnectors through long-term transmission rights (2-5 years) as we move to implicit trading when GB links to the Internal Electricity Market (IEM). Also need to ensure reforms of the Capacity Allocation and Congestion Management (CACM) ensure there is adequate capacity operationally.

- Regulation and oversight through the Agency for the Cooperation of Energy Regulators (ACER) and a process to deal with any disputes.
- Clarification that the linkage of ETS schemes and subsequent exemption from the EU and UK CBAMs will not create any issues for cross border CPPAs due to any differences in approach to emissions factors.
- Clarification that emerging 'made in Europe' procurement policies will not include electricity or limit cross border PPAs to financial only.

Role for CPPAs in bespoke CfDs for new low carbon generation

- Government could explore the potential to link CfDs and CPPAs more directly for bespoke, bilaterally agreed subsidy arrangements with new low carbon generation assets.

Removing barriers to efficient private wire systems

- The Government and Ofgem should review existing licence conditions, codes and guidance regarding private wire network solutions to assess if these remain appropriate.
- Planning reforms should enable BESS to be treated as one planning application and one project, therefore reducing admin and making a smoother application process.

Q4. What best-practice approaches developed in comparable markets could address the challenges in developing and agreeing CPPAs in Great Britain?

We set out a number of interesting international examples below that could be looked into however they would need to be explored further and assessed on their likely merit in a GB context.

New Irish policy driving investment in dispatchable generation and new renewables

- Data centres that service the data and digital sector are a core component of the Irish economy but represent a major and growing source of electricity demand. However, the energy system on the island of Ireland is struggling to integrate them; electricity demand for data centres is currently at 21% of total demand and projected to rise to 30% within 10 years based on currently planned data centres alone. Ireland previously encouraged the co-location of renewable power generation with data centres, but this was technically challenging for many sites. A de facto moratorium was put in place on new data centre connections to the transmission system from 2022.

- Three recent policy updates will shape the landscape for data centres and other large energy users ("LEU's") in Ireland, ranging from near-term Grid Code modifications to longer-term strategic changes of how Ireland's grid accommodates large, new demands.
- EirGrid's Large Demand Facility Fault Ride-Through Proposed Solutions, the Irish Government's LEAP - Large Energy User Action Plan, and the CRU's Large Energy Users Connection Policy will have substantial near- and longer-term impacts on existing and new data centres in Ireland.
- In December 2025 the Commission for Regulation of Utilities (CRU) has published its (CRU/2025236) on Large Energy User (LEU) connection policy, establishing a new framework for how Data Centres connect to the Irish grid. The policy introduces size-based requirements, a mandatory renewable energy obligation, and stronger locational and performance criteria. It aims to balance DC growth with grid stability and decarbonisation goals after several years of uncertainty for developers. [7]
- The decision paper marks an end to the blanket moratorium on additional data centre grid connections in the Dublin region. The requirements are linked to the Maximum Import Capacity (MIC) that the data centre is seeking, measured in megavolt-amperes (MVA).
- Applies to all new DC applications to the Irish electricity network or xisting DCs seeking to increase MIC will be subject to aspects of the new policy.
- Requirements depend on the size of the data centre:
    - Below 1 MVA (De-minimis). Exempt from major technical requirements. Subject to location constraints.
    - 1 MVA to <10 MVA Must provide onsite generation registered as an auto-producer and participate in the wholesale market and meet the renewable energy requirement.
    - ≥10 MVA Must deliver dispatchable onsite or proximate generation and/or storage matching (de-rated) MIC. Assets must be separately connected and metered. Cannot operate at full MIC until associated energy assets are delivered. Renewable energy requirement applies.
- Shared generation/storage models may be acceptable but require SO approval and are subject to locational considerations.
- Renewable Energy Requirement
    - DCs above 1 MVA must source 80% of annual demand from additional renewable electricity generated in Ireland.
    - This renewable power must physically feed into the Irish grid and come from projects that are newly built or fully repowered, not from any generator supported by REFIT, RESS, or ORESS.

[7] CRU (2025), Large Energy Users Connection Policy

    - This renewable capacity is taken into account as part of the dispatchable capacity requirement using derating factors.
    - Compliance achieved through a six-year glide path.
    - Developers must submit a credible plan, such as CPPAs or direct renewable project development.
- Performance & Availability Standards
    - Required energy assets must meet performance/availability standards equivalent to other system units.
    - Failure may result in MIC reduction or non-firm status. Implications for contractual arrangements with energy suppliers.
- Locational Considerations
    - SOs will assess grid constraints when evaluating applications.
    - Constrained areas include: Greater Dublin, Galway, Limerick, Cork, Waterford.
    - SOs must publish updated capacity and constraint information by 31 March 2026.

EU EIB guarantee scheme for PPAs

- The EU is launching a new 500m euro pilot programme to provide counter guarantees for CPPAs.
- In its current iteration, the counter-guarantee is only available for CPPAs covering solar, wind and battery energy storage systems (BESS), with the possibility for other clean technologies to be included on a case-by-case basis. Moreover, the programme only covers greenfield developments: new generation and/or storage capacities that have entered into operation no longer than three years before the signing of the CPPA.
- One proposal is for Member States to run competitive auctions where corporate end-users could bid in €/MWh for support, which would be awarded via CfDs on a pay-as-bid basis. These would be more expensive than single tech PPAs but provide a higher degree of hedging (i.e., reduced exposure to short term markets), and a higher degree of decarbonisation.
- This year the Commission will produce an assessment and guidance on barriers to PPAs and an assessment of the market platforms.

Norwegian industrial guarantee scheme

The Energy Purchase Guarantee Scheme was created in Norway 2011 to make it easier for industrial companies to obtain long-term electricity contracts at a predictable price. The power seller, the power buyer, or the lender can apply for a guarantee. The Export Credit Guarantee Agency (GIEK) scheme is administered by Export Finance Norway, Eksfin.[8]

[8] Eksfin (2024) Power purchase guarantee

This scheme is reserved for industrial companies registered in Norway with activities in:

- Wood processing
- Metal production
- Production of chemical products

Eksfin can provide two different guarantees:

- A guarantee to the power seller, which safeguards against the buyer's failure to fulfil the agreement.
- A guarantee to the banks, which safeguards the repayment of loans that the buyer has taken out for the advance payment of parts of the supply of power.

The guarantees cover a maximum of 80 percent of the outstanding financial obligation to which the guarantee relates: either the remaining payments agreed in the power agreement and/or outstanding loans given in connection with the advance payment for the power.

The scheme has been used for a number of new wind projects:

- PPA contracts between Macquarie's Green Investment Group (GIG) with Eramet Norway, for two new wind farms (Tysvær in Rogaland and Buheii in Agder) to provide power to Eramet Norway's Norwegian smelters[9].

Aluminium producer Alcoa has entered into a number of PPAs including the Kvitfjell and Raudfjell 281MW onshore wind farm (known as 'Project Northern Lights') near the city of Tromsø in northern Norway[10], a new 330 MW wind farm Øyfjellet in Norway to supply its production plant in nearby Mosjøen[11] and the Guleslettene 197.4MW wind farm in west Norway.[12]

[9] Green investment group (2020), Green Investment Group enters into power agreements with Eramet Norway
[10] Lexology (2019), Raudfjell and Kvitfjell wind farms commence operation
[11] Eolus (2018), Eolus signs 330 MW Power Purchase Agreement with Alcoa for wind farm Øyfjellet in Norway
[12] Augusta and co (2018) The sale by Zephyr of the Guleslettene 197.4MW ready-to-build wind