Bird & Bird

Corporate PPAs
An international perspective

2025/2026

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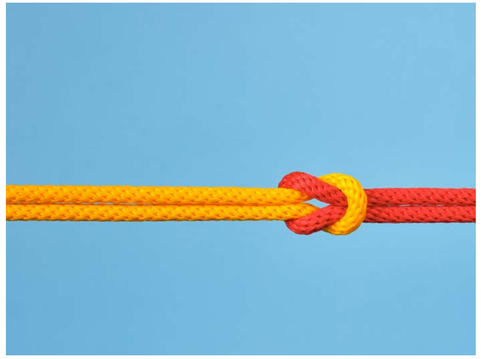


Introduction

Looking back at the Corporate PPAs Landscape in 2024

What happened in the market?

2024 was a particularly strong year for Corporate PPAs with 68 GW of clean power deals being contracted through Corporate PPAs, representing a 29-35% increase on 2023 according to some sources.

The United States leads the charge

The US continued to dominate the global market with a record 28 GW signed across 184 Corporate PPAs in 2024, more than double the number of deals seen in 2023. The surge is largely down to data centres, particularly those tied to AI.

Europe holds steady

The European market also saw sustained activity with 12.6 GW of new capacity contracted under Corporate PPAs. A record 276 long-term PPAs, including 157 first-time PPA contractors enabling 5.2 GW in 2024. Spain lead the European market with 3.1 GW contracted whilst the UK doubled volumes contracted from 2023 to 1.4 GW. Denmark, Greece and the Netherlands also saw notable growth. Germany, however, saw a slight reduction of 0.3 GW in contracted volumes in 2024 as economic uncertainty tempered market appetite.

The technology sector remained the largest player in the Corporate PPA market as clean energy demand from data centres, particularly those tied to AI, bolstered Corporate PPA growth. More than 17 GW of data centre PPAs were contracted in 2024, accounting for 60% of Corporate PPA deals in the US and a quarter of announced capacity globally. Despite this, we saw a decrease in average Corporate PPA size from 58 GW in 2024 (and a high of 72 GW in 2021) to 47 GW in 2024.

Solar continues to dominate, but diversity grows

Solar continues to dominate the technology mix, accounting for over 40 GW, an increase of over a third on 2023. Wind remains steady as the second most popular technology at roughly 15 GW, as it has since 2021. Interestingly, technologies outside of solar and wind, including Battery Energy Storage Systems (BESS) and nuclear, make a notable appearance, surpassing 1 GW for the first time.

What's motivating buyers?

As ever, the drivers behind Corporate PPAs remained largely the same: sustainability and resilience to market events. While corporate offtakers continued to reach towards sustainability goals by procuring clean energy through Corporate PPAs, market volatility stabilised considerably in 2024 compared to preceding years. However, 2024 also saw a record year for negative pricing with risk allocation in such events remaining non-standardised, something which we expect to continue to affect the market in 2025.

Leading the Charge: How we can help your business

Having advised on some of the earliest Corporate PPAs in the Netherlands (2007) and the UK (2009), we have become an experienced advisor on these structures globally. Our longstanding experience navigating the Corporate PPA landscape means that there's not much we haven't seen when it comes to advising on these evolving, and often complex structures. This report looks at the main drivers propelling the growth of Corporate PPAs globally. It addresses several innovative deal structures and provides an overview of market considerations in key jurisdictions across Western and Eastern Europe, the Nordics, Asia-Pacific and the USA.

Understanding the Global Corporate PPA Market

What is a Corporate PPA?

A Corporate PPA allows corporate energy consumers to purchase power directly, and on a long-term basis, from renewable energy generators, even if they are not located nearby. They provide an alternative to the traditional model, where businesses purchase power from utilities that gather energy from multiple generators.

Corporate PPAs are long term agreements (typically between 10-20 years) that provide price certainty for both the corporate and the generator by using fixed or floor pricing structures. We elaborate on this on pages 13–14 of this report.

The global market at a glance

Data centres continue to drive Corporate PPA contracting, with more than 17 GW of deals in 2024, largely driven by demand in the US (60% of corporate deals in the data centre sector). Solar continues to be the most popular renewable technology for Corporate PPAs and accounted for roughly half of deals in 2024.

More than

17 GW

of deals in 2024

Market Overview: EMEA

How is Europe performing?

The European PPA market continues its deal-making appetite but with a more conservative approach. Negative price events and low capture rates tempered demand for higher volume deals. 2024 saw 15.2 GW disclosed contracted volumes, a decrease of around 11% from 2023.

There are some constants though; as was the case in 2023, solar energy remained the dominant technology type in Europe in 2024, with wind close behind.

In H1 2025, that trend continued, as solar became the EU's largest source of electricity for the first time, responsible for 22% of the power mix. Technology, telecommunications and supermarket chains continued to be the largest offtakers of renewable energy in Europe in 2024. Amazon remained the single largest buyer of energy via PPAs on the continent, and Spanish renewable energy company Iberdrola remained its largest seller.

In H1 2025, the European market has lagged slightly behind 2024 so far, with over 6.5 GW being contracted in H1 2025.

Countries experiencing a worsening and rapid increase in negative pricing due to surplus solar generation, such as Germany and France, are seeing the biggest decline in contracting volumes of solar. In the first half of 2025, 228 MW were contracted across eight deals in Germany, a stark contrast from the 1.2 GW across 31 deals in H1 2024. Conversely, countries that have had time to adjust to the lower value of solar production have increased market appetite – solar PPA volumes in Italy grew 184% year-on-year, while the country's largest solar corporate deal of 420 MW was announced in June.

Despite this slow down, we expect activity to pick up in H2, particularly as demand in the technology sector continues. A notable area of growth is BESS technology, with 4.6 GW of BESS capacity being contracted in H1, more than triple the offtake volumes for the entire preceding year, with further deals in the most advanced markets – UK and Germany – and first-time deals in countries including Poland and Greece. Further into 2025, we expect to see increased integration of BESS solutions, particularly under hybrid PPAs which combine generation and storage. Certain types of corporate buyers are exceeding expectations. Supermarket chains contracted a greater volume of energy via PPAs in 2024 than ever before. Tesco was the leading Corporate PPA buyer in Great Britain in 2024 and, for the first time, cracked the list of the top ten corporate offtakers across Europe that same year. This can be attributed to its shift away from the unbundled procurement of Energy Attribute Certificates in favour of procuring renewable energy directly through PPAs. This trend is not unique to Great Britain, with French supermarket chain Carrefour similarly relying heavily on PPAs to meet its target of 100% renewable energy by 2030; as a result of which Carrefour was the fourth largest corporate offtaker in Europe in 2023 by contracted volume.

As has been the case for a couple of years now, the Corporate PPA market in Europe in 2024 was shaped in large part by tech companies and the ever-growing energy needs of data centres. This trend is explored in more detail in our *'Who are the key drivers of growth'* section below.

Meanwhile, The picture is rosier in the Middle East, with countries like Saudi Arabia awarding record breaking numbers of renewables projects as it targets 130GW of renewable energy contracts by 2030. There is less information available about the role for corporates in this transition plan, though one can assume that as the kingdom – and the region more broadly – transitions away from its reliance on fossil fuels, so too will businesses operating in the Middle East.

Market Overview: APAC and US

The US clean energy industry is navigating a complex regulatory landscape In spite of this, the surge in AI and resulting boom in data centre development have kept the Corporate PPA market on an upward trajectory throughout 2024 and early 2025. These energy-intensive facilities are also sparking demand for emerging technologies such as geothermal plants and small modular reactors.

The notable apathy – if not antagonism – towards the clean energy in the US in 2024/25 is not (yet) representative of the financial realities on the ground. The US continues to host the world's most dynamic venture capital ecosystem and deep financial markets capable of driving forward these new technologies, and the US stands poised to become a leader in them as data centres create a domestic market for innovation and investment. In 2024 alone, the US' clean energy sector deployed 67GW and attracted $115 billion in private sector investment.

While the immediate future of the renewable energy sector in the US is less certain, owing in large part to the phase-out of Biden-era subsidies, it is clear that data centre demand will ontinue to drive PPA contracting for years to come. The data centre industry accounted for 60% of Corporate PPA deals in the US in 2024, up from circa 50% in 2023, and it shows no signs of slowing down.

New technologies and the rapid growth of data centres make for an exciting picture of 2024 and H1 2025, but there were some elements of consistency in the American PPA market as well. Synthetic (or financial) PPAs remain the standard structure in the US, and solar PV the dominant technology type.

In Australia, the Corporate PPA market in 2024 was again led by the resource sector. Major players such as Rio Tinto and BHP Mitsubishi Alliance signed substantial PPAs tied to their mining and metallurgical coal production activities. The Australian Corporate PPA market in 2024 remained a 'sellers' market, as was the case in 2023, but with a slight slowdown as some buyers held tight waiting for market conditions to change.

Across Asia, the Corporate PPA market is still maturing but progressing steadily. We reported on this trend in 2023, and it continues to be true for 2024 and seemingly 2025. While challenges remain – such as regulatory complexity, pricing premiums and infrastructure constraints, these are slowly but surely being addressed, paving the way for a resilient Corporate PPA market. Encouragingly, several policy frameworks were introduced in Asia in 2024, which helped stimulate interest and investment in the market. Vietnam launched its direct power purchase agreement (DPPA) scheme; Malaysia rolled out its corporate renewable energy supply scheme; and Thailand also unveiled a DPPA scheme.

Who are the key drivers of growth?

Despite facing some headwinds in 2024, big tech companies continued to lead the Corporate PPA market, defying broader trends and remaining the largest group of corporate offtakers. Amazon topped the Corporate PPA charts for a second year running, contracting over 1,503 MW globally in 2024. While Amazon's PPAs in 2023 were predominantly solar (1,409 MW), it shifted gears in 2024, favouring firmer volumes in Europe through onshore and offshore wind procurement.

This pivot reflects a broader pattern: the growing energy appetite of AI-driven data centres. There's a clear link between big tech's clean energy demand and the rapid expansion of AI infrastructure. Corporate PPAs offer a practical solution – providing certainty around volume, carbon intensity of the electricity and – crucially – price. A greater degree of control over these variables allows data centre operators to reduce the risk of vacancies, set premium rental rates and therefore maximise the value of their underlying assets.

And the energy demand of data centres is not slowing down anytime soon. In fact, the International Energy Agency estimates that it will more than double from 2025 levels to around 945 terawatt-hours by 2030. This growth in electricity demand has largely outpaced the deployment of renewable and other carbon-free energy generation. As a result, companies like Google have reported a significant rise in Scope 2 emissions in their latest environmental reports. This does not mean that big tech has 'given up' on net-zero and renewables investment, but rather that its procurement has not quite caught up to its electricity needs. As big tech's electricity needs continue to grow, so too will its efforts to procure carbon-neutral energy via Corporate PPAs.

Paving the way towards Clean Energy: The RE100 Movement

The RE100 initiative brings together over 440 major companies committed to achieving 100% renewable electricity. With an ever-growing membership, these companies are making significant strides in green energy consumption, accounting for a total of 57 GW of renewable purchases globally. In 2024 alone, new RE100 members committed 56 TWh per year, more than Denmark's total yearly consumption.

However, momentum slowed in early 2025. Only nine new corporates signed up to the RE100, compared to 25 in 2024. This included just one signatory in Europe (ASOS) and none headquartered in the US. It's unclear whether this signals waning enthusiasm for sustainability commitments or simply a shift in pace. One possible factor is the introduction of stricter RE100 requirements for renewable certificates and revised technical criteria.

This included limiting eligible assets to those under 15 years old and certificate use to countries within the EU single market and AIB. In addition, it could be that after a rush of companies signing up, we are now just seeing a drop in growth momentum, even though the number of corporates making such commitments continues to grow.

Opportunities and threats

Corporate Consumer

Opportunities

- Fix/floor/cap power price which safeguard against rising or fluctuating energy prices in the holesale markets.
- Achieving sustainability targets and objectives to buy 100% of power demand from renewable sources. This is fast becoming more important than economic drivers.
- Smaller corporates can join together to share risk and enhance bargaining power via aggregation PPAs which continue to gain ground in Europe.
- Blockchain PPAs will make it easier to aggregate demand with other corporates and enter the market.
- Newer technologies becoming more established (e.g. small-modular nuclear reactors) to enable 24/7 purchase of renewable power.
- Multi-technology PPAs combining different renewable sources offer increased certainty on energy supply profiles, better hedging benefits due to decreased merchant market exposure.
- Growing number of standardised PPA commercial/contractual models which provide more tailored and scalable solutions. This includes corporate consumers increasingly preparing their own template PPAs.

Threats

- Board appetite for the deal – boards are sometimes unwilling to pay more in the short-term for lower prices in the long term. Economic benefits only add up if the board trusts the power price forecasts.
- Slightly lower price volatility than in recent years means that some corporates are adopting a ‘wait-and-see’ approach.
- Complexity/costs in negotiating the contracts. Power purchase is not core business. This will pose a hurdle for small and medium sized enterprises.
- A utility will still be required to provide power when the generating station is not generating (renewable power is intermittent). Allocation of volume and shaping risk is a key issue – it can affect the level of price certainty that is achieved and means the corporate is buying power at a profile/volume that doesn’t match its demand.
- If a project finance lender has financed a project, it may require further security from the corporate: e.g. direct agreement or parent company guarantees.

- Change in law risks affecting the commercial balance of the deal and triggering renegotiation.
- Demand for Corporate PPAs continuing to outpace green energy generation.
- Lack of contractual standardisation.
- Potential for protracted negotiations (with some regional and country surveys noting that, despite negotiation times reducing, it can still take 12-24 months to conclude a PPA deal) particularly in relation to negative price risk allocation (or 'cannibalisation') which is becoming an increasingly live issue.

Generators

Opportunities

- Generators can achieve a stable price over the long-term as the corporate often has more appetite to hedge against rising/fluctuating power prices. This is particularly attractive for projects financed by investment funds and project finance.
- The corporate is sometimes willing to pay higher than wholesale prices in the short term, with the expectation that this will pay off in the long-term when prices rise and the corporate still has the benefit of the fixed price.
- The phasing out of renewable subsidies (especially in the US) means that Corporate PPAs offer a new route to market for generators.
- Innovation in BESS agreements provides asset owners with new ways to maximise returns and manage risks.
- Mixed-technology PPAs allow generators to offer a different risk profile to offtakers as demand for standalone solar profiles reduces.

Threats

- Price – the price the corporate is willing to pay may not be sufficient to bank the project.
- Creditworthiness/bankability of offtaker – a bigger issue for unsubsidised projects as the Corporate PPA will represent almost 100% of total project revenues.
- Power offtake not core business for the corporate: if wholesale power prices decline will the corporate default in order to buy their way out of a bad bargain?
- Inconsistencies between regulatory regimes in different member states making it difficult to achieve scale across jurisdictions with one offtaker.
- The deal will need to be bankable. Might it be more complex to get a Corporate PPA approved by banks/investors?
- Elevated LCOE costs driven by higher financing costs and increased grid connection expenses, creating misalignment between seller pricing expectations and buyer willingness to pay.

Corporate PPA Contract Structures

Private wire

The simplest of the PPA structures; this involves a contract being made between an offtaker and generator who are co-located or located in very close proximity which means that electricity can be transported and delivered without a third-party utility or grid connection.

Such deals are often exclusive and the grid bypass further reduces licencing and grid costs. However, such savings must be weighed against the prices of maintenance and repair which will be heavily negotiated.

Sleeved

Also known as a physical PPA, these further fit into two main subcategories: pay-as-produced and pay-as-nominated (also known as a baseline PPA). A sleeved PPA involves an offtaker signing a PPA with an electricity generator in parallel with a separate agreement with a licenced intermediary who transports the energy from the generation site to the offtaker's site and tops-up if needed.

Pay-as-produced is, as the name suggests, an agreement whereby the offtaker pays for the amount of energy generated and delivered. This aligns to the natural output fluctuations of a renewable generation project while also mitigating underproduction risks. Pay-as-nominated involves paying for a fixed amount of energy regardless of overproduction.

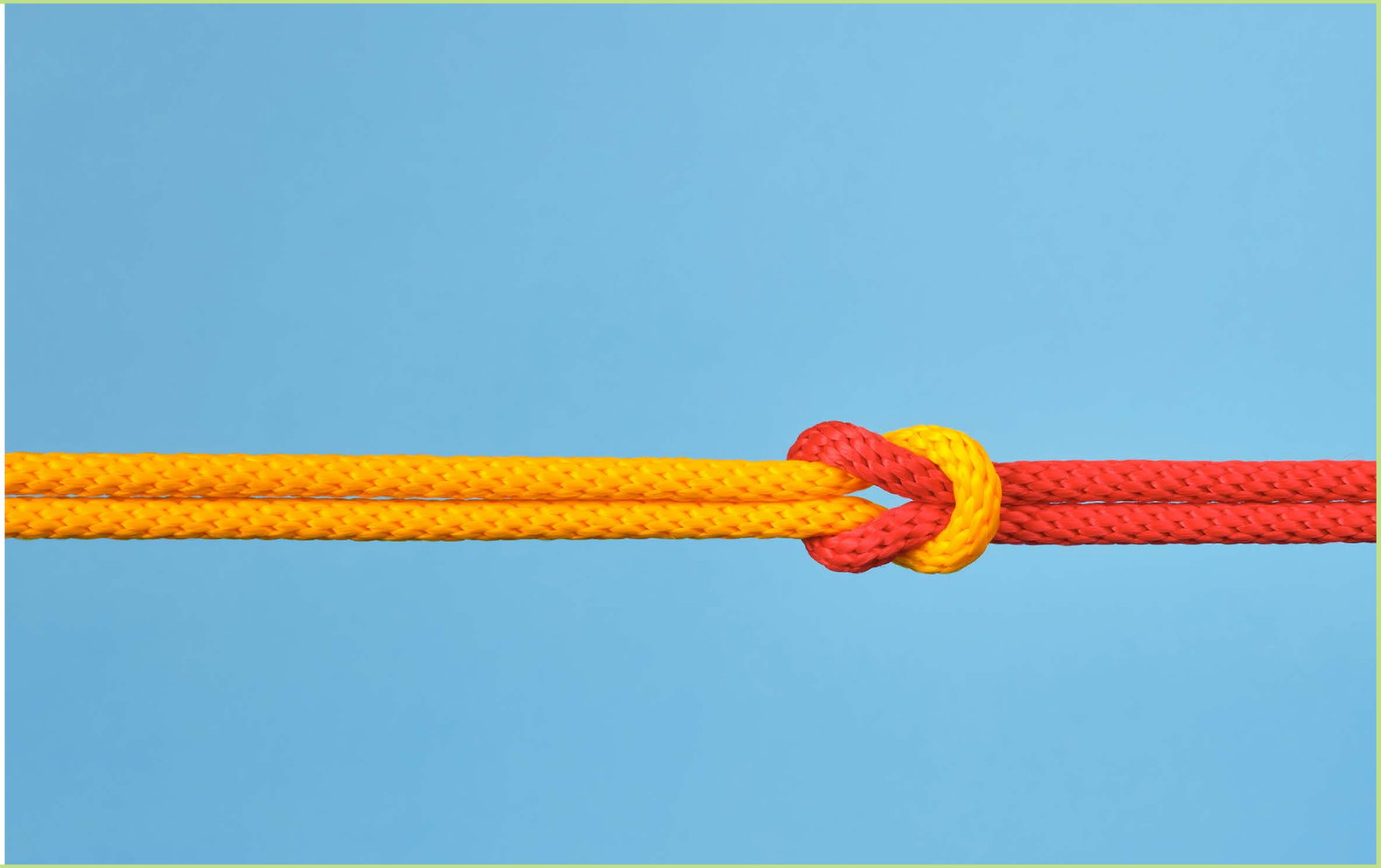
This can lead to higher risks in the case of underproduction for renewable producers but can be amended via 'fixed-shape' structures which account for predictable variation in renewable output (e.g. dropping expected solar output to zero during dark-hours). A potential key benefit of such a structure is to enable the offtaker to receive renewable electricity with greater certainty on price (recognising that for some PPAs the pricing can link to market prices).

Synthetic

Also known as a virtual or financial PPA, this structure does not require the physical delivery of power. Instead, the generator sells power to a utility company in a conventional utility PPA who then supplies electricity to the end-user. However, the end-user may make a separate agreement with the generator for a contract for difference (CfD) (or alternative derivative) under which the parties agree to settle the difference between market price and an agreed 'strike price'. This is often accompanied by the purchase of Energy Attribute Certificates where companies want to offset their emissions.

Such a structure is also utilised for cross-border PPAs. However, the derivative contract could be considered a regulated financial instrument and so further regulatory advice and subsequent authorisations and compliance may be required.

Proxy Generation PPA & Volume Firming Agreements



Price risk

Given the amount of hedging and financial instruments available in the market, Corporates often favour price risk (taking on the risk of a fixed/floor/capped price) because their main reason for entering into a Corporate PPA is price predictability. Additionally, this approach may provide the accounting flexibility a corporate needs to avoid the Corporate PPA being classified as a derivative.

Operational & weather risks

When negotiating a Corporate PPA, negotiations often revolve around an appropriate risk allocation for operational and weather risks.

As corporates may not have the in-depth knowledge of the project specifics (as it is not their core business) or the ability to control the operation of the project, it can be argued that the generator should handle operational risks. The generator is the party that selected the turbines or panels, ancillary equipment and arranged the (terms of the) relevant contracts (including performance, maintenance and curtailment clauses), all determining the actual performance or output of a project. While the traditional PPA is calculated against the actual output of a project (i.e. pay-as-produced), a 'proxy generation PPA' is calculated against the expected output based on the project's specifics and its power curve, shifting operational risk back to the project.

After agreeing the terms of a proxy generation PPA, the parties agree on a number which reflects the expected operational performance of that project. If the project performs better than the agreed number, then any upside benefits the generator; however if the project performs worse than expected, the generator may suffer. A calculation service agreement with an independent calculation agent is required to assess the expected output of a project which could make arranging this structure costly.

Renewable energy projects are also unique in that each produces variable output throughout the day due to weather intermittency. While weather patterns can be predicted to some degree, they cannot be forecast with 100% certainty or far ahead of time. Microsoft was an early mover in developing solutions for the allocation of operational and weather risk, including the 'volume firming agreement'. This agreement is intended to protect corporate buyers against the intermittency and weather-related risks inherent to renewable projects. These agreements transfer the 'shaping' risk – stemming from project intermittency – away from the corporate buyers by offering them a 'baseload' or fixed amount of electricity throughout the day. Generators who take on such weather risk will resort to storage and balancing solutions, or they may seek to offset the risk with insurers who are comfortable managing such challenges. Another example is Octopus Energy's 'Electric Match' product which matches energy consumers renewable electricity demand needs (in half hourly intervals) with generators generating during that same period. It is intended to provide greater real time transparency and accuracy of renewable generation and consumption.

24/7 model

One of the newest models is the 24/7 model developed by Google. Through its 24/7 CarbonFree Energy Compact with Sustainable Energy for All, Google strives to power its global data centres and offices with sustainable energy around the clock. This is a bold statement knowing the challenges posed by the intermittent nature of renewable energy; however, Google is convinced that new renewable technologies have evolved to a point where they can support consistent power, negating the need for grey energy to provide a baseload. Google's strategy to achieve this 24/7 carbon free goal is focused on developing new contract structures, supporting innovative technologies, and developing new smart solutions to manage its energy consumption. Its goal is to align its electricity consumption with clean energy every hour of every day, everywhere.

Blockchain PPAs

Since 2020 we have seen an increased use of blockchain in the energy sector, including in the PPA space. Blockchain can be used to create local energy markets (via virtual power plants) by aggregating and matching generator supply and consumer demand in an automated way. Both generators and energy consumers can enter into a contract with a blockchain platform provider. The blockchain provider will agree to provide a 'matching' service where the renewable energy generation is automatically matched with the consumer's demand (and is therefore not trading on the usual electricity trading market). The contract that corporates enter into with the blockchain provider is simpler than traditional Corporate PPAs made directly with generators, particularly if the corporate was aggregating demand with others under a club Corporate PPA. Blockchain PPAs therefore offer a real opportunity to open up a route to market for a broader range and volume of corporate energy consumers.

Overcoming the challenges of blockchain

This structure is not without its challenges, which we very much hope can be overcome, particularly:

- Even with blockchain, the licensable activities within the electricity market still exist – generation, distribution and supply. While blockchain PPAs match renewable generation and demand, this is only done virtually and there is still a physical regulated supply between generator and consumer. Parties therefore need to be clear which party is responsible for performing each of these regulated functions and paying necessary grid charges to transport the power.
- As both generator and corporate contract with the blockchain provider (rather than with each other) the generator may not know who the corporate is when it enters into the contract, and there may not be any guarantee or security provided by the blockchain provider for the corporate's obligations.
- As the technology is so new, generally we are seeing blockchain PPAs only for a short-term trial basis (so around a year) so at the moment they are not sufficient to 'bank' a project. We expect this to change in the coming year as the technology becomes more established and regulatory hurdles are overcome.

Multi-technology/portfolio PPAs

Multi-technology PPAs, as their name suggests, cover more than one source of renewable technology (e.g. wind, solar, biomass, hydro or geothermal). Having multiple uncorrelated technologies covered by the same PPA offers a hedge against the intermittence and volatility of a single renewable energy project. This allows the buyer of a multi-technology PPA to manage the shape, volume and balancing risks associated with their consumption profile.

Portfolio PPAs, also known as multi-location PPAs, allow for the bundling in the same PPA of the price of renewable energy assets using the same technology but in different locations. The hedging element of portfolio PPAs stems from the different weather and geographic conditions of the projects comprising it.

Both multi-technology and portfolio PPAs have typically been available – on the supply side – only from the largest utilities, developers and generators. This is both a result of the renewable assets required and the legal intricacies and commercials. However, smaller developers are now looking to these types of PPAs to optimise their portfolios and find different routes to market.

Similarly, while these PPA forms tend to stem from pre-existing and already operational assets, increasingly sophisticated modelling paired with historical weather data for certain sites is allowing for new build assets to be bundled up with pre-existing sites.

The preference for a single site PPA over a multi-technology or portfolio PPA will depend on a multitude of case specific factors. One such factor is the corporate's consumption profile as compared to the renewable site's generation output (forecasted or actual).

Multi-technology and portfolio PPAs can offer stability against shape risk (i.e., the generation profile of different renewable technologies), volume risk and balancing risk. However, with this certainty of supply comes contractual complexity. One Corporate PPA covering multiple projects often requires extensive negotiation and can make the already convoluted Corporate PPA contracting process that much more drawn out. These types of PPAs remain most appropriate for large, sophisticated corporates, though a spike in popularity in 2024 and early 2025 may soon mean a streamlined contracting process available to less sophisticated buyers.

Hybrid PPAs aka Battery PPAs

Hybrid PPAs (HPPAs) are a newer type of PPA which co-locate BESS with energy generation projects. These co-location arrangements started in Great Britain, and while they remain largely confined to the GB market, this model has now been deployed in other European countries.

This new 'renewables plus storage' model is rapidly becoming mainstream, though it is being supplanted in part by BESS-only offtake agreements. The 'Hybrid' co-located model was expected to gain ground in Europe in 2024 – and more widely around the world – but there has instead been an increase in standalone storage offtake agreements, whether or not the underlying BESS asset is co-located with a generation asset but managed separately.

BESS capture surplus energy generated by renewables during peak periods and release it during periods of low production, thereby mitigating the intermittent nature of renewable energy. HPPAs offer grid services and asset performance via a structured contract, potentially offering a 'best of both worlds' scenario.

Despite the increase in popularity of both HPPAs and storage-only offtake agreements, there is no single agreed contractual framework in place for either and several contractual set-ups have already been deployed. In the case of HPPAs, these include:

- Blended renewable and storage premium PPA – this is a pay-as-produced volume structure whereby contractual arrangements between the renewable and storage assets are shared. A premium rate for all energy to be delivered is charged and this structure builds in the benefits of profile shaping which accounts for the price premium.
- Renewable PPA and storage capacity agreement / optimisation agreement – this arrangement entails two separate agreements: (i) a traditional generation Corporate PPA; and (ii) a separate agreement for the BESS asset. In this scenario, each asset operates independently in accordance with its respective agreement but shares the financial and logistical benefits of sharing a site. Buyers typically want certainty that the generator will prioritise electricity supplies to the buyer (rather than sending the electricity to the BESS asset where market signals indicate it is beneficial to do so).
- Shaped renewable PPA – the two assets share contractual agreements with the aim of mimicking the demand of a particular off-taker looking for such an arrangement; this is similar to fixed-hourly profile delivery or baseload PPAs. This results in a hybrid shaped pay-as-produced PPA. Pricing under this contractual model is often dynamic depending on when the energy is delivered.

The growth of battery storage offtake agreements saw the creation of Power Storage Agreements, or PSAs. As with the HPPAs, these PSAs have different structures; some parties opted for floor-with-revenue share structures, while others chose tolling agreements. The choice of which model is appropriate is largely related to the capacity market in a given country.

Storage, whether co-located with generation or tandalone, has taken the PPA / PSA market by storm, and is likely to become an increasingly mportant feature of offtake agreements going forward.

International Case Studies

Australia

Australia's energy market is undergoing dramatic transformation, with over 6.6GW of coal and gas generation retiring between 2014-2024, replaced by approximately 18.5GW of large-scale renewables and 18.2GW of rooftop solar. Following supply constraints in 2023, more than 5GW of new capacity entered the National Electricity Market in 2024, with renewables now comprising 60% of generation capacity.

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The Corporate PPA market sustained strong momentum throughout 2024, doubling year-on-year deal volume. However, the market has become increasingly polarised. In 2025, 98% of capacity came from large industrial buyers, while smaller buyers have pulled back, largely due to rising prices and contract complexity.

Queensland dominates activity, driven by mega-deals from resource giants like Rio Tinto and BHP Mitsubishi Alliance (2.5GW in 2024), with resources companies securing approximately 1.8GW of solar offtake arrangements in 2025.

Certificate pricing dynamics are reshaping the market, with declining Large-scale Generation Certificate prices reducing the "LGC uplift" in bundled deals. The Australian Government's Capacity Investment Scheme has issued two new tenders in 2025 to underwrite new renewable projects thereby lowering merchant risk and broadening the Corporate PPA pipeline.

Looking ahead, the transition from LGCs to Renewable Energy Guarantee of Origin certificates in 2027 presents significant challenges for Corporate PPAs. The Australian market is adapting towards hybrid renewable projects combining solar, wind and battery storage, alongside emerging Long-term Energy Service Agreements that offer broader integrated energy solutions beyond traditional PPAs.

Historical Overview

The shift in technology base of the Australian electricity market has created some (perhaps) unexpected consequences. Between 2014 and 2024, more than 6.6GW of (baseline) coal-fired and gas-powered generation exited the Australian energy market, replaced by approximately 18.5GW of (intermittent) large-scale wind and solar capacity, and 18.2GW of rooftop solar came online. This shift has fundamentally changed the nature of Australia's energy mix.

In 2023, the market faced notable supply-side constraints, including grid connection bottlenecks, project pipeline limitations, and regulatory delays. These challenges contributed to a seller's market in 2024. However, as a surge of renewable projects reached financial close over 2024, the Australian Energy Regulator (AER) estimates more than 5GW of new capacity (spanning solar, wind, battery and gas) entered the National Electricity Market (NEM).

The AER notes by the end of 2024 renewable technologies including solar farms, wind, hydro, and batteries comprised 60% of the NEM's generation capacity and 39% of generation output. The distinction between nameplate and relevant capacity factor being further obscured by these figures.

In 2025 the Australian energy market continues to evolve, driven by, decentralisation of energy services, new technologies, and an emerging trend in hybrid generation/BESS projects.

The evolving system in Australia highlights a complex relationship between weather conditions, shifting energy demands, diverse generation types which impacts the stability of wholesale market pricing and lastly the shear physical size and distances involved with the Australian East Coast network – often referred to as one of the World's biggest machines.

Market Performance in 2025

The Corporate PPA market sustained strong momentum over 2024, doubling total deal volume year-on-year. Rio Tinto led the charge, accounting for over two-thirds of the total contracted volume through two major agreements. Utilities, large retailers, and government entities also contributed to growth by increasing their renewable commitments. Notably, only two mid-sized deals (20-100 MW) closed in 2024 signalling a clear shift to a market dominated by large industrial buyers.

Deal sizes remain polarised in 2025, with over 90% of capacity coming from large industrial Corporate PPAs. Smaller buyers have become less active, possibly influenced by rising prices, increased contract complexity and an increased interest in government-backed schemes like the Capacity Investment Scheme (CIS).

More significantly, environmental certificates and government policy shifts are reshaping pricing dynamics. Pricing of large-scale generation certificates (LGCs) eased from 2023 highs in Q2/2024 and have trended downwards since. The impact reduces the "LGC uplift" in bundled deals, prompting some corporate buyers to favour shorter tenors or staged volume.

At the same time, the CIS is playing a pivotal role in underwriting new variable renewable energy and storage. This lowers merchant risk for projects and broadens the project pipeline that Corporate PPAs can contract against – but that energy still needs to overcome grid connection challenges highlighting the tri dependency between generation, storage and transmission.

Regional Dynamics

Demand for Corporate PPAs remains strong in Australia. However, the market faces risks from:

- **Policy uncertainty,** especially in Queensland following the change in state government in 2024.
- **Grid infrastructure challenges**, notably in New South Wales and Victoria, where wind and solar assets are built in windy or sunny parts of the country – but further from consumption centres – and network capacity tends to be limited or unavailable.

Queensland has led the Corporate PPA market since 2022, largely driven by mega-deals from Rio Tinto and the BHP Mitsubishi Alliance (2.5GW in 2024). Publicly owned electricity retailers, like CleanCo, have played a vital role in this dominance by signing PPAs and on-selling through retail agreements. The strong industrial demand in aluminium and mining continues in 2025, with Rio Tinto signing two hybrid services agreements with Edify Energy for 600MW of solar and 600MW solar/2400MWh of BESS.

New South Wales has seen slower growth over recent years despite the interest in the Central West Orana Renewable Energy Zone (REZ) and the nearby Hunter region. Industry insight shows grid connection and transmission bottlenecks is slowing growth. As a result, there is a trend in corporate buyers seeking offtake through aggregated PPAs.

Similarly, Victoria's activity in Corporate PPAs has plateaued due to grid constraints and policy uncertainty. While corporate offtakers in Victoria remain active and continue to engage in Corporate PPAs, most deals are structured as virtual PPAs and sleeved PPAs.

Western Australia (WA) and the Northern Territory operate outside the NEM and so PPA dynamics differ. In WA, mining companies have driven growth, but retail PPAs are more common due to limited grid interconnection and smaller project sizes. In July 2025, the WA government announced investment to expanding the South-West Interconnected System north of Perth. The construction of new HV transmission lines, terminals, and substations towards large mining sites will result in increased corporate PPAs from industry and mining in WA.

Tasmania and the ACT have minimal Corporate PPA activity due to already high renewable penetration and limited industrial demand.

Corporate PPAs and Sectoral Participation

Since 2017, Corporate PPAs have underpinned around 20% of renewable energy capacity in Australia. Looking ahead, the Australian Energy Market Operator (AEMO) forecasts a significant rise in corporate consumption, from today's 145TWh to approximately 345TWh in 2050, as the economy moves toward deeper electrification of industry and transport.

The resources and heavy industry sectors continue to dominate Corporate PPA activity. In 2025, companies like Rio Tinto, BOC, and Newcastle Coal Infrastructure Group secured the majority of renewable energy PPAs (approximately 1.8GW of solar offtake arrangements).

However, the technology & communications sector is increasing offtake agreements under Corporate PPAs, driven by the rapid expansion of data centre infrastructure. Amazon signed multiple PPAs across 2024 and 2025, totalling 310 MW alongside a $20 billion investment in data centre expansion. This trend reflects Australia's growing appeal as a global hub for digital infrastructure.

Additionally, companies like Telstra and Equinix entering multiple PPAs to meet their renewable energy (read data carriage) targets.

Policy Frameworks

The Australian Government's CIS continues to play a pivotal role in facilitating renewable energy projects.

On 2 September 2025, the Australian government opened two major CIS tenders (Tender 5 and Tender 6) to renewable energy and storage capacity in the Wholesale Electricity Market (WEM) in Western Australia. These tenders not only form part of a broader 'net-zero' strategy but also address challenges posed by an ageing coal-fired power fleet on the west coast.

Tender 5 process is to secure 1.6GW of renewable energy generation capacity to connect into the SWIS. Tender 6 is to secure 2.4 GWh of dispatchable capacity, including BESS with a minimum duration of 2 hours. Tender 6 emphasises the importance of clean dispatchable capacity to ensure grid stability and reliability as the energy mix transitions to renewables.

The New South Wales government established the Long-Term Energy Services Agreement (LTESA) scheme to complement or substitute traditional PPAs. Successful applicants of the NSW government scheme will gain access rights for transmission networks in REZs bypassing oversubscribed grid connection.

While PPAs are focused on locking in a price for electricity from a specific generation project, LTESAs are broader contracts for a long-term, integrated energy service solution combining supply, operational management, support, risk mitigation and flexibility in pricing.

Looking Ahead in Australia

LGCs and REGOs: A New Era of Certification

In 2027, LGCs will be replaced by Renewable Energy Guarantee of Origin **(REGOs)** certificates. This will create a valuation challenge that may affect Corporate PPAs and pricing due to:

- Tracing complexity: LGCs are a “1 MWh = 1 certificate” commodity, whereas REGOs will vary based on when, where, and how the electricity was generated.
- Comparability: Corporate buyers accustomed to buying LGCs for annualised offset will need to adapt to a regime where not all REGOs are equal. Some will be more valuable if aligned with demand or emissions reduction claims.
- Market pricing: Until secondary markets mature, liquidity and transparency around REGO pricing will be difficult to benchmark.

These changes are expected to impact Corporate PPAs in several ways:

- Contract design and settlement: LGCs will not be interchangeable and valued per MWh.
- Valuation and risk allocation: Project certificate revenue under REGO’s will likely be – in the short term at least – more volatile.
- Corporate claims and strategy: Corporate offtakers may face challenges claiming “100% renewable energy” by retiring LGCs to equal annual consumption. Instead, REGOs will need hourly and locational matching which may change structure of Corporate PPAs around assets that deliver higher value REGOs.

Hybrid Generation and BESS

In parallel, there is a growing trend toward hybrid renewable energy projects that combine solar, wind, and BESS. These projects offer different performance characteristics that appear to better align with market opportunities and risks.

Croatia

In the Croatian market, Corporate PPAs have recently started to emerge, with several agreements now concluded.

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While many projects remain in the development phase, the market is progressing steadily, with increasing attention on solutions that safeguard against electricity price fluctuations. The Croatian PPA market is now positioning itself as one of the pioneering markets in Southeast Europe, with further growth expected over the coming years.

Regulatory Landscape: Croatia's Evolving Framework for Corporate PPAs

Croatia began laying the groundwork for Corporate PPAs in 2021 by transposing the EU's "Winter Package" through the adoption of the Electricity Market Act and the Renewable Energy Sources (RES) Act. As part of this, Corporate PPAs were recognised as one form of off-taking electricity from RES electricity producers. However, the legislation stops short of explicitly regulating Corporate PPAs, offering only a broad definition: a "renewable energy purchase agreement" is one in which a natural or legal person agrees to purchase electricity directly from RES – excluding cases where the producer has a feed-in tariff agreement with the Croatian Energy Market Operator (HROTE).

This provides flexibility. Parties are free to structure Corporate PPAs under Croatia's broader obligations law, allowing for flexibility that suit evolving market needs.

Virtual vs direct PPAs

Under the current regime, a virtual PPA can be implemented without additional energy regulatory requirements since it does not involve the direct sale of electricity to the end consumer. Instead, it functions as a CfD, and therefore, a supply licence is not required.

However, a direct Corporate PPA would need to fulfil additional formalities. This is due to the current legislation, which regulates market relationships between various market stakeholders (i.e. producers, suppliers, consumers). All stakeholders involved must have their respective licences and can only engage with predefined counterparties on the market. Producers may therefore sell their electricity to suppliers or traders, and not directly to end consumers, and vice-versa. Therefore, to execute a direct Corporate PPA, either the producer or the corporation as the end consumer would need to obtain a supplier's licence to fulfil the statutory preconditions. This would also invoke other formalities such as additional reporting obligations, divided accounting, etc.

In 2025, there were several Corporate PPAs executed in Croatia, with notable examples being the agreements between INA and E.ON and Bauwerk Group and E.ON, as well as the on-site PPA between Petrol and Metro and the Corporate PPA between Axpo and Kilmaoprema.

Virtual PPAs have been on the rise since 2023 as a more convenient option for market participants, as they are financial contracts for difference (i.e., hedging arrangements with respect to the price of electricity) meaning that they do not require any specific regulatory approvals or licenses.

By 2025, Croatia has largely moved away from the model based on feed-in tariff agreements with HROTE, which provided a predetermined fixed price for electricity until the expiry of the agreement, and is phasing it out in favour of competitive auctions and market-based premiums. In addition, RES electricity production facilities are now entering into offtake agreements with electricity suppliers or commercial PPAs. This was the case with wpd and its Croatian subsidiary wpd Adria, which concluded a commercial PPA with Danske Commodities A/S in 2021, in their respective roles as registered producer and trader in Croatia.

Looking ahead: regulatory developments

The Croatian market is increasingly recognising the benefits of Corporate PPAs. These agreements provide energy producers with a degree of revenue stability, while buyers gain predictability and the potential for savings, free from the concern of rising prices.

By including the Corporate PPAs in the legislative framework and considering the overall interest of producers and (end) consumers on the RES market, all market participants (including the financing banks) are expecting that the legislation appropriately deals with this matter. The upcoming amendments to the Electricity Market Act, announced for the end of 2025 and intended to implement the relevant provisions of the RED III Directive on market mechanisms, provide precisely such an opportunity. This would enable Corporate PPAs to become a standard and preferred model of electricity market participation.

Lengthy approval processes are slowing down RES projects and increasing costs, making it essential to upgrade infrastructure to support the energy transition and industry decarbonisation.

A stable, investment-friendly environment, alongside a general understanding of Corporate PPAs and their mechanisms (including from the perspective of future financing parties) is crucial for the growth of PPAs.

In Croatia, experience with Corporate PPAs is still developing, although the market is steadily advancing and overcoming initial uncertainties. As international PPA standards (including EFET) continue to be adapted to local legislation, Croatian law governed PPAs are expected to become more prominent among stakeholders. To further facilitate the adoption of PPAs, it is important to create a more supportive environment for RES investments.

Czech Republic

As subsidy policies become increasingly stringent, Corporate PPAs present a compelling opportunity both for new and existing generators.

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The subsidy scheme in the Czech Republic for electricity generators from renewable energy sources is built on two main types of subsidies:

(1) the one-off investment subsidy and

(2) the operating subsidy.

Both of these allow for the continued slow and steady growth of the Corporate PPA market in the Czech Republic.

Operating subsidies

Operating subsidies are available in three distinct forms: of green bonuses, auction bonuses, and feed-in tariffs. Importantly, these mechanisms are mutually exclusive, and generators must choose one.

The green bonus operates as a surcharge on the market price of electricity. It represents a fixed value equal to the difference between the feed-in tariff and the actual market price. While the market price is paid by the generator's chosen electricity trader with whom the generator has concluded a power purchase agreement, the green bonus is paid separately by the market operator (OTE). The green bonus can be paid in two ways:

- Quarter-hourly intervals (as of 1 August 2025)
- Annual mode (typically used by smaller producers).

The feed-in tariff offers a fixed purchase price set by the Energy Regulatory Office (ERO). This price is paid for each MWh of renewable electricity delivered to the grid. State-designated mandatory purchasing traders are required to buy all electricity produced under this scheme at the regulated price. Electricity generating plants put into operation after 1 January 2022 are covered by operating aid in the form of green bonuses if their installed capacity does not exceed 1 MW. Generating plants with a higher capacity may receive support through the auction system.

The Auction System: Pros and Cons

Auctions have emerged as a key market-oriented mechanism for supporting renewable energy generation in the Czech Republic. This competitive approach offers several advantages:

- Cost efficiency: Auctions help prevent overcompensation by allowing market forces to determine subsidy levels.
- Control and transparency: Authorities can set upper limits on capacity and define the total available subsidy, ensuring better budget management and policy alignment.

However, auctions also introduce certain risks and costs for bidders, this in turn may lead to a lower level of participation in auctions and subsequently may result in more expensive offers.

Despite these challenges, interest in auctions is growing. To date, the Ministry of Industry and Trade has called for the first auction for 2025 to support renewable energy sources, and public engagement in using this kind of support continues to rise.

The role of the Government and the ERO in Supporting Renewable Energy

The Government of the Czech Republic plays a central role in shaping the renewable energy landscape.

Each year, it issues regulations that define:

- The types of supported technologies
- The capacity ranges eligible for operating support.

Based on these decisions, the Ministry of Industry and Trade (MIT) launches auctions for operating support. These calls outline the specific terms of the auctions, such as deadlines, competing capacities and requirements for generating plants.

The ERO then issues a pricing decision setting the specific amount of operating support – for example, green bonuses or auction bonuses.

However, the ERO can only set the amount of support if the government activates the form of support. This procedure ensures coordination between the legislative framework and regulatory oversight of the energy market.

Legal regulation of PPAs in the Czech Republic

As of 2025 there is no explicit regulation implementing the rules on the PPAs stipulated in the Directive No. 2018/2001, or on the promotion of the use of energy from renewable sources.

However, the lack of regulation, does not prevent market participants from entering into Corporate PPAs in the regime of the Civil Code. In this respect, the provisions on the substantive content of the contract for electricity supply will apply similarly.

Corporate PPAs in Action: Examples from the Czech Republic

The Czech Republic's Corporate PPA market has gained momentum in recent years, with a growing number of companies turning to long-term renewable energy contracts to secure price stability and meet sustainability goals.

The first Corporate PPA was signed in July 2021 in the automotive sector. Energy supplier Ambient Energy entered into a 20-year agreement with ŠKO-ENERGO, supplying energy to ŠKODA AUTO. The deal covers electricity from four wind power plants, totalling 26,280 MWh per year. The construction of the power plant for the purpose of the PPA is led by the Micronix Group, the operator of a wind park that has been expanded due to the construction.

Valued at over CZK 1 billion, the contract is for 20 years and offers long-term cost certainty and protection against market volatility.

Since then, several PPAs have followed:

- A 20-year rooftop solar PPA between Atlantis Management and Jarošov brewery, with an output of 35 kWp.
- A 15-year agreement between Woodburn Capital Partners and Magna Exteriors s.r.o, operating a 2.4 MW photovoltaic power plant.
- Cross-border PPAs signed by T-Mobile Czech Republic, Slovak Telekom, and CE Colo Czech Republic with Rezolv Energy, sourcing electricity from a wind park in eastern Romania.
- The first solar PPA between Enery and Benteler, involving a 37 MW peak photovoltaic power plant with electricity for ten years under pre-agreed conditions.

One of the most notable recent developments is the first off-site PPA signed by ČEZ ESCO for electricity supply to Třinecké železárny, the Czech Republic's largest steel producer. This three-year agreement secures 4.4 GWh annually of emission-free electricity from the Vrskmaň photovoltaic power plant, operated by the ČEZ Group. The deal supports the steelworks' strategy to reduce energy consumption and transition to cleaner sources. For ČEZ ESCO, this marks its first major off-site PPA from photovoltaics, where the renewable source is not located on the customer's premises but is directly linked to the electricity supply.

These examples reflect a growing appetite for Corporate PPAs across sectors, from automotive and manufacturing to telecoms and food and beverage, highlighting the Czech market's shift toward more sustainable and resilient energy procurement.

The Current PPA Landscape in the Czech Republic

PPAs remain relatively uncommon in the Czech Republic, especially when compared to more mature markets. Broader adoption is currently constrained by slow permitting processes for renewable energy projects – among the slowest in Europe. However, this is expected to improve following the adoption of Act No. 249/2025 Coll., which came into force on 1 August and aims to accelerate the use of certain renewable energy sources.

Beyond regulatory hurdles, there's also a perception barrier. Many entrepreneurs remain cautious, citing uncertainty around the local market's ability to support viable PPA projects. This has led to some corporates to look beyond national borders. A notable example is T-Mobile's cross-border virtual PPA with supplier Rezolv, sourcing green electricity from a wind farm in Romania. T-Mobile cited greater efficiency and simplicity as key reasons for choosing a foreign supplier.

Despite these challenges, momentum is building. Government support measures, such as the regulation outlining operational support conditions for RES for 2025-2027, and the specification of eligibility for hourly green bonuses and auction bonuses, are helping to create a more favourable environment for PPAs.

Companies that adopt PPA contracts also benefit from improved access to financing. Long-term agreements provide revenue certainty, reducing risk for banks and investors and making renewable energy projects more bankable.

While the Czech PPA market is still in its infancy, the foundations are being laid for more widespread adoption in the years ahead.

Denmark

Interest around Corporate PPAs in Denmark continues to grow with the number of PPAs increasing significantly in recent years.

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Denmark's Growing PPA Scene

Corporate PPAs are well-established in Denmark, supported by the country's open economy and the international outlook of Danish businesses.

Many PPAs signed by Danish companies relate to activities outside Denmark, often involving Danish developers or sponsors in foreign markets. As a result, some of the largest and most publicly visible PPAs are cross-border agreements. However, domestic activity is also on the rise, with foreign data centre operators and local Danish offtakers increasingly entering Corporate PPAs to secure green electricity.

Rapid growth of PPAs in 2024-2025

Data from 2024 and 2025 shows a clear acceleration in Denmark's Corporate PPA market. Both individual and joint ventures are committing to long-term renewable energy agreements, reflecting growing confidence and ambition.

- In September 2024, STARK Group signed a 10-year PPA with Energi Danmark, supporting the development of a 122-hectare solar park in Djursland expected to generate around 132 GWh of green electricity each year.
- That same month, 25 Danish companies entered Denmark's first multi-buyer PPA, a five-year agreement supplying approximately 14 GWh per year from another solar park in Djursland.

Looking into 2025:

- European Energy finalised long-term PPAs with Microsoft, delivering 3.6 TWh of renewable power from new Danish and Swedish wind and solar projects.
- Danske Commodities signed a PPA with German energy company e.optimum, providing 180 GWh of wind-generated electricity between 2025 and 2026.

These developments highlight the diversification of PPA structures in Denmark, from single corporate agreements to collective buyer models. All are contributing to the rapid build-out of renewable capacity and reinforcing Denmark's position as a leader in corporate clean energy procurement.

Obstacles to Corporate PPAs in Denmark

While interest in Corporate PPAs continues to grow in Denmark, several structural and regulatory challenges are adding complexity to heir adoption.

One key issue is regulatory uncertainty. The Danish Financial Supervisory Authority (FSA) is yet to issue guidance on when or how a Corporate PPA might be subject to financial regulation. This lack of clarity makes it difficult to assess risk and structure financing for PPA projects.

In January 2025, the Danish Tax Authority issued a binding ruling stating that PPA's with a fixed price are to be treated as financial contracts for tax purposes. This means they are subject to in mark-to-market taxation, requiring companies to recognise unrealised gains and losses on their contracts annually, even before physical delivery of the electricity. The binding ruling has faced criticism for not being accurate and the actual tax treatment depends on the specific facts and circumstances, e.g. whether any exemptions for mark-to-market taxation apply.

These legal and tax uncertainties are slowing down broader adoption, especially among smaller corporates and financial backers who require predictable frameworks for long-term investment.

Denmark's 2050 Vision: The Road to Green Energy

Denmark remains firmly committed to its longer-term goal of achieving 100% independence from fossil fuels by 2050, as outlined in its Danish 2050 Energy Strategy. This vision includes a complete transition to renewable energy across electricity, heating and transport sectors.

Despite this ambitious target, Denmark has not yet established a stable, long-term legislative framework specifically regulating Corporate PPAs. The absence of clear rules has created uncertainty for market participants, even as demand for PPAs continues to rise.

Still, there is a strong political consensus in Denmark that renewable energy will continue to expand. With PPAs playing a growing role in the energy transition, it is expected that legislators will place greater focus on PPA regulation in the coming years to support Denmark's climate goals.

Renewables in Denmark: Expanding Beyond Wind

Wind energy has long been the backbone of Denmark's renewable electricity generation. As of 2024, wind accounts for approximately 86% of total gross electricity consumption, underscoring its dominant role in the country's energy mix. However, the landscape is evolving, with solar energy projects gaining momentum and diversifying Denmark's renewable energy portfolio.

This shift is reflected in the growing number of Corporate PPAs being signed by Danish companies, both domestically and internationally. For example:

- European Energy entered into several new agreements in 2024, including a PPA with DSB for the construction of a new solar park.
- European Energy also signed a major agreement with Microsoft, highlighting the increasing appetite from global tech firms to invest in Denmark's green energy transition.

Solar energy is now seen as one of the most suitable technologies for PPAs, offering strong economic and environmental benefits. Hybrid PPAs, combining wind and solar, are also emerging, such as the agreement between Eurowind Energy and Greenlab in Skive.

These developments signal a steady broadening of Denmark's renewable energy market in both scale and diversity.

At the same time, the Danish government is actively working to resolve legal and financial challenges that have previously hindered PPA growth. These efforts are aligned with broader EU and national strategies to accelerate the green transition.

This political pressure is also driving corporate engagement. PPAs are increasingly viewed as a strategic tool for companies to meet their ESG commitments, enhance sustainability credentials and gain a competitive market advantage. As such, Corporate PPAs are becoming central to Denmark's energy and climate strategy.

Finland

Corporate PPAs are gaining momentum in Finland, driven by increasing price volatility and the emergence of new energy applications. PPAs offer both producers and buyers both stability and predictability, making them an attractive tool for managing energy costs while supporting the development of renewable energy projects.

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PPAs are now being applied across a wide range of renewable technologies, including:

- Wind farm projects: Selling electricity generated by wind turbines to corporate buyers.
- Solar farm projects: Facilitating long-term offtake from solar installations.
- Hydropower: Supporting clean energy procurement from hydropower plants.
- Biomass power plants: Enabling electricity sales from biomass-based generation.
- Green hydrogen and hydrogen derivatives: PPAs are often essential for demonstrating that the hydrogen or hydrogen derivative has been produced with electricity from renewable sources.

Beyond these, PPAs are also being explored in geothermal and wave energy projects, reflecting Finland's growing interest in diversifying its renewable energy mix.

Corporate PPAs: The Finnish Electricity Market

Corporate PPAs are increasingly being adopted in Finland, particularly by large technology and industrial companies seeing long-term price stability and renewable energy sourcing.

Encouragingly, medium-sized electricity consumers are also showing interest. The PPA market is expected to continue growing.

For solar power, PPAs are already being used for smaller-scale projects compared to wind. Meanwhile, offshore wind is emerging as a major opportunity, with several large projects under development. Although offshore wind still faces feasibility and regulatory challenges, its potential to accelerate new energy production is significant.

PPAs are widely recognised as a critical tool for Finland's green energy transition, helping companies manage energy price volatility, meet sustainability targets, and support the build-out of new renewable capacity. As the market matures and regulatory clarity improves, Corporate PPAs are expected to play an even greater role in shaping Finland's energy future.

Recent Market Developments: Data Centres Driving Nordic Energy Demand

Finland's electricity system, as part of the Nord Pool wholesale electricity market, is interconnected with Sweden, Norway and Estonia.

One of the most recent significant developments across the Nordics is the surge in demand for green electricity, largely driven by the rapid expansion of data centre projects.

Data centres require a stable and continuous supply of renewable energy, making Corporate PPAs a natural fit for securing long-term electricity contracts. The Nordic region is particularly attractive for data centre development due to its cool climate, low electricity prices, and robust energy infrastructure. Many of these facilities are also being designed to integrate with district heating systems in Finnish cities, contributing to household heating and improving overall energy efficiency.

Data centres are located in the lower electricity tax class, and the data centre driven demand for electricity increases the electricity wholesale prices in the Finnish market.

According to Fingrid Oyj, Finland's transmission system operator, there is approximately 1,000 MW of data centre capacity in Finland either operational, under construction, or nearing development as of 2025. This accounts for 5-8% of Finland's total electricity consumption. Additionally, there are 2,000 – 3,000 MW of further capacity in the planning pipeline, indicating that data centres will continue to be a major force shaping Finland's energy landscape.

Recent Statistics: Finland's Renewable Energy Growth

Finland's renewable energy sector continues to expand, with wind power leading the charge. According to statistics from Renewables Finland (RF):

- Wind power production increased by 20% from 2023 to 2024.
- In 2024, wind accounted for 25% of Finland's electricity production and 24% of total electricity consumption, generating 19,854 TWh.
- Finland's total electricity consumption in 2024 was approximately 83 TWh.

While solar power still represents a small share of Finland's renewable energy mix, interest is growing rapidly. As of the end of Q2 2025, Finland had 251 MW of installed solar capacity, with an additional 300 MW expected to be commissioned by the end of the year.

This surge in solar development reflects a broader trend toward diversification in Finland's renewable energy portfolio. With multiple projects in various stages of development, solar is poised to play a more prominent role in the country's energy transition.

2024 Overview: Wind Power in Finland

Wind power continued to play a central role in Finland's renewable energy production throughout 2024. According to RF, the sector saw substantial growth:

- 235 new wind turbines were commissioned, adding 1,414 MW of capacity.
- By the end of 2024, Finland had 1,835 wind turbine generators (WTGs) in operation, with a total installed wind capacity of 8,358 MW.

Looking ahead, projections suggest that by 2026, wind power could cover over one-third of Finland's electricity consumption, equating to at least 28 TWh of annual production.

Wind power has also been proven to be a strong magnet for investment. Projects completed in 2024 attracted more than €1.8 billion, reinforcing Finland's reputation as a stable and attractive market for renewable infrastructure.

While the pace of new wind developments has slowed since the record year of 2022 (when 437 new turbines added 2,430 MW), this is largely due to rising construction costs and a dip in electricity demand. However, the growing momentum behind data centre and green hydrogen projects offer a positive outlook for the future wind energy deployment.

Finnish key regulations and requirements

In Finland, no license or permit is required for wind power itself. However, several regulatory requirements must be met, including:

- A Building Permit is mandatory for the construction of new wind power plants and industrial-scale solar plants. These are issued by Municipal Building Control Services.
- Wind power plants over 50 metres in height require a permit from the Finnish Defence Forces.
- The Finnish Energy Authority must be notified if a power plant is expected to exceed 1 MVA in capacity.

While environmental permits are not typically required for wind power plants, an Environmental Impact Assessment (EIA) is mandatory for both wind and solar plants. Offshore wind developments may also require permits under the Water Act.

Wind power plants are usually required to be built in a detailed planned area for wind power or an area with a general plan. As of 2025, solar power plants can still be developed under a planning requirement decision, sometimes paired with a derogation permit, offering a lighter administrative process.

Navigating the Finnish Electricity Market Act

Under the Finnish Electricity Market Act (588/2013), grid access in Finland is governed by the principle of open and non-discriminatory network access. Network operators are obligated to connect any generation facilities that meet the technical requirements outlined and pay the relevant grid fees.

Role of the Finnish TSO

Fingrid has a responsibility to develop the Finnish electricity power system and an obligation to connect regional and distribution networks, as well as power plants, to its main grid. On request and against reasonable compensation, the system operator is obliged to provide access to the main grid for electricity consumption sites and power generating installations with technically approved connection solution.

Becoming an electricity supplier

To become an electricity supplier in Finland, a generator must acquire a party code and enter into an agreement with a company to act as a balancing party. Alternatively, a generator could perform the balancing function itself or enter into agreement with another electricity retailer who has an agreement with a balancing party, (known as the “chain of open delivery”).

The Finnish regulator permits direct, sleeved, and financial PPAs, which can be executed directly between producers and buyers or facilitated by third-party intermediaries.

Hydrogen and Hydrogen Derivatives: A New Frontier

Hydrogen is poised to reshape Finland’s energy landscape, alongside the data centre economy.

Together with the data centre economy, hydrogen and hydrogen derivatives are likely to impact the Finnish PPA market in the upcoming years. As illustrated by many actors, the key barrier to scaling up the hydrogen market in Finland is still the causality dilemma between supply, demand, and infrastructure. In the current landscape, this means lack of transparency and trust in the market, and many players find themselves having to wait and see.

However, there are several factors that make Finland well positioned to be a European leader in the hydrogen economy. These include its abundance of renewable energy potential and natural resources, leading technology in clean hydrogen and its derivates, and stable and well-planned infrastructure. Furthermore, Finland has a modern, smart, and robust electricity grid. Clean energy potential is distributed across the country, and it is anticipated that hydrogen production can well be deployed across both the north and south of Finland.

Several hydrogen plant projects are currently at varying stages of development and construction. This is changing the role of PPAs as they evolve to meet the needs of these projects. The requirement of hydrogen plants for large amounts of electricity, particularly from renewable sources, is driving the demand for new renewable energy generation.

France

France's Corporate PPA market is evolving rapidly, with businesses increasingly leveraging renewable energy opportunities. The sector is now entering what many refer to as the "generalisation phase of PPAs" – a shift from early adoption to broader mainstream uptake.

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Overview of the PPA Market in France (CRE Report, March 2025)

The French PPA market has experienced significant changes in recent years, with strong growth in 2022–2023 followed by a slowdown in 2024. In March 2025, the Energy Regulatory Commission (CRE) published a report presenting the state of the PPA market in France, based on 2023 data.

According to the CRE report, which drew on data from 116 signatories representing 162 installations, the French market remains limited compared to other European countries, with 3.3 TWh of annual delivery (2.4 TWh from photovoltaic and 0.8 TWh from wind power).

Two-thirds of PPAs are corporate agreements (between a producer and an end consumer), while one-third are utility PPAs (between a producer and a supplier). The average duration of PPAs in France is 19 years, which is longer than in most other European countries.

Despite a strong start in early 2024, the pace of PPA signings slowed over the course of the year.

Looking Ahead: France's Evolving PPA Landscape

The growing number of PPAs signed by industrial off-takers highlights the impact of the ENR Acceleration Act, enacted in March 2023. This legislation provided much-needed regulatory certainty, encouraging companies to commit to long-term renewable energy contracts.

To broaden access, several initiatives are now targeting ETIs and SMEs, aiming to reduce barriers to entry for PPAs. Notable efforts include:

- The Bpifrance PPA guarantee fund, designed to mitigate credit risk.
- The Nouvelle-Aquitaine pilot project, which explores multi-buyer PPA models to enable collective procurement.

Hybrid PPAs: Flexibility Meets Innovation

The emergence of hybrid PPAs (which combine renewable energy production with energy storage) is expected to play a key role in the sector's future. These contracts offer greater flexibility, aligning with the evolving needs of large energy consumers and the dynamics of the wholesale market.

A leading example is Orange, which signed a hybrid PPA in May 2024 with ZE Energy. The agreement covers 90 GWh of solar energy per year, paired with 33.5 MWh of lithium storage, showcasing how corporates are tailoring energy supply to meet operational and sustainability goals.

The Generalisation of PPAs

Following strong momentum in 2022 and 2023, the French PPA market slowed in the second half of 2024, largely due to declining wholesale electricity prices. Despite a robust start – 15 PPAs signed in Q1 for 845 GWh/year – the market cooled as long-term commitments became more complex.

Nevertheless, PPAs are expanding across all sectors, with a growing diversity of participants:

- Transport leads the way, with SNCF accounting for 17.7% of all PPAs signed.
- Other sectors, including energy, banking, agri-food and data centres, each contributing around 8.9% of total volume.

Key examples include:

- Les Mousquetaires: The retail group signed three PPAs with TSE, Kallista Energy and Valorem, totalling 197 GWh/year.
- SNCF: Through its parent company (SNCF Voyageurs) and subsidiary SNCF Énergie, the group signed eight PPAs in the past year. SNCF aims to source 40-50% of its energy consumption from renewables, with 20% via PPAs, targeting 1,100 GWh/year by 2027-2028.

PPA projects are also gaining traction in brownfield developments, especially as feed-in tariff contracts for older solar and wind installations begin to expire.

Driving Innovation: Agrophotovoltaic PPAs

The first half of 2024 confirmed the rise of agrophotovoltaic PPAs, following two decrees published in December 2023 and April 2024.

The first decree ensures that installations respect the land's ecological functions and agronomic potential. Agrophotovoltaic systems must be designed for removal without causing permanent damage, applying a principle of reversibility.

The second decree provides a detailed legal framework for installations on agricultural, natural, and forest land, specifying urban planning classifications, constraints, and required authorisations. It also clarifies the specific services and benefits that agrophotovoltaic installations must provide according to Article L. 314-36 of the French Energy Code, which include enhancing agronomic potential and productivity, supporting climate change adaptation measures, mitigating climatic risks for agricultural activities, and promoting improved animal welfare conditions.

Collective Self-Consumption

Collective self-consumption has seem remarkable growth in France. This system allows local energy production to be shared among multiple nearby consumption points, attracting growing interest from companies. The number of collective consumption operations increased from six projects in 2018 to 428 active projects by May 2024, with participants ranging from public authorities to private companies, registered social landlords, and economic activity zones.

By August 2025, France had 1,111 active collective self-consumption (ACC) operations, representing a 144% increase in one year. Total installed capacity stands at 161 MW, with an average capacity of 145 kVA per operation. In total, 1,700 producers share green electricity with more than 10,600 consumers.

Momentum is particularly strong in regions like Occitanie, Auvergne-Rhône-Alpes, Grand Est, and Bourgogne-Franche-Comté, driven by proactive local authorities and energy transition initaties.

Administrative procedures have been simplified. Since the order of 10 July 2024, establishing a management company is no longer required for ACC projects below 1 MW, greatly accelerating development on a smaller scale. The order of 21 February 2025 further raised power thresholds for ACC operations (up to 5 MW, or 10 MW with special dispensation), paving the way for larger projects.

A Dedicated Legal Framework: The ENR Acceleration Act

The ENR Acceleration Act, enacted in March 2023, created a dedicated regulatory framework for PPAs and aims to fast-track renewable energy deployment in France. It introduced new rules for PPAs, aiming to halve administrative processing times.

ENR Acceleration Act: Producer Licensing for Physical PPAs

Since July 2023, producers entering PPAs must obtain a purchase-for-resale license under Article L.333-1 of the Energy Code. To avoid hindering PPA development, non-authorised producers may transfer obligations to a licensee. These obligations include capacity guarantee management (Article L. 333-1 2°) and imbalance rules for balancing group managers. Decree No. 2024-613 of June 2024 confirms that licensing responsibilities only apply to producers entering physical PPAs. In sleeved PPAs, the aggregator ("sleever") may obtain the license as they purchase electricity from the producer and sell it to the off-taker. Licensing is not required for virtual PPAs, where no physical energy is transferred. Producers transferring obligations must notify the Minister for Energy at least one month in advance.

Role of Public Authorities in PPAs

Under Article L.331-5,public entities (including the State, local authorities, and public institutions) are permitted to sign long-term PPAs to secure renewable energy supply.

However, adoption remains limited due to lack of experience.

Currently, only SNCF, through SNCF Énergie, has implemented several PPAs:

- May 2024: 25-year PPA with Valorem for a wind farm in Marne.
- June 2024: PPA with Neoen for a 139 MWp solar farm in Haute-Vienne.
- April 2025: PPA with JP Énergie Environnement for a solar project.

These contracts were signed in a private framework and do not yet constitute public PPAs under Article L.331-5.

Mixed Bidding

The ENR law allows mixed bidding, combining PPAs with FIT or CfD mechanisms, helping smaller companies access PPAs while reducing producer risk. Producers benefiting from FIT or CfD cannot sell origin guarantees for PPA electricity, limiting hybrid offers' appeal. These PPAs fall under CRE regulation, though no mixed bidding processes have yet been published.

Public Incentives for multi-buyer PPAs

Multi-buyer electricity purchase agreements (collective PPAs) began to emerge gradually in France from 2021 onwards. A structuring dynamic has developed in Nouvelle-Aquitaine, where the region launched a call for expressions of interest at the end of 2023 with the aim of bringing together local companies around a joint PPA. The objective was to enable them to purchase electricity from the same power plant, in the form of a PPA, while benefiting from public support. This regional initiative marked an important step in the democratisation of PPAs at the regional level. In May 2024, a memorandum of understanding was signed by 11 companies, expressing their intention to commit to this collective project. This process recently culminated on 23 June 2025 with the signing of the first multi-buyer PPA contract between producer VALECO and nine medium-sized companies (ETIs) in the region. This type of initiative by regional public authorities could mark a turning point in the development of PPAs as a means of strengthening local distribution networks.

Germany

PPAs established, however in a difficult market environment in Germany

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Over the past few years, PPAs have become a well-established mechanism in Germany. Whether physical or virtual, PPAs are now a widely accepted revenue stream for developers and a practical tool for industrial offtakers aiming to reduce their CO2 emissions on the path to carbon neutrality. Yet, recent signals from the current German government suggest a shift in priorities that could reshape the trajectory of renewable energy development.

Current Market Challenges for PPAs in Germany

In the first half of 2025, the German PPA market experienced a noticeable slowdown. While developers – particularly those working on large ground-mounted solar PV projects – continue to rely on PPAs as a key revenue stream, recent energy price trends have led offtakers to push for lower PPA prices compared to 2023 and 2024. This pricing pressure has caused some projects to stall and has dampened return-on-investment expectations.

Another persistent challenge is the increasing number of negative price hours. These typically occur during periods of high renewable generation, when the sun shines and the wind blows (the so called “Hellbrise”), and/or when electricity demand is low or inflexible.

Germany recorded 301 hours of negative prices in 2023, which rose to 457 hours in 2024. By June 2025, the count had already reached 389 hours.

Regulatory Developments Impacting PPAs

Bidding Zones

The proposal to introduce up to five electricity bidding zones is being discussed after publication of the results of the bidding zone study by the transmission system operators (TSOs) on 28 April 2025. According to the study, a split would lead to a higher overall economic efficiency.

With the split the redispatch costs could be lowered and the consumers paying for the required grid expansion with the grid fees may overall benefit from lower electricity prices. Electricity prices dependent on the region in Germany, where electricity is produced, are also relevant for PPAs by, inter alia, having an impact on the PPA price offtakers are willing to pay.

While the German government stated in its coalition agreement that it would keep the single bidding zone, recent political initiatives from the minister presidents of the northern federal states of Germany brought up the discussion again, leading to some further uncertainty.

Industrial electricity price

The conversation around introducing an industrial electricity price continues to evolve. Initially sparked by the energy price shock following Russia’s invasion of Ukraine, the previous German government explored detailed plans to support energy-intensive industries, though these were never implemented.

The current government stated in its coalition agreement that it intends to also introduce an industrial electricity price, but without providing specifics.

Meanwhile, the EU Commission’s adoption of the Clean Industrial Deal (CISAF) on 25 June 2025 offers a potential pathway. CSIAF allows for electricity price reductions under defined conditions, but how Germany will leverage this framework remains unclear, especially given ongoing budgetary constraints.

Implementation of RED III Directive

Germany transposed The RED III Directive slightly later than the deadline of 21 May 2025, completing the process on 15 August 2025.

We expect that the envisaged acceleration of

planning and permitting for renewable assets will have a positive effect on renewable projects and consequently also on PPAs. However, it has to be noted that the implementation of the RED III Directive has not directly addressed PPAs.

Looking Ahead: Changes in Electricity Market Design

The long tenors of PPAs mean that amendments to the underlying electricity market that may become relevant in the long term need to be considered. In addition to the split of the bidding zones, the discussion around establishing new capacity markets may affect PPAs going forward.

Solar PV and Offshore Wind as PPA Drivers

The dominance of solar PV and offshore wind in the PPA landscape remains unchanged. Interestingly, data centre operators have emerged as significant offtakers, driven by both sustainability goals and regulatory requirements (such as CSD).

Under the German Energy Efficiency Act ("Energieeffizienzgesetz", "EnEFG") operators of data centres must source 50% of their electricity from renewables, starting in 2024 and increasing to 100% by 2027. This regulatory push has made PPAs a strategic tool for compliance and carbon reduction. Another emerging trend involves PPAs linked to green hydrogen production. While the market has yet to gain real momentum, partly due to its complexity, interest remains strong. The German government's current plan to build 20 GW of new gas power plants by 2030 suggests that green hydrogen could play a complementary role in Germany's evolving energy mix.

Rise of industrial rooftop solar PV

Since 2023, industrial rooftop solar PV projects have gained traction, particularly among corporates and retailers seeking to enhance sustainability and boost the value of their real estate. More recently, real estate owners and investment funds have entered the space, adopting long-term on-site PPA models.

These models range from:

- Traditional EPC contracts, where the building owner operates the solar PV system, to
- Full-service developer-led models, where the developer handles planning, construction, and operation, retaining ownership of the system.

The Solar Package II ("Solarpaket II"), introduced by the German government, aims to further accelerate this growth. Key measures include:

- Community building supply ("Gemeinschaftliche Gebäudeversorgung") enabling local electricity sharing without feeding into the public grid.
- Providing "Mieterstrom" has been made possible to tenants of commercial buildings and ancillary facilities.
- Relaxed direct marketing obligations for solar PV plants over 100 kW, reducing cost barriers for larger installations.
- Increased feed-in tariffs for commercial rooftop systems.

However, recent rulings by the European Court of Justice (ECJ) and the German Federal

Court of Justice (BGH) have cast doubt on the legal framework underpinning these models. Specifically, on the legal term “customer installation” (Kundenanlage, also known as “self-consumption facilities”).

The concept of customer installation refers to an energy installation which final consumers in a specific geographic area find at their disposal, free of charge, in order to ensure their electricity supply. These facilities are explicitly excluded from the defined scope of energy supply networks. The concept is not only of very high practical relevance for roof-top solar PV but also the concepts of “Mieterstrom” and community building supply require that no (public) grid is used for supplying the electricity.

The recent judgements ruled that the concept of customer installations is not in line with European law and any distribution system used to distribute electricity intended for sale to wholesalers or end customers is a distribution network and subject to regulation.

In consequence, operators of customer installations now face uncertainty of whether they prefer setting themselves up as operators of a closed distribution network or waiting for legislative action. In any case, the concepts that currently rely on using unregulated customer installations are in jeopardy.

Uncertainty is also caused by the fact that the law on modernisation and bureaucracy reduction in the electricity and energy tax law was not passed in 2024 due to an early change of the German government. This law was supposed to clarify tax exemptions for large On-Site-PPA projects, which are under the current legal situation at risk of losing tax exemptions under § 9 para. 1 No. 3 lit. a) StromStG due to plant bundling (“Anlagenverklammerung”). This latter point is addressed in the recent draft bill introduced by the Federal Ministry of Finance on 23 July 2025. The further implementation of the law remains subject to changes in the legislative process.

Outlook for the German PPA Market

Despite current headwinds, the long-term outlook for PPAs in Germany remains positive. The recent dip in PPA volumes appears to be a temporary correction rather than a structural decline. With growing awareness, regulatory support, and increasing demand from industrial and commercial offtakers, PPAs continue to be a cornerstone of Germany’s energy transition.

Hungary

Until recently, Corporate PPAs were not a common practice in Hungary. The first publicly announced agreement was signed in 2022, marking a turning point. Since then, Corporate PPAs have gained traction, driven by evolving regulations and shifting market dynamics.

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Understanding the Slow Start

The initial hesitation around Corporate PPAs can largely be attributed to Hungary's feed-in tariff system, KÁT, which offered eligible renewable generators a fixed price for selling all electricity to the national TSO, MAVIR. This guaranteed revenue model left little incentive for alternative offtake arrangements.

In 2017, Hungary introduced the premium-based METÁR subsidy scheme alongside KÁT. Under METÁR, generators receive a subsidised electricity price and a premium over the market reference price (based on specific day-ahead prices of the Hungarian Electricity Exchange, HUPX) if the subsidised price is higher than the reference price. However, this must also be paid back if the subsidised price is lower than the reference price.

Additionally, companies with ESG goals in Hungary could meet their sustainability targets by purchasing certificates of origin, either directly from generators or via electricity traders, further reducing the urgency for direct Corporate PPAs.

Corporate PPAs on the Rise

In METÁR, the renewable generators must go out to the market and conclude PPAs with customers or traders. Capacities tendered through METÁR were lower than the demand and became irregular as there were no new tenders issued since 2022. This, coupled with rising market prices, has meant that no-subsidies solar project development plans have started to crop up on a larger scale. Additionally, the first KÁT feed-in licenses have started to expire, and those generators needed to find a sensible route to market.

With the fall away of the secure KÁT fixed tariff and the uncertainties of METÁR subsidies in a high-price environment, a secure PPA became a key element of bankability for merchant renewables projects.

Behind-the-meter (BtM) solar projects are also becoming increasingly popular among larger manufacturing companies in Hungary. Multiple contractual structures may be suitable for such projects most of which would include a CPPA type electricity offtake agreement.

These factors described above have led the way towards Corporate PPAs in Hungary in multiple shapes and forms.

Key Challenges: Robin Hood Tax and Grid Access

From a commercial standpoint, one of the most significant hurdles for merchant PPAs is the Robin Hood Tax (a 41% income tax on energy suppliers under Act LXVII of 2008). This applies to generators above 50% not covered by KAT or METÁR subsidy. Fortunately, this rate is set to decrease to 31% from 1 January 2026, offering some relief to developers.

Another major challenge is grid connections. Over the past two years, securing grid access for renewable projects has become increasingly difficult, as authorities aim to manage grid stress from weather-dependent generation. As a result, BtM and rooftop installations, often without grid feed-in, have become the preferred model for new developments.

Outlook for Corporate PPAs in Hungary

Despite regulatory and infrastructure challenges, the outlook for Corporate PPAs in Hungary is promising. Market conditions, evolving legislation, and growing familiarity with PPA structures among offtakers and financiers are all contributing to increased adoption. As more companies seek long-term energy price stability and sustainability credentials, Corporate PPAs are expected to become a mainstream solution in Hungary's energy transition.

Italy

Italy's renewable energy market has entered a phase of consolidation following several years of rapid expansion.

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The Italian Corporate PPA Market: Growth, Maturity and Legislative Support

Legislative updates and new incentive schemes continue to support this momentum, but the corporate PPA market stands out as a stable and strategic route for both generators and offtakers to secure long-term revenue certainty.

While new feed-in-tariff (FiT) schemes have been introduced, and more are expected, not all projects are eligible. As a result, PPAs remain a key alternative, particularly for those seeking flexibility and independence from public policy constraints. The Contracts for Difference (CfD) structure continues to be a reliable tool for managing electricity price risk, and is likely to remain a cornerstone of energy strategy for market participants.

Understanding PPA Structures in Italy

PPAs in Italy are typically bilateral contracts, executed "over-the-counter", with prices directly negotiated between generators and energy traders or wholesalers. These intermediaries then handle the pricing arrangements with the TSO, based on actual energy generation.

In select cases, where a generator and a corporate offtaker can be physically connected via a private network, Corporate PPAs offer a compelling model. These arrangements are particularly attractive when the offtaker has a consistent, high-volume energy demand, allowing for direct energy supply and greater control over pricing and sustainability outcomes.

Emergence of Long-Term Corporate PPAs

Although there are no regulatory barriers preventing the use of long-term Corporate PPAs in Italy, their adoption has only gained traction over the past five years, for both physical and synthetic Corporate PPA structures.

Earlier FiT schemes, such as Conto Energia, offered high premiums that made PPAs less attractive. With those incentives now phased out or limited, PPAs have emerged as a flexible and strategic alternative.

What's Driving the Growth of Corporate PPAs?

Several factors are contributing to the rise of Corporate PPAs in Italy: Energy price volatility: The raw materials crisis and the sustained increase in natural gas prices, exacerbated by the Russia-Ukraine conflict, have pushed electricity prices to record highs, far surpassing the temporary demand drop.

Regulatory innovation: New rules enabling shared supply contracts through energy communities and simplifying PPA access for non-professional actors are helping broaden market participation.

Virtual PPAs: A Flexible Solution

The Italian market is currently dominated by virtual PPAs, which offer a practical way for offtakers to engage in renewable energy without overhauling their existing supply chains. In this model, the generator sells electricity on the wholesale market, while the buyer continues purchasing from their usual utility. The two parties then settle the different between a pre-agreed strike price and the wholesale market price, effectively hedging against price fluctuations.

The phasing out of the national single price (Prezzo Unico Nazionale – PUN) is further encouraging long-term contracts, making virtual PPAs an increasingly attractive option for businesses seeking both sustainability and financial stability.

A New Platform for PPAs: MPPA

To support the expansion of long-term renewable energy contracts, the Italian government introduced Decree No.152 (20 June 2025), mandating the creation of a new organised market for PPAs (MPPA), managed by the Gestore dei Mercati Energetici (GME). This initiative alignsd with EU and national energy strategies and is backed by funding from PNRR and PNIEC. It aims to reduce the financial barriers to PPA adoption, particularly for small and medium-sized enterprises which can't afford the costs connected to the issuance of collateral guarantees associated to PPAs. A key feature is the introduction of a GSE (Gestore dei Servizi Energetici) guarantee mechanism, where the GSE will act as a guarantor of last resort. If a buyer defaults, the GSE will step into continue the contract; if a seller defaults, the GSE will act as the dispatching user. In either case, the contract price is replaced by a reserve price set by GSE/ GME, which may impact expected returns.

The MPPA will be integrated with the GME's forward market (i.e. MTE market), allowing for the negotiation of standardised baseload and peakload contracts lasting 5–0 years. Moreover, such PPAs to be negotiated on this new platform have to refer to volume not already subject of previous PPAs or other public subsidies.

However, some market operators have raised concerns about the strict eligibility requirements (indeed, the operators must have an investment grade rating, be "market operator" in accordance with GME definitions and be dispatchment users).

Public consultations by GME and GSE are underway to finalise the operational rules, with the goal of making the market more accessible and effective.

Electricity prices: what to expect

While the broader European energy market is trending toward stabilisation, Italy's energy prices for 2025 and 2026 remain subject to fluctuation. Key influences are:

- International gas markets.
- Growth in domestic renewable generation.
- Deployment of battery energy storage systems, which are expected to help balance the grid and reduce price spikes.

Wholesale prices are forecast to stay elevated but are unlikely to reach the extreme peaks seen in recent years. As solar and wind capacity continues to expand, periods of high renewable output will help moderate prices, contributing to a more predictable energy landscape.

Japan

With the transition from Feed-in Tariff to Feed-in Premium, the number of Corporate PPAs in Japan is on the rise.

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Japan's Transition to Corporate PPAs: A Market in Motion

Japan is experiencing a steady rise in Corporate PPAs, both onsite and offsite, as the country transitions from a Feed-in Tariff (FIT) regime to a Feed-in Premium (FIP) regime. This shift is reshaping the energy landscape, encouraging more direct engagement between power producers and corporate offtakers.

A Snapshot of the Japanese Corporate PPA Market

The number of Corporate PPAs in Japan is growing, albeit with relatively modest deal sizes compared to more mature markets. In 2024, 97 offsite Corporate PPAs were announced (up from 57 in 2023), highlighting a clear upward trend. Most deals have been solar-powered, with some onshore wind projects entering the mix.

Notable milestones include:

- Amazon's 2021 agreement with Mitsubishi Corporation, sourcing 22 MW from 450 solar sites.
- Google's two PPAs in 2024 for a total of 60 MW.
- Microsoft's aggregate 100 MW of Corporate PPAs with Japanese developer Shizen Energy in October 2025.

These deals signal growing interest from global tech firms and set a precedent for broader market participation.

Regulatory Evolution: From FIT to FIP

Japan's FIT regime, launched in 2012, offered generous tariffs that spurred a solar boom, placing Japan fourth globally in installed capacity by 2024. However, FIT discouraged power producers to seek Corporate PPAs, as they had little incentive to seek alternative revenue streams.

The introduction of the FIP regime in 2022 changed that. Under FIP, power producers must sell electricity on the market or to third parties, receiving subsidies under a contract-for-difference arrangement. This structure encourages Corporate PPAs, both for new and legacy projects transitioning from FIT.

Recent regulatory updates have now added complexity:

- A generation-side tariff now applies to producers.
- A capacity contribution fee is imposed on retailers.

These changes underscore the need for market participants to stay informed and agile.

Corporate PPA Models in Japan

Japan offers a diverse range of Corporate PPA structures:

1. Onsite PPAs: Widely adopted across Japan, onsite PPAs typically involve solar panels installed on rooftops of large facilities such as warehouses or shopping malls. These agreements are cost-effective, as they avoid wheeling charges and offer direct access to renewable energy.
2. Physical/Sleeved (Offsite) PPAs: Also prevalent, this model involves a power producer selling electricity to an end user via an intermediary holding an electricity retail licence. Japanese law does not permit direct PPAs between producers and end users, making this intermediary structure essential.
3. Virtual/Synthetic (Offsite) PPAs: A relatively new entrant to the Japanese market, virtual PPAs allow producers to sell electricity into the spot market while the end user continues purchasing from their regular utility. The two parties enter a contract-for-difference to hedge against price fluctuations and transfer environmental attributes. This model gained traction after regulatory clarification in 2022.

4. Self-Wheeling PPAs: Unique to Japan, self-wheeling allows related entities to use transmission lines without a license. While this model saw initial growth, regulatory tightening in 2024 has made it less attractive.

Outlook for Corporate PPAs in Japan

The future growth of Corporate PPAs in Japan will largely depend on market economics. End users have multiple options for electricity procurement, including utilities and the spot market. If these alternatives remain costly, Corporate PPAs will likely become more appealing.

Currently, solar power physical PPAs are priced competitively with utility rates, while onshore and offshore wind PPAs tend to be significantly more expensive. This price differential may influence adoption rates across sectors.

Key Challenges to Watch

Despite growing interest, several challenges continue to shape the Japanese Corporate PPA landscape, particularly for virtual PPAs:

- Environmental attribute restrictions: Current rules limit the transfer of *Non-Fossil Certificates,* complicating the structure of some deals.
- Accounting uncertainty: Japanese accounting standards do not yet clearly define how virtual/synthetic PPAs should be evaluated, creating ambiguity for corporate finance terms.

Reforms in these areas are anticipated in the coming years, which could unlock further growth and simplify adoption. For now, stakeholders are advised to monitor regulatory updates closely.

Morocco

Described as a "renewable energy superpower", the Kingdom of Morocco is home to remarkable wind and solar resources, estimated at an impressive 500 TWh annually. This natural advantage, paired with the country's strong political stability, positions Morocco as a leading force in Africa's renewable energy landscape.

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In 2024, renewables made up 24% of Morocco's total electricity generation, up from around 22% in 2023. The Kingdom has set an ambitious yet achievable goal: to generate at least 52% of its electricity from renewable sources by 2030, reaching a total installed capacity of 20 GW. Corporate PPAs play a key strategic role and are gradually being developed.

A Necessary Tool for the Development of Moroccan Industries

Morocco's renewable energy journey was formally set in motion in 2009, when King Mohammed VI launched a national roadmap for clean energy. This initiative was accompanied by the introduction of Law 13-09 on renewable energies, a foundational piece of legislation designed to create a regulatory framework that would encourage the development of renewable energy installations in Morocco.

Since then, Law 13-09 has evolved through two key amendments. The first, Law 58-15 (January 12, 2016), and the second, Law 48-09 (February 27,2023), collectively referred to as the Amended Law 13-09, were introduced to address gaps in the original text and make the sector more attractive to investors and developers.

In parallel, Morocco also reformed its self-generation electricity system at the end of 2022.

Morocco's Strategic Priorities

According to the Ministry of Energy Transition, recent reforms are shaping a model of electricity production that is decentralised, low-carbon and increasingly competitive. Alongside this energy shift, the Moroccan Government has identified industrial development as a strategic priority, balancing economic growth with climate action, even if not explicitly framed as a "green" agenda.

Beyond the Amended Law 13-09, Moroccan companies are now facing external incentives to decarbonise. One key driver is the EU's Carbon Adjustment Mechanism (CBAM), which applies a carbon tax to Moroccan exports based on their embedded emissions. In this evolving landscape, Corporate PPAs offer a practical and forward-looking tool. They enable Moroccan businesses to take control of their energy transition, manage production costs amid volatile energy prices, and pursue sustainable growth with greater confidence.

The Emerging Role of Corporate PPAs in Morocco

Corporate PPAs are gradually gaining ground in Morocco, marking a new chapter in the country's renewable energy journey.

The Noor solar programme, first commissioned in 2016, was a bold state-led initiative that showcased Morocco's ambition. Noor I was a technological milestone, but its high electricity costs soon highlighted the need for more efficient models. This led to a strategic pivot toward hybrid solar PV and battery storage, as seen in the Noor Midelts projects, designed to offer more competitive pricing and greater flexibility for grid connection.

Between 2022 and early 2023, several Corporate PPAs were signed in Morocco, marking the early emergence of this model across diverse sectors. For example:

- Aya Gold & Silver signed a 20-year agreement with Energie Eolienne du Maroc to supply 100% of the electricity needs of the Zgounder silver mine's electricity needs, avoiding 56,000 tonnes of CO2 annually.
- InnoVent partnered with STMicroelectronics for a wind farm expected to generate over 80 GWh per year, cutting emissions by 60,000 tonnes.

- Amea Power partnered with Amendis (Veolia Morocco) for a 35 MW solar project to decarbonise water services in Tangier, with plans for additional CPPAs in Fès-Meknès following the award of two solar projects totalling 72 MW.
- In the agri-food sector, Nareva signed a 2 MW agreement with Lesieur to support its decarbonisation goals.

These previous deals demonstrate the practical viability of Morocco's legal framework for Corporate PPAs across multiple industries. However, further regulatory refinements could help accelerate adoption and scale.

In 2024, a strategic agreement was signed between TAQA Morocco, Nareva, and the Mohammed VI Investment Fund to develop new infrastructure for power generation, transmission, and desalination. While not structured as a traditional Corporate PPA, the agreement includes long-term electricity supply arrangements that support industrial and municipal offtakers, reflecting Morocco's broader strategy to modernise its energy infrastructure and expand access to low-carbon electricity, especially in water-stressed regions.

Also in 2024, the final PPA was signed for the 270 MW Jebel Lahdid wind project near Essaouira, developed by Nareva Holding and Enel Green Power. Part of Morocco's 850 MW wind energy programme, the project will supply electricity to the National Office for Electricity and Drinking Water (ONEE). Though this is a utility-scale PPA, it underscores the momentum behind long-term contracts in securing clean energy for both public and private stakeholders.

Looking ahead, Green of Africa is developing a 360 MW wind project near Dakhla, similar in scale to Jebel Lahdid. The project recently raised 3.8 billion MAD (approximately $416 million) from a consortium of Moroccan banks. Major industrial players in Morocco have already begun negotiating Corporate PPAs to purchase energy from this project.

Amended Law 13-09: Perfecting the Framework for Corporate PPAs

Firstly, the Amended Law 13-09 regulates the producer and the development of its generation facilities more than the commercial relations it enters with its offtakers. Article 26 of the Amended Law 13-09 expressly authorises the conclusion of electricity contracts between a producer and one or more offtakers if the off-takers are connected to the national medium-voltage, high-voltage and very high-voltage electronic network granted to the TSO.

This gives developers access to all national electricity grids and a particularly large potential customer base of SMEs and large companies. The duration of the contract, the guaranteed volume and the price are freely negotiated between the parties. Similarly, the Amended Law 13-09 does not specify whether the Corporate PPA is subject to a "take and pay" or "take or pay" system.

Generation facilities constructed for the purpose of Corporate PPA projects are governed by Chapters 2, 3 and 4 of Amended Law 13-09. Secondly, Law 48-09 introduced two distinct procedures depending on a facility's capacity:

1. A facility with a capacity of less than 2 MW is subject to a prior declaration to the Ministry, whereby only administrative and technical information is filed before the administration takes a decision;
2. If a facility has a capacity of more than 2 MW, there is a two-fold authorisation process:

a. Development Permit: Issued before construction by the Ministry of Energy, and it is valid for three years, during which time the project must be carried out. To obtain it, operators must: provide administrative and technical information, a bank guarantee or security deposit, and undertake to apply the principle of national preference in all works, supply and service contracts relating to the project.

b. Additionally, facilities over 2 MW must comply with the "solar map" requirement, meaning they must be located in zones designated by the administration. Although this requirement was introduced in the original Law 13-09, the relevant regulations were only published in 2022, more than a decade later.

To connect to the national grid, producers must sign two key agreements with the TSO:

- A grid connection agreement, allowing the facility to connect to the national grid.
- A grid access agreement, granting the right to feed electricity into the grid, subject to technical and financial conditions.

Finally, to support the credibility and transparency of Corporate PPAs, Law 40-19 introduced a system for tracking renewable energy. Producers can now obtain certificates of origin, official documentation confirming that the electricity fed into the grid is from renewable sources.

Renewable Advancements in Morocco's Renewable Energy Landscape

Morocco continues to make meaningful progress in its renewable energy sector, supported by a series of recent regulatory developments that signal both ambition and pragmatism.

On January 31 2024, the Board of the National Electricity Regulatory Authority unanimously approved the national electricity system's capacity to integrate renewable energy sources for the 2024-2028 period. This decision sets a substantial target, with a total capacity for integrating renewable energy reaching approximately 7,236 MW, including 1,323 MW specifically allocated to distribution networks.

In a quieter but equally important move, the decree for issuing green energy certificates (certificats d'origines) was published in October 2024 and implemented in October 2025. Despite limited media coverage, this development introduces a formal system for verifying the renewable origin of electricity.

The decree's first article confirms that certificates will be issued via an online platform, managed by the Moroccan government. Subsequent articles outline the conditions for obtaining these certificates, including:

- The issuance of a report detailing the characteristics of the power production facility.
- An independent review.

While the introduction of certificates of origin is a welcome move, several practical questions remain. The legal nature of these certificates, particularly their emissions, transferability and potential value, requires further clarification.

For now, the system is not yet operational, which poses a challenge for industrial operators. Many need to demonstrate the decarbonisation of their energy sources at Moroccan sites but currently lack the tools to do so effectively.

Regulatory Challenges and the Future of CPPAs in Morocco

Despite Morocco's progress, some regulatory texts, particularly those concerning auto-production, have yet to be published.

As the self-generation/auto-production legal regime has not yet been completely implemented (and might not be until 2027), it is not possible for industrial companies to own their own facility and to be self-sufficient. To bridge this current legal gap, they enter into Corporate PPAs with power producers who develop an on-site facility and sell electricity directly to the site owners. Certain Corporate PPAs provide that the facility will be transferred at the end of the contractual term and/or when legally feasible.

The Netherlands

Major policy changes pending to accelerate the energy transition, which includes guarantees for offtake under (corporate) PPAs.

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The Dutch Regulatory Environment

The EU has set targets for renewable energy generation and decarbonisation to halt global warming for its member states. The climate goal targets for the Netherlands are ambitious and until now the Netherlands has struggled to meet these targets. The Netherlands Environmental Assessment Agency (PBL) has projected that the 'proposed and adopted' policy will only achieve a 45-52% reduction in emissions by 2030, falling short of the 55% target. This signals a clear need for additional policy measures.

To close the gap, the Dutch government is pursuing a mix of short and long-term strategies. These include:

- Phasing out coal plans in the new term.
- Launching new wind energy tenders for future capacity.
- Rapid deployment of PV panels in ground-mounted solar parks and on rooftops.
- Expansion of onshore and offshore wind parks.
- Significant investment in green hydrogen infrastructure, with €700 million in subsidies awarded to 11 projects, which will require a secure (baseload) of electricity, by entering PPAs.

However, one of the most pressing challenges is grid congestion – a bottleneck that limits the development of large-scale renewable energy projects. In response, the Dutch regulator (ACM) has introduced several measures to ease pressure in the grid:

- A prioritisation framework that favours projects reducing congestion or delivering essential social services.
- Promotion of flexible grid use and congestion management measures.
- Introduction of alternative grid connection and access rights (such as non-firm ATOs, TDTRs, CBCs and CSCs).
- Implementation of the time-of-use tariffs and the "use it or lose it" principle.

These evolving policies are designed to unlock new capacity, supporting the deployment of renewable energy, and enable the growth of Corporate PPAs as a practical solution for industrial and infrastructure-scale decarbonisation.

Supporting Investment in Renewable Energy Projects

To accelerate its energy transition, the Dutch Government has introduced a range of measures designed to attract and support investment in renewable energy. This includes the Sustainable Energy Production and Climate Transition Incentive Scheme (SDE++) and the Energy Investment Allowance (EIA).

The SDE++ provides operating subsidies for technologies that contribute to renewable energy generation and decarbonisation. Unlike its predecessor (SDE+), which calculated subsidies per kWh of electricity produced, SDE++ bases its support on emissions reductions.

In 2025, the SDE++ budget is set at €8 billion, and notably includes a new category: “Hydrogen from electrolysis, grid-connected with renewable power purchase agreements.”. To qualify, the hydrogen must be produced using electricity sourced from renewable energy, and the electrolyser must be linked to a renewable energy facility via a Corporate PPA that clearly defines supply volumes and pricing.

Additionally, backward banking is no longer permitted for Solar PV and Wind categories, excess profits will be offset against the subsidy received and no subsidy is provided for generated electricity for self-consumption.

Companies investing in renewable energy and energy-efficient technologies may also be entitled to the Energy Investment Allowance (EIA), which offers tax relief for companies investing in renewable energy and energy-efficient technologies. Eligible businesses can deduct up to 40% of qualifying investment costs from their taxable income, in addition to standard depreciation. To apply for the EIA, the investment must be listed in the Energy List 2025, and companies can propose new technologies for inclusion in future editions.

Securing Renewable Energy Offtake

The Netherlands has adopted the EU’s unbundling requirements in an especially stringent way, prohibiting electricity and gas network operators from belonging to corporate groups that also generate, supply, or trade energy within the country. This “group prohibition” has significantly impacted the credit worthiness of traditional offtakers, such as utilities, by removing the financial backing of grid operators and reducing the security available for financing.

In response, long-term Corporate PPAs with credit-strong corporate offtakers are emerging as a practical alternative. These agreements offer generators a more bankable route to securing cheaper financing.

The Rise of Corporate PPA Structures in The Netherlands

The Netherlands’ mandatory unbundling requirements have opened the door for generators and corporate consumers to enter into a Corporate PPA directly, without the need for a utility to act as an intermediary through a “back-to-back” PPA with the corporate consumer. This is possible because the grid operator, rather than the utility, handles the “sleeving” of electricity. As a result, corporate consumers can transfer their program responsibility to a trading or balancing party, streamlining the process and reducing energy consumption costs.

PPAs: A Cornerstone of Project Finance

Deploying renewable energy assets demands significant upfront capital. As with most project finance structures, lenders rely not on the company’s balance sheet, but on the long-term projected cash flows of the project. A well-structured Corporate PPA becomes essential in making a project bankable.

A long-term PPA offers predictable revenue streams, especially when they include stable pre-agreed pricing formulas with cap and floor mechanisms to manage electricity price volatility.

Over the years, we’ve seen a rise in consortia of corporate offtakers jointly entering PPAs with a single generator. This approach spreads the production capacity across multiple buyers, reducing exposure of the generator to any single offtaker and further enhancing bankability for large-scale projects.

Introducing the Guarantee Fund

While the Dutch PPA market is maturing, it remains dominated by large players with strong credit ratings. Yet, mid-sized and smaller companies are increasingly eager to participate. However, rising inflation, high interest rates and supply chain disruptions have increased offshore wind construction costs by around 50%, without a corresponding increase in what offtakers are willing to pay under PPAs.

This mismatch has dampened industry enthusiasm, leading to the postponement of two offshore wind tenders this year. Concerned about the impact on national renewable targets, the Dutch Parliament has urged the government to act. The responsible minister was asked to explore a PPA guarantee fund for offshore wind and to introduce a Dutch version of Contracts for Difference (CfD), the latter now under public consultation.

Preliminary research suggests that under the proposed guarantee structure, developers could secure protection against income loss if a corporate offtaker goes bankrupt. The fund would cover the shortfall between the agreed PPA price and the market price at time of bankruptcy, funded by premiums paid by developers.

Although initially focused on offshore wind, the conversation has expanded. Industry groups are now advocating for the fund to include onshore wind and both ground-mounted and rooftop solar. They estimate that a fund of €60-70 million could unlock around €4 billion in additional energy projects. There's also growing support for enabling cross-border Corporate PPAs, which could further expand market opportunities.

No Credit Rating? No Problem

Rabobank has introduced an innovative guarantee product (PPAssurance), designed to helpcompanies without a formal credit rating to enter into a PPA. In collaboration with Eneco, this product enabled two Dutch food and agricultural companies (Plukon and De Heus) to enter into a PPA to purchase electricity from the offshore wind farm Hollandse Kust West VI (Ecowende), This development opens the door for a broader range of businesses to participate in the green energy transition through PPAs.

Corporate PPA Benefits for Consumers and Generators

As market participants become more familiar with Corporate PPA structures, interest in using them to support renewable energy projects continues to grow. These agreements offer practical benefits for both side of the transaction.

For corporate consumers, PPAs provide long-term price certainty and a clear path to improving sustainability credentials. For generators, they unlock access to lower-cost financing by offering predictable revenue streams. Utilities are also becoming increasingly active, many are co-investing in renewable projects or contracting large volumes of renewable electricity to resell to their customers.

Norway

Whilst recent decades have seen a resurgence in the use of Corporate PPAs in Norway, recent market conditions and fewer renewable energy projects have led to a decline in the number of PPAs being finalised. This year, however, activity in the PPA market has begun to pick up.

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Government-regulated PPAs have traditionally been an important instrument in attracting power-intensive industry to Norway, such as metal, wood and chemical industries. Today, most of the energy trading in Norway occurs at spot prices through the well-established Nordic power exchange, Nord Pool.

In recent decades, however, there has been a substantial increase in the use of PPAs in Norway, particularly in connection with financing of onshore wind projects. In recent years, we have experienced a slight decline in the number of concluded PPAs due to market conditions and few new renewable projects having reached financial close. In 2025, the PPA activity in the Norwegian market has once again improved, partly due to an increase in the establishment of large-scale data centres.

Norway is part of a common Nordic power market with Sweden, Denmark and Finland, which in turn is integrated into the European power market via grid connections to the Netherlands, Germany, the Baltics, and Poland. In 2021, NordLink, a 623 km interconnector between Norway and Germany, was implemented, and in 2022, the North Sea Link was put into operation, a 720 km interconnector between Norway and the UK.

Power Pricing in Norway

Corporate PPAs are typically entered into to ensure predictability for both the power producer and the customer, but fixed-price agreements, index-price agreements and hybrid agreements combining elements of both are common.

For private consumers, spot pricing remains the most common model. However, following a period of elevated electricity prices, the government introduced a support scheme in December 2021 to help mitigate costs. This initiative provides financial support when electricity prices exceed certain thresholds and has recently been extended to run until at least the end of 2025.

A concept, “Norway Price” (Norgespris), has now been reduced as an alternative support mechanism. Starting from 1 October 2025, this voluntary scheme offers households a fixed electricity price of 40 øre per kWh (excl. VAT) or 50 øre per kWh (incl. VAT), regardless of market fluctuations. The price excludes grid fee, taxes and other surcharges. The government covers the difference between the spot price in the market and the Norway Price, up to a monthly consumption cap.

This approach adds a layer of predictability for consumers and reflects a growing interest in shielding households from market volatility while maintaining access to clean energy.

The Regulatory Environment in Norway

Norway’s PPA market operates without a universally standardised contractual framework. Instead, larger entities typically reply on their own templates as a starting point for negotiations, resulting in most PPAs being tailored to the specific needs of the parties involved.

The energy market in Norway is fully deregulated, and there are no specific laws governing the formation of private PPAs. The only formal requirement is that any electricity wholesaler must hold a trading licence, easily obtained through an application to the Norwegian Energy Regulatory Authority (RME). Producers delivering electricity to the grid, however, must secure a more comprehensive set of licences and approvals.

What’s Driving PPA Growth in Norway?

In 2020, Copenhagen Economics, commissioned by the RME, published an analysis on the development and use of long-term PPAs in Norway. The report highlighted several growth drivers, including the rise of data centres across the Nordic region and the financing of onshore wind farms.

While Corporate PPAs have seen a resurgence over the past few decades, recent market conditions and a slowdown in renewable project development have led to a temporary dip in activity. However, the demand for PPAs remains strong, fuelled by growing attention to the energy transition, ESG strategies, and evolving legal requirements (particularly those stemming from EU policy), which influence access to capital.

As a result, large energy consumers are increasingly expected to demonstrate that their electricity is sourced sustainability. This shift has led to high-profile PPAs being signed by global corporations such as Google, IKEA and Facebook, signalling a broader trend toward long-term, responsible energy procurement.

Electricity Certificates and Guarantees in Norway

Electricity certificates (commonly referred to as Elcerts), have traditionally been bundled with PPAs under the Swedish-Norwegian certificate scheme. Renewable facilities commissioned between 2012 and 2021 typically receive one Elcert per MWh of electricity produced, valid for 15 years. While Elcerts are usually sold alongside electricity in PPAs, they have occasionally been traded separately under Elcert Purchase Agreements (EPAs), though this remains relatively rare.

Norway's energy authority (NVE), has been tasked with evaluating whether the Elcert system should be phased out earlier than the planned 2035 deadline. The scheme's original targets have already been surpassed, and current certificates barely cover administrative costs, prompting a reassessment of its continued relevance.

In parallel, Guarantees of Origin (GoO's), issued in accordance with EU regulations, are also allocated to Norwegian renewable producers and commonly sold along with electricity under a PPA.

There has been some uncertainty related to the future of the GoO's in Norway as the political platform of the previous government contained provisions on removal of the system, but these provisions have to date not been followed up with concrete actions. Due to recent measures taken to ensure that the GoO's sold to other countries do not prevent the Norwegian industry from being able to report that the electricity used is renewable, it is likely that the profitable market for GoO's will continue in the years to come.

PPAs in Norway: Challenges and Future Prospects

The recent slowdown in Norwegian PPA activity can be traced to several factors. An high volatile spot market has resulted in a gap between supplier and buyer expectations, leading many renewable projects to choose lower hedging ratios in combination with shorter duration, or constructing projects on an all-equity basis, thereby avoiding the banks' price hedging requirements.

The processing of onshore wind license applications was also put on hold by the Norwegian government in 2019, leading to a natural decrease of the number of onshore wind projects reaching FID over the last years. Since 2022, new applications are again being processed which is expected to lead to a rise in greenfield onshore wind development in Norway and a further demand for PPAs. In July 2023, the Norwegian Energy Act was amended to prevent the granting of licences for onshore wind farms until the projects have been approved under the Norwegian Planning and Building Act by the local municipality. This change, often referred to as a local veto, could help put a boost into the development of onshore wind energy again.

Now, in 2025, almost six years after the stop in new onshore wind initiatives, several new projects are now under development. It must also be noted that recent reports indicate a growing level of PPA activity in the Norwegian market.

PPAs and Offshore Wind Power Developments in Norway

The role of PPAs in offshore wind developments in Norway remains uncertain. Currently, these projects rely heavily on government subsidies, which are awarded through competitive processes. Support may come in the form of direct investment or through a Contract for Difference (CfD) with the Norwegian State.

Under a CfD regime, entering a long-term PPA is generally not commercially attractive for the duration of the CfD (typically 15 years from commissioning), except as a basic route-to-market agreement. However, not all offshore wind projects will be supported by CfDs. For those that proceed without them, long-term PPAs are expected to play a critical role, particularly in meeting the requirements of project finance providers.

A notable example is the Utsira Nord offshore wind area, where the Norwegian government has opted to provide investment support rather than CfDs. This decision opens the door for more traditional PPA structures to be used, potentially setting a precedent for future offshore wind projects in Norway.

Poland

Over the past decade, Poland's Corporate PPA market has evolved rapidly, transitioning from a niche financing tool to a mainstream instrument for renewable energy development in Central and Eastern Europe. What began as an early-stage experimentation has now matured into a dynamic and promising market, positioning Poland as a potential regional leader in corporate renewable procurement.

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Poland has made remarkable progress in reshaping its power system. In 2015, coal accounted for nearly 90% of electricity generation. By 2024, that figure had dropped below 57%, with wind and solar now contributing over a quarter of the country's power supply. Looking ahead, national targets are ambitious: renewables are expected to exceed 56% of electricity production by 2030.

Price Stabilisation

After a period of sharp fluctuations, PPA prices in Poland and across Europe are showing signs of stabilisation. While short-term wholesale volatility remains high, contract prices for solar and wind have recently moved downwards and are less erratic than in previous years. This creates a more predictable environment for both developers and buyers. For investors, such stabilisation reduces the perception of market risk and makes it easier to model project revenues over the life of a contract.

Corporate Demand and Opportunity

For industrial and commercial energy consumers, PPAs have become a strategic tool. They secure stable long-term electricity prices in an environment of volatility, while also delivering credible sustainability outcomes.

Demand is particularly strong among energy-intensive sectors such as steel, chemicals, automotive and manufacturing, as well as international corporations aligning their Polish operations with global ESG commitments. Many buyers view PPAs not only as a cost-hedging instrument but also as a competitive advantage, strengthening their brand in the eyes of customers and investors.

Financing and Bankability

The financial community is increasingly confident in the PPA model. Long-term agreements with reliable corporate offtakers are now recognised as bankable, enabling developers to secure debt financing on favourable terms. While banks remain selective, the growing track record of successful contracts is lowering perceived risks. Developers are also adopting flexible approaches, combining auction-backed volumes with PPA offtake to optimise returns. This variety of models strengthens the investment case and broadens participation.

Flexible contracting

One of Poland's emerging strengths is the flexibility of contract structures. In addition to classic long-term, fixed-price PPAs with tenors exceeding ten years, buyers can now access a wider range of products.

Shorter contracts – including one-year solar PPAs – are increasingly available, offering an attractive entry point for companies wishing to test the market or meet temporary hedging and sustainability needs. This product diversity lowers the barrier to entry, making corporate sourcing of renewable electricity accessible not only to the largest players but also to mid-sized businesses.

Data Centres and New Sources of Demand in Poland

An important emerging trend is the rising interest in PPAs from large technology companies and data centres. Their electricity demand is both substantial and continuous, making them ideal candidates for long-term renewable sourcing.

As Poland continues to attract international IT and cloud service providers, data centres are expected to become a major driver of PPA demand. For the market, this adds a new category of highly creditworthy offtakers, further strengthening the investment case.

The Role of Utilities

Utilities are stepping up as key enablers of market growth. By contracting large volumes from developers and passing them on to corporate customers through sleeved or aggregated PPAs, they allow smaller buyers to participate while reducing credit risk for developers. This role is expected to expand in the coming years, reinforcing utilities as reliable intermediaries and helping to scale up overall demand.

Market Challenges in Poland

Despite strong momentum, Poland's Corporate PPA market still faces several structural challenges. Grid congestion and limited connection capacity continue to restrict the rollout of new renewable projects. While permitting processes are improving, they can still be time-consuming and unpredictable.

GoOs issued in Poland are not yet fully recognised in cross-border transactions, which limits the ability of corporates to use them across Europe.

However, there are already legal foundations in place to change this situation. Poland is aligning its regulatory framework with European standards, and the country's planned accession to the Association of Issuing Bodies (AIB) will ensure full compatibility of Polish certificates with the European system. Once implemented, this will significantly enhance the liquidity and credibility of Polish PPAs in the international market.

Positive Outlook for Poland

Despite these challenges, the overall trajectory is highly encouraging. Corporate buyers are motivated by both economic and sustainability factors, and their appetite for PPAs continues to grow. The next wave of technologies, offshore wind, hydrogen, storage integration, and eventually nuclear, will expand the range of PPA opportunities available. With strong corporate demand, a robust renewable pipeline, and increasing participation from utilities and financiers, Poland offers investors a market with significant growth potential and resilient long-term fundamentals.

Poland Leads the Charge in Central and Eastern Europe

Poland has become the most dynamic corporate PPA market in Central and Eastern Europe. Demand from corporates, utilities, and new sectors such as hydrogen is set to expand strongly, while supply constraints create a favourable environment for developers to secure attractive long-term contracts.

For investors, PPAs offer predictable cash flows, diversification opportunities, and alignment with global decarbonisation trends. For buyers, they provide price stability, flexible contract options, and credible renewable sourcing. The market is competitive, innovative, and increasingly sophisticated – and it is poised to remain a cornerstone of Poland's energy transition.

Romania

Corporate PPAs present significant opportunities, as new projects advance into the Ready-to-Build (RtB) phase, and an increasing number of assets are close to reaching commercial operation, creating a dual need for offtake agreements to both secure initial financing for RtB projects and de-risk revenues for operational assets.

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The end of the PPA ban in Romania

Since 2007, Romania's electricity market has become increasingly liberalised. However, further to the signing of several detrimental long-term electricity sale agreement, by a state-owned producer, Romania's State banned all electricity producers from entering into directly negotiated electricity sale agreements. The PPA ban was in force for almost ten years and within this period the electricity produced in Romania has been sold solely on the centralised markets administered by the Romanian Operator of the electricity and natural gas market, "Opcom S.A." As of March 2023, the Romanian Commodities Exchange also obtained a license for the administration of a wholesale centralised market.

Thus, in early 2020, Romania's electricity market entered a new phase of development, in line with the country's commitment to reach a RES 2030 target of 30.7% (to be potentially increased to 34%). From December 31, 2021, the ban on PPAs was lifted. The Energy Law no. 123/2012 was also amended to enable developers to sell, during the construction phase, the electricity that will be produced by the generation facilities, despite not having a generation license at the date of signing of the PPA.

Recent examples of PPAs in Romania

The Romanian PPA market has shown significant dynamism and diversification. Recent key transactions highlight several market trends:

Large-scale utility PPAs: major energy players are securing large volumes. Noteworthy are the series of agreements signed by OMV Petrom with DTEK for a total of almost 240 MWp from three solar parks, and with Saint-Gobain for a five-year 800 GWh supply.

Emergence of cross-border virtual PPAs: Rezolv Energy has become a key player in this space, signing multiple cross-border virtual PPAs from its Vifor wind farm project with offtakers including Slovak Telekom, T-Mobile Czechia, CE Colo Czechia. A2A, and Bekaert.

Strong corporate demand: a wide range of corporations are hedging against price volatility and pursuing sustainability goals. Examples include Nokian Tyres' virtual PPA with Enery for its zero-CO2 emissions tire factory, and Autoliv's virtual PPA with Eurowind.

Growth in the on-site C&I segment: the on-site generation model remains popular for industrial consumers, as seen in the agreements signed by nextE with industrial players and E.ON with automotive supplier Webasto.

Romania's financing environment for renewables has strengthened markedly, with a growing pipeline of bankable corporate PPAs and the full roll-out of the CfD scheme. The CfD design provides 15-year revenue stabilisation and is backed by €3 billion from the EU Modernisation Fund, improving price visibility for lenders and sponsors.

The first CfD auction (December 2024) awarded 1.5 GW (0.4 GW solar; 1.1 GW onshore wind) at weighted-average strike prices of ~€51/MWh (solar) and ~€65/MWh (wind). The outcome demonstrated robust competition and materially enhanced bankability for projects heading to FID.

Building on that momentum, the second CfD auction (August 2025) awarded 2.75 GW in total: 1.49 GW solar at an average ~€40/MWh and 1.26 GW wind at an average ~€74/MWh. Notably, very large assets (e.g., the 1.04 GW Dama Solar project) secured CfDs, underscoring depth in the financing and developer base.

Critically, CfDs and corporate PPAs now function as complementary instruments: CfDs deliver long-term price certainty for a portion of output and underpin non-recourse financing, while PPAs continue to be used for additional hedging, bespoke offtake needs, and cross-border commercialisation – evidenced by the steady flow of recent corporate deals alongside the CfD rounds. This combined toolkit has reduced revenue risk, broadened lender participation, and matured the route-to-market options for Romanian renewables.

Challenges to Corporate PPAs: offtakers & penalties

Although credit institutions have shown a preference towards corporate PPAs, developers still claim they face some difficulties in finding credit-worthy offtakers that the credit institutions accept. In addition, similar to other EU countries, Romania transposed and further detailed the EU legislation on supplier's switching. This legislation grants the corporate client the right to terminate any supply agreement at any point in time. Termination penalties can be enforced by the developer/producer, provided they satisfy the conditions imposed by Romanian law. Among these conditions we note that the penalty cannot exceed the amount of the producer's direct economic losses caused by the customer further to the early termination of the contract.

Whilst corporate PPAs are beneficial in protecting against price strike, end-consumers are still hesitant about committing to a long-term, predetermined price. Especially given the volatility and alleged abuses of electricity prices by suppliers which some end-consumers have reportedly witnessed over the last couple of years. However, Romania's corporates also start to commit to sustainability initiatives, notably towards achieving net zero and Economic Social Governance (ESG) strategies.

Furthermore, it is worth noting that the challenge of finding credit-worthy offtakers seems to be diminishing as the market matures. The recent wave of PPAs signed by top-tier multinational corporations demonstrates a clear and growing appetite for long-term green energy contracts.

Looking ahead: a brighter future for Romania's Corporate PPA landscape

The outlook for Romania's PPA market is strong. Beyond the inclusion in the top 30 Corporate Power Purchase Agreement (PPA) index published by EY, the country is advancing decisively towards steady integration into the European energy market. Romania is expected to become a full member of the Association of Issuing Bodies (AIB) by 2026, which will facilitate the cross-border trading of GOOs issued in Romania. This final step, combined with a more stable regulatory framework, a deep pipeline of renewable projects, and willing corporate buyers, solidifies the country's position in the PPA market.

Serbia

Strong indicators that the demand for corporate PPAs will continue to rise and that the market will witness an increase in projects relying on the corporate PPA mechanism.

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While the Serbian corporate PPA market is not yet as advanced as the highly developed European ones, the need for wider implementation of corporate PPAs has been recognised by legislative and market players – not only by the commercial buyers, producers and sellers of electric energy, but also by financing institutions.

Corporate PPAs in Serbia: current regulatory landscape and market outlook

The introduction of corporate PPAs in Serbia is gaining clearer direction following the recent amendments to the Energy Law in late 2024. The changes introduce a legal distinction between physical and financial corporate PPAs: physical PPAs involve the actual delivery of electric energy to the end buyer, while financial PPAs serve as a hedging mechanism against price fluctuations without physical delivery.

In parallel, the amendments establish the concept of the active customer. These entities are able to produce, store, consume, and sell electric energy whereas energy activity is not their primary business activity. Importantly, active customers are expected to play a significant role in the development of corporate PPAs. By being allowed to enter into PPAs themselves and sell excess electric energy on the market, active customers expand the pool of potential participants and make PPAs a more flexible tool for companies pursuing decarbonisation.

Previous delays which hindered the expansion of corporate PPAs (such as the transmission grid bottleneck and the repeated postponement of market premium auctions) have now largely been overcome. The long-awaited second round of renewable energy auctions was successfully completed in 2025 (awarding more than 400 MW of new wind and solar projects). A key feature of the auction design was the requirement for developers to demonstrate offtake arrangements, which in practice was largely met through long-term commercial PPAs with the state-owned supplier EPS. However, as indicated further in the text, reliance on state owned offtakers will not be sufficient to secure offtake for the full capacity of new power plants under development, highlighting the need for private corporate PPAs to take root.

Despite these advancements, several challenges remain for the wider use of corporate PPAs in Serbia. Many companies are still unfamiliar with the mechanism or perceive it as overly complex, while the dominant role of EPS as the traditional supplier continues to limit broader market engagement. Addressing these issues will be crucial to unlocking the full potential of corporate PPAs in Serbia's energy transition.

The benefits of corporate PPAs to all stakeholders: outlook for the future

Regardless of whether they are physical or financial, private corporate PPAs, being bilateral agreements between private parties, offer significant flexibility. Despite being complex and full of technical details, these contracts can be tailored to meet the specific needs of both parties involved. This contrasts with agreements made with state-owned suppliers or those under government incentive schemes, which follow prescribed models and offer little to no room for negotiating terms.

Companies, especially big industrial players, now recognise that remaining passive when it comes to electric energy consumption is not viable for their businesses. They understand the importance of actively securing a reliable supply of electricity at steady prices to ensure their long-term operational stability. Beyond the need for a stable energy supply, companies are also feeling pressure to adopt environmentally friendly practices. This pressure comes from their CSR commitments, goals related to environmental preservation, as well as marketing and reputation considerations. As a result, they are increasingly opting for green energy solutions.

When it comes to producers of electric energy (i.e. investors), they also seem to realise that both corporate and commercial PPAs are crucial tools for ensuring a steady and predictable income from their energy projects. This predictability makes their projects more attractive, thus boosting the bankability prospects of these projects (at least for a certain amount of output).

This is because:

01

Selling electricity exclusively on the power exchange without first hedging against price fluctuations is not only risky but also typically not considered bankable by financial institutions.

02

The current state incentive scheme has a limited quota for awarding market premiums to wind and solar power plants – 1.3 GW in total (of which about 850 MW has already been allocated in the first two rounds of auctions). This quota is insufficient compared to the expected capacity of new power plants under development, meaning investors will likely need to use private PPA mechanisms to secure their offtake.

Finally, commercial banks, aware of Serbia's green goals to increase the electricity production from renewable energy sources – along with the expected surge in new projects – acknowledge that it is highly unlikely that all these projects will be self-financed by the investors. Recognising their crucial role in financing these projects, banks understand that they must adapt. Although the traditional model for financing renewable energy projects was based on feedin-tariffs which banks grew accustomed to, they have now accepted the new reality and are willing to explore different directions and adapt to new mechanisms. We are already seeing banks financing projects which have been awarded market premiums, and the first project financings based on commercial PPAs have emerged. This progression indicates that financings based on corporate PPAs with reliable and creditworthy offtakers is the logical next step.

Singapore

Singapore Green Plan 2030 charts ambitious and concrete targets to advance Singapore's national agenda on sustainable development.

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Singapore Green Plan 2030: Accelerating Toward Net-Zero

Singapore is ardently advancing its national sustainability agenda under the Singapore Green Plan 2030, with updated targets and milestones reinforcing its commitment to achieving net-zero emissions by 2050.

In February 2025, Singapore announced its 2035 Nationally Determined Contribution (NDC), aiming to reduce emissions to between 45 and 50 MtCO□e by 2035, building on its 2030 target of around 60 MtCO□e. The country expects emissions to peak in 2028, with key mitigation strategies including:

- Energy efficiency improvements across industrial sectors.
- Carbon capture, utilisation and storage (CCUS) technologies.
- Clean energy imports, projected to contribute up to 20% of total emissions reductions by 2030.

Achieving Net-Zero: The Role of Corporate PPAs in Singapore

To reach net-zero emissions by 2050, Singapore's electricity supply mix will need to evolve significantly over the coming years towards the "four switches" of natural gas, solar power, regional power grids and electricity imports, and low-carbon alternatives.

The government will work with companies, researchers, and the public to deploy at least 2 GWp of solar by 2030, enough to meet the annual power needs of around 350,000 households in Singapore or around 3% of Singapore's 2030 projected electricity demand.

As of March 2025, Singapore has already surpassed its 2025 solar target, reaching 1.5 GWp of installed capacity by the end of 2024.

The country is now on track to meet its 2030 goal of 2 GWp. Innovative solutions such as floating solar farms and rooftop installations continue to expand solar capacity.

Types of Corporate PPAs in Singapore: Onsite & Offsite

The corporates and industries in Singapore favour precise contracting frameworks for green energy, driven by financial, regulatory and sustainability objectives. There are mainly two types of corporate PPAs in the market: onsite PPA and offsite PPA.

Onsite PPA

The onsite PPA is currently the most prevalent contracting model in Singapore. Smaller projects are sometimes referred to as "behind the meter" PPAs as the solar energy is produced and consumed onsite in a private distribution agreement, separate from the national grid, without going through a meter. In terms of the documentation, the major areas of contention typically centre on the termination rights and termination payments, curtailment scenarios, and in some cases, the ownership of the green attributes (including renewable energy certificates or RECs).

There are also options for excess power to be sold to the national grid. The energy regulator (EMA) has helpfully simplified the regulations for a consumer to sell excess solar generated electricity back to the national grid.

As an Intermittent Generation Source (IGS), solar power output fluctuates depending on weather and environmental factors. This imposes an added burden on the national grid, and it is widely anticipated that the regulator will impose an intermittency pricing mechanism (IPM) in due course. Onsite PPAs will have to cater to this impending development and fairly allocate the risks between the operator and the offtaker.

Offsite PPA

The offsite PPA is nowadays referred to as a virtual (VPPA). This can be rather confusing as VPPAs are also used for demand management curtailment or used interchangeably with corporate PPAs.

In VPPAs, no physical energy exchange is involved, and the VPPA only documents a financial transaction. Typically, there is a CfD between the fluctuating spot price and the VPPA's predetermined strike price, thereby providing a hedge against future spot price fluctuations.

In addition, all Renewable Energy Certificates (RECs) and other environment attributes accruing from the green power generation passes to the buyer. RECS lower the buyer's gross market-based Scope 2 emissions from purchased electricity and entitle the buyer to claim its use of renewable electricity from a low or zero emissions source. RECs are typically registered with I-REC or TIGR in Singapore. Unbundled procurement of RECs or energy attribute certificates (EACs) which are purchased independently and separate from the underlying generation they are issued to and separate from corporate buyers' procurement of electricity for their operations are not common and not favoured by the industry.

The offsite PPA is typically more complex than the onsite PPA. There are no standard contracting terms and many of the commercial arrangements are variable and designed to suit the consumer's specific needs. The negotiations for an offsite PPA usually centre around the stability of the green power supply and the consequences of any shortfall in supply as well as the need for valid creation, registration and transfer of RECS and green attributes to the buyer. Obviously, in this case, metering is also key as the buyer pays based on metered injection into the grid, and many buyers require audits and contractual mechanisms to deal with metering inaccuracies. Termination rights and termination payments are also highly negotiated in most offsite PPAs.

Offsite PPAs are gaining traction, particularly in conjunction with power import projects.

Power import projects

Power import projects, where renewable power is produced offshore (e.g. Malaysia and Indonesia) and transmitted to Singapore via subsea cables, have spurred a healthy growth of VPPAs in Singapore.

The force majeure and change of law provisions in such VPPAs are usually highly negotiated as power import projects are susceptible to foreign law and operational risks. Transmission risks and political risks add a further dimension to the complexity.

Climate commitments

Renewable energy commitments, such as RE100, which bring together businesses committed to 100% renewable electricity continue to seek pathfinder means to attain their targets. In Singapore, RE100 companies have propelled the growth of self-generation from facilities owned by the companies as well as direct procurement contracts with generators via onsite PPAs and offsite PPAs.

RE100 companies, particularly those in the energy intensive industries are also actively exploring more novel forms of contracts with electricity suppliers. These include initiatives for a supplier agreement where a supplier procures green electricity from specified projects on behalf of the corporate buyer with the supplier signing on the PPA and the supply contract signed on as a ‘green tariff’. Other forms include retail supply agreements with the corporate buyer’s electricity retailer where the corporate buyer agrees to pay a per-kilowatt hour premium for the renewable electricity.

The consumer demand for green energy has surged whilst the local supply of green power purchase agreements remains in limited supply. Heavy energy users, such as data centre operators, have been canvassing for government support to make renewable electricity more accessible and to provide more certainty in the supply pathways.

The power of the sun

Singapore is one of the most solar-dense cities in the world today. Presently, Singapore has a solar capacity of around 1.5GWp as at the first quarter of 2025, surpassing its 2025 solar target of 1.5GWp ahead of schedule.

There is also a whole government approach to systematically aggregate the renewable energy needs of all public agencies and to regularly put this out to the market on PPA tender (Solar Nova programme), thereby creating a vibrant and enticing market for independent power producers.

Slovakia

Market liberalisation and general support for more free market mechanisms have cleared the way for more renewable energy sources in Slovakia, and the interest in Corporate PPAs across businesses continues to increase.

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State Subsidies in Slovakia

Slovakia promotes electricity from renewable energy sources (RES) through a system of state subsidies. Since 2019, the country transitioned from a feed-in tariff (FIT) model to a feed-in premium (FIP) system, following a successful auction process. The Electricity Market Operator (OKTE) plays a central role in administering these subsidies.

Under the FIP scheme, selected RES producers receive a premium on top of the market price for their electricity. Smaller producers (those generating under 500 kW), continue to benefit from the previous FIT model. Additionally, the Slovak RES Act allows businesses to operate "local RES" installations under 500 kW for self-consumption, exempting them from certain fees such as grid connection charges.

The Slovak Ministry of Economy is expected to launch a new call for applications to support the development of electricity sources, including renewables. This initiative aims to enhance system flexibility through investment in hydroelectric storage and battery systems.

One of the important conditions for participation in the auction and purchasing guarantees is to conclude a respective Agreement with OKTE on activities related to the issuance and use of guarantees.

Corporate PPAs in Slovakia: Emerging Potential Amid Regulatory Gaps

For several years, Slovak RES producers have primarily sold electricity to the grid and distribution system operators. The option of selling directly to the specific electricity buyer using a Corporate PPA has not been widely adopted in practice.

However, interest in non-subsidised RES projects and Corporate PPAs is growing. These agreements are increasingly viewed as a viable alternative to traditional grid sales and participation in state auctions. While Corporate PPAs are regulated under Slovak law with a fair degree of detail, some regulatory uncertainties remain. Importantly, these gaps do not prohibit the use of Corporate PPAs altogether.

To navigate this evolving landscape, more precise and locally informed PPA contract drafting is essential. This includes consideration of statutory laws and the operational rules of distribution system operators, who may play a role in the implementation of such agreements.

Overall, Slovakia's liberalised energy market and support for free-market mechanisms have laid the groundwork for RES expansion. With rising interest from businesses, it's likely that Corporate PPAs will gain formal legal support and clearer regulation in the coming years.

Spain

Spain's Corporate PPA Market in 2025: Navigating Market Transformation and Regulatory Challenges

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Spain's Corporate PPA market is undergoing a period of significant transformation in 2025, shaped by extreme price volatility, evolving regulations, and shifting market dynamics. These changes are prompting a rethinking of risk management strategies and contract structures across the sector.

Spain's European Market Position in 2025: A Year of Extremes

Spain's electricity market has experienced a remarkable shift in 2025, recording over 500 hours of zero or negative wholesale prices recorded, roughly 12.5% of all hours in the year. This remarkable statistic means that roughly one in every eight market hours has been settled with minimal or negative costs, fundamentally altering Spain's position within the broader European energy landscape.

What was previously considered an exceptional occurrence has become a regular feature as renewable energy sources, particularly solar and wind, expand their share of the electricity generation mix. Comparing 2025 to the previous year reveals accelerating change. The Iberian Daily Market first recorded negative energy prices in April 2024, but the frequency and duration of such events have multiplied exponentially.

Price Volatility and Market Implications for PPAs

The volatility characterising Spain's electricity market has created extraordinary challenges for PPA pricing and contract design. In this sense, the financial impact on PPA structures has been particularly severe. Solar photovoltaic assets in Spain generated approximately 20% of their production during zero or negative price periods in 2024. For projects operating under pay-for-production PPAs that exclude such pricing scenarios, this translates to 20% of normally contracted generation remaining unsettled under the PPA terms.

Assuming a contracted volume of 75%, this scenario implies a 14% reduction in total revenues per MWh compared to an identical PPA with zero or negative price inclusion at the same strike price. Wind energy projects face similar but less severe impacts, with onshore wind generation experiencing 10% of production during zero or negative price periods in 2024, resulting in a 7% decrease in total revenues per MWh.

Current Market Dynamics and Structural Challenges

Spain's current market dynamics are characterised by structural imbalances between electricity supply and demand, infrastructure constraints, and evolving industrial consumption patterns. The insufficient availability of storage technologies has emerged as a clear bottleneck, alongside limitations in interconnections with France and Portugal that restrict the export of excess clean electricity.

Industrial demand patterns have been significantly affected by elevated electricity costs. Industrial electricity demand has declined by 23% over the past five years, meaning that one in four items previously produced domestically are no longer manufactured in Spain.

Moreover, corporate PPA adoption faces regulatory barriers that limit market efficiency. All electro intensive industries have PPA contracts but encounter regulatory obstacles that hinder optimisation, as current regulations prevent having multiple suppliers per supply point. The electricity market structure combines short-term signals with long-term pricing, where ten-year contracts must accommodate daily adjustment services that distort final prices, which discourages long-term contracting and generates market uncertainty.

Regulatory Disruption and Market Impact

Spain's regulatory landscape experienced significant disruption in 2025 through the parliamentary rejection of Royal Decree-Law 7/2025. The Congress of Deputies repealed the decree, eliminating regulations that promised to strengthen the Spanish electrical system.

Key provisions were eliminated, including expanded radius for shared self-consumption, creation of self-consumption manager roles, public utility declaration for energy storage, and streamlined procedures for wind repowering. The package of measures designed to improve electro intensive industry competitiveness was nullified, including specific bonuses, tariff flexibility, and prioritised access to more affordable energy.

The rejection of RDL 7/2025 created an acute crisis in project development timelines.

The failure to extend critical regulatory deadlines from June to September 2025 has effectively paralysed numerous energy projects across Spain. Developers now lack the necessary legal framework to proceed with investments and construction activities, forcing many to halt project advancement entirely. This regulatory limbo affects billions of euros in potential investments, particularly impacting storage development and hybridised solutions that were expected to address market challenges. The timing proves especially damaging as these projects were strategically positioned to help resolve the structural imbalances contributing to Spain's negative pricing events and Corporate PPA market volatility.

Industry associations expressed concerns about the resulting regulatory uncertainty, with UNEF stating that the non-approval would negatively affect the sector, representing a lost opportunity with approximately 30 billion euros in investments at risk.

Risk Mitigation and Emerging Solutions

Despite significant challenges, market participants are developing innovative approaches to manage negative pricing realities. Generators have multiple options available, with those initiating PPA negotiations considering risk-sharing mechanisms between sellers and buyers.

Reconciliation clauses may include thresholds below which negative prices are excluded, limits on volumes or values settled at negative prices, or settlement based solely on differences between zero and strike prices. This type of clause is becoming increasingly common in Iberia, though it's essential that risks are correctly reflected in agreement pricing.

For assets without negative price protection, alternative strategies are emerging. Renewable energy projects can increasingly participate in auxiliary markets, with renewable sources representing 2.8 TWh of auxiliary services volume in 2023, a ten-fold increase since 2018.

Storage helps reduce economic curtailment and enables energy sales at higher prices, while also facilitating hybrid power purchase agreements that can generate premiums.

Outlook for 2026 and Beyond in Spain

Spain's Corporate PPA market outlook for 2026 and beyond is shaped by a mix of structural challenges and emerging opportunities. Analysts forecast continued downward pressure on prices, estimated at €61.05/MWh for 2026 and €59.50/MWh for 2027, as installed renewable capacity grows faster than the deployment of backup and storage facilities.

This imbalance is expected to drive innovation in energy storage, flexibility contracting, and new business models to support project bankability.

With negative prices now a recurring feature of the Iberian energy market, PPAs must evolve to incorporate pricing risk and ensure financial resilience.

Industrial demand recovery remains a key variable. Consumption levels were 23% higher five years ago, and regaining that momentum will depend on regulatory reform and competitive pricing. Industry proposals include revisiting electricity taxation, restructuring network and adjustment service costs, and enabling long-term contracts that are decoupled from spot market volatility and free from excessive regulatory barriers.

Sweden

Corporate PPAs have been used for some time in Sweden and continue to grow, particularly for solar and onshore wind, advancing an already appealing market.

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Corporate PPAs in the Swedish Energy Market

Corporate PPAs in the Swedish energy market should be viewed in the context of the integrated Nordic wholesale energy market, Nord Pool, and the Swedish Norwegian support scheme for renewable energy.

Integrated Markets & Cheapest Average Prices for Wind PPAs in Europe

Nord Pool facilitates price visibility and cross-border power sales between Sweden and other Nordic countries. Large corporates are increasingly entering into Corporate PPAs, buying power directly from renewable energy generators.

More long-term Corporate PPAs are being entered into in the Swedish market, with large-scale renewable production facilities within wind and solar increasingly common.

The Certificate System

The Swedish electricity certificate system, in place since 2003, became a joint Swedish Norwegian support scheme in 2012. The scheme reached its 2030 target of 46.4 TWh in March 2021. Plants commissioned after 31 December 2021 are not eligible for certificates, and the system will close by end of 2035.

As the certificate system does not guarantee specific prices, power generators face price risks. Corporate PPAs provide price hedging and enable project financing while offering corporates predictable energy costs and sustainable profiles.

Recent Developments and Current Trends in Sweden's Corporate PPA Market

Sweden's Corporate PPA market continues to gain momentum, with major global corporations such as IKEA, Google, Facebook, Amazon, Volvo and H&M actively signing long-term agreements.

Wind Power: Growth and Local Resistance

Wind power is Sweden's third-largest energy source and is expected to be the fasted-growing fossil-free energy contributor in the coming years, driving demand for corporate wind PPAs. However, wind projects often face strong local opposition due to concerns over habitat disruption and visual impact.

Notable recent developments include:

- Amazon and BP (2019): Announced a partnership to power Amazon Web Services data centres with 122 MW of onshore wind from Västernorrland, Sweden. Commercial operations began in 2024.
- Microsoft and NTR (2022): Signed a long-term PPA for 86 MW from the Norra Vedbo wind project, supporting Microsoft's goal to power its Sweden Central Azure cloud region with 100% renewable energy.
- Volvo Group and Vattenfall (2023): Entered a PPA under which Volvo will purchase 50% of the renewable electricity produced at the Bruzaholm wind park in Jönköping.
- Equinix and Neoen (2023): Concluded a PPA for 15 MW from the Storbrännkullen wind project in Ragunda and Sollefteå, marking Equinix's fourth PPA with Neoen under its global programme.

Solar Power

Solar PPAs are gaining traction across a wide range of industries in Sweden, from hospitality and retail to agriculture and logistics, as businesses seek to reduce emissions and manage energy costs. Innovative models, such as agrivoltaics, are also emerging, combining solar generation with traditional farming.

Notable developments include:

- Parks and Resorts and Svea Solar (2022-2023): Entered into a solar PPA for the Fjällskär solar park in Nyköping, inaugurated in May 2023.

The park is expected to generate 20 GWh annually, powering amusement parks during peak summer months.

- Axfood and Alight (June 2023): Announced a PPA for what was then Sweden's largest solar plant, with a capacity of 64 MW.
- H&M and Alight/Neoen (August 2023): Signed a larger PPA for a solar facility with a capacity of at least 90 MWp, marking a shift in the feasibility of large-scale solar in Sweden.
- H&M Group and Alight (2024): Signed long-term PPAs for three new solar groups in Blekinge, Södermanland, and Halland, with capacities of 13 MW, 6 MW, and 4 MW, respectively.
- Ljusgårda, Energi Försäljning Sverige AB and Svea Solar (June 2024): Announced a solar PPA for Europe's largest indoor farm, with a 13-hectare agri-voltaic solar park expected to generate 8 GWh annually from August 2024.
- Better Energy and Swedish Businesses (2024): Connected the 24 MW Studsvik Solar Park to the grid, with an annual production capacity of 25 GWh. Three 10-year PPAs were signed with Nolato, Scan Global Logistics, and Vestre.

Nuclear Power

In a notable development, Fortum and Vargön Alloys signed a five-year nuclear PPA for approximately 0.4 TWh annually, demonstrating the growing role of nuclear PPAs alongside renewable PPAs.

The Future of Investments in Renewables

Sweden has seen record-breaking growth in solar and wind investments. The electricity certificate system reached its 2030 target of 46.4 TWh nearly a decade early, underscoring the pace of development. In 2024, wind power increased by 18%, reaching 40.3 TWh and accounting for 24% of electricity production, while solar grew by 31%, from 3.1 TWh to 4.0 TWh, bringing total installed solar capacity to around 5 GW.

Sweden's long term energy goals include 100% fossil-free energy by 2040 and net zero emissions by 2045, aligned with the EU's target of 42.5% renewables by 2030. Onshore wind continues to dominate due to the higher costs and regulatory complexity of offshore wind. While production and capacity are expected to double in the coming years, the number of turbines will remain around 5,000, peaking in 2027. However, complex permitting processes remain a major obstacle to further expansion.

The current government has scrapped offshore wind grid connection subsidies, but launched an investigation to minimise offshore wind permitting times. In March 2024, the government expanded the offshore wind inquiry to consider state-designated sites for licensing. The results, presented in November 2024, had dramatic consequences: 13 offshore wind applications in the Baltic Sea, representing nearly 32 GW of potential capacity, were rejected due to defence concerns. Only the Poseidon project on the west coast was approved, expected to generate 5.5 TWh annually.

Rejected projects included major proposals from leading developers:

- OX2's 5.5 GW Aurora
- Ørsted's 1.5 GW Skåne
- RWE's 2 GW Södra Victoria
- Statkraft's 2.5 GW Baltic Offshore Beta

These decisions significantly limit the future potential for offshore wind PPAs in Sweden, shifting focus back to onshore wind, solar, and emerging technologies.

Market Position Changes

In 2024, the European renewable energy PPA market entered into a new phase of expansion, with 19 GW of newly contracted capacity. However, Sweden's position in the rankings shifted. Poland, the United Kingdom, and Greece now round out the top five markets, replacing France and Sweden, which held third and fifth place respectively in 2023.

Despite this change, Sweden's underlying market drivers remain strong. The phase-out of the certificate system, growing corporate sustainability mandates, and the need for price hedging continue to support PPA demand – particularly in the solar and onshore wind sectors.

Market Development and Regulatory Changes (2024-2025)

- Sweden's energy market saw significant developments during 2024-2025:
- Wind power increased by 18%, reaching 40.3 TWh (24% of electricity production).
- Solar energy grew by 31%, from 3.1 TWh to 4.0 TWh.
- The average system price dropped to 41 öre/kWh, with negative prices occurring during 8% of the year's hours.
- Sweden's power balance improved, with a surplus of 600 MWh/h during normal winter conditions.
- The introduction of flow-based capacity calculation on 29 October 2024 altered trading conditions, increasing price differences between electricity areas.
- Net electricity exports rose by 16%, reaching 33.2 TWh.

A major regulatory shift occurred in November 2024, when the government rejected 13 offshore wind applications in the Baltic Sea (representing 30 GW of capacity) due to defence concerns, significantly limiting future offshore PPA opportunities.

In response to market volatility and increasing negative price occurrences, Sweden is now exploring innovative PPA structures, including multi-buyer and hybrid PPAs. These models are particularly attractive to data centres and other energy-intensive industries seeking flexible, long-term energy solutions.

United Kingdom

An established contractual model and safe regulatory environment have made the UK an attractive, albeit comparatively expensive market for Corporate PPAs.

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Corporate PPA Market in the UK

Since the Labour Party came to power in July 2024, the UK government has ramped up its commitment to Net Zero, unveiling plans to achieve clean power by 2030 and launching Great British Energy, a publicly owned company, to accelerate investment in renewable energy. A spate of funding announcements has followed, from investment in homegrown energy in the 2025 Spending Review to plans to double current investment levels in clean energy industries to over £30 billion per year by 2035.

The government's approach builds on the introduction of the wide-ranging Energy Act (2023) (EA) introduced by the previous Conservative government. The EA aims to unlock £100 billion in private investment for energy infrastructure, focussing on renewable generation projects; the government say that £40 billion of private investment was announced in the past year. The EA is encouraging investment in the UK PPA market by enhancing market stability and seeking to provide a more robust regulatory framework. The EA also provides support for the purchase of power on the wholesale market through increased consumer protection and regulation.

Since Labour announced the removal of the de facto ban on onshore wind projects last year, the government has unveiled plans for the UK to host at least 27 GW of onshore wind by 2030. The move is part of the government's aim to double onshore wind energy capacity, treble solar and quadruple offshore wind by 2030. This would suggest a strong outlook for UK PPAs in the years to come.

Floating solar looks set to play a greater role in the UK's PPA market in 2026 and beyond. This year, Associated British Ports submitted a planning application for the UK's largest floating solar project with a generating capacity of up to 40MWp. As an island nation which is forecast to add between 3-3.5GWp-dc of solar capacity in 2025, there is ample opportunity for adoption of the technology in the UK.

Grid Constraints Limiting the PPA Market

A longstanding issue in the UK PPA market has been the constraints on the national grid system which transports and delivers the UK's electricity. National Grid has been facing a series of challenges with getting its customers connected to the Grid: increasing application volumes; changes in the technology mix (including increased electrification) and diversity of customers adding complexity to the application process and putting a strain on aging infrastructure; and lengthy connection times (in February 2025, there were reportedly over 700GW of projects seeking connection, far exceeding the level required to deliver clean power by 2030 or Net Zero by 2050).

This limits the PPA market as many new generation projects are simply financially unviable as wait times delay projects producing income. To address these challenges, the energy regulator for Great Britain, Ofgem, approved the National Energy System Operator (NESO)'s grid reform plan, the TMO4+ (also known as "First Ready, First Connected"). As part of TMO4+, applications for grid connection were "paused" at the start of 2025 and later given seven weeks to submit evidence of project readiness and alignment with the capacity targets in the Clean Power 2030 Action Plan. NESO has now begun the task of reorganising the more than 3,000 projects in the connection queue and as it starts to reissue grid connection offers in the autumn, pressure on the UK PPA market should start to ease.

Incentivising Renewable Energy Projects: Contracts for Difference

2025 promises to be a strong year for the UK government's CfD auction, following the award of CfDs to projects totalling 9.6 GW in 2024 across solar, onshore wind, tidal and offshore wind in the sixth round of the scheme. A CfD represents a long-term contract between a low carbon electricity generator and the government-owned Low Carbon Contracts Company. The CfD guarantees a MWh price floor thus incentivising renewables investment and protecting generators from sudden changes in the market.

Following past criticism of the CfD scheme, the government announced reforms which came into effect in the seventh round in 2025. These include risk-reducing CfD phasing for floating offshore window projects, new eligibility for repowering onshore wind and the lengthening of CfD duration from 15 to 20 years. From 2026, government intends to implement a fixed timeline for appeals to make the process clearer.

While CfDs help to incentivise renewable energy projects, generators must go through a highly competitive auction process which only occurs once per year. Corporate PPAs, on the other hand, are bespoke commercial arrangements that can be negotiated and entered at any time of year. We understand from conversations with clients that the announcement of CfD allocation windows can make some counterparts reluctant to engage in Corporate PPA negotiations until the allocations are announced. This is to avoid what they perceive as wasted time and money on PPA negotiations only for the generator to be granted a preferable CfD. Now that the government CfD scheme is a yearly occurrence, it will be interesting to see whether this has a cyclical effect on the Corporate PPA market.

Developments and Trends

Market Position and Notable Deals

The continued prevalence of UK headquartered and operating organisations in the membership of the RE 100 (a group of companies pledging to meet 100% of their energy requirements from renewable sources) indicates that the market will continue to grow as businesses seek to meet these commitment aims in the most commercially sensible manner.

May 2025 saw the state-owned National Rail enter into its first Corporate PPA with EDF. The 14-year supply of solar energy at a fixed annual cost will help to decarbonise the UK's railway stations. The 64 GWh contract, which will power around 15% of the electricity required by the firm's offices, depots and manages stations, demonstrates how bodies like National Rail can use their buying power to drive clean power generation for the country. Hot on its heels came the announcement of an 80 GWh solar PPA between EDF and another public transport body, Transport for London.

Despite the perceived issues of affordability in the UK Corporate PPA market, there are positive signs that smaller offtakers are having success with aggregated PPAs. In April 2025, five co-operative independent society members (ISMs) – Lincolnshire Co-op, Scotmid Co-op, East of England Co-op, Southern Co-op and Central Co-op – signed a 10-year Corporate PPA with RWE, the UK's largest power generator to supply electricity to over 400 locations across the UK.

At the other end of the scale, in early 2025 renewable energy developer OnPath Energy shared plans to invest £1 billion in clean energy projects in the UK over the next five years. The company owns and operates ten onshore wind farms across Scotland and northern England and intends to build a portfolio including solar and energy storage projects – just this year, it received planning permission for a 200 MWBESS in Bathgate, Scotland. Meanwhile, The Crown Estate – which manages the seabed around England, Wales and Northern Ireland recently unveiled £400 million in funding for the UK's offshore wind

supply chain, with a particular focus on enabling infrastructure. The Crown Estate is set to partner with Equinor and Gwynt Glas (a joint venture between EDF Renewables UK and ESB) to deliver two new floating windfarms off the coasts of Wales and South West England.

PPA Structures

The aggregated nature of the electricity grid and the regulatory framework have meant that the large majority of Corporate PPAs in the United Kingdom have been concluded using the "sleeved" structure and this remains the most popular structure in the UK market.

Whilst the "synthetic" PPA approach popular in the US has been used in the past in the UK, notably by Marks & Spencer who adopted a CfD structure for 20 projects, these remain in the minority within the UK market.

We have also begun to see more deals (as mentioned above) in the "hybrid PPA" model which covers both a power project and a battery storage system.

The "mini-utility" model, where suppliers offer a range of 100% renewable tariffs from their generation projects to business and domestic consumers, also continues to gather momentum in the UK. This ties in with Octopus Energy's "Electric Match" product which matches energy consumers renewable electricity demand needs (in half hourly intervals) with generators generating during that same period. Octopus Energy, an arms-length supply company of Octopus Investments, the UK's largest solar investor, is now one of the UK's major domestic energy suppliers. Other notable examples of the mini-utility model include Ecotricity and Good Electricity. These types of models could see a shift from more traditional corporate PPA structures.

Our Energy & Utilities Group

Fuelling the future, powering change

Amid a global energy crisis and major regulatory, political, and environmental calls for clean and renewable energy, the Energy & Utilities sector is changing rapidly. As a result, new policies in major markets are set to propel annual clean energy investment to more than USD 2 trillion annually by 2030. Our International Energy & Utilities Group, consisting of over 250 lawyers, has the experience and expertise to advise on this transition to cleaner energy and leverage the challenges and opportunities presented by these developments. Clients turn to us for our energy industry knowledge and our ability to solve complex problems, provide commercial, industry focused advice, protect their business and enhance its value in order to meet the transforming needs of the energy sector. Wherever you are in your energy transformation journey, we can support you.

We advise on projects across:

- Renewable Energy
- Energy Storage
- Energy Networks & Grids
- Hydrogen
- Energy Solutions
- Energy Digitalisation
- Mining & Minerals
- Oil & Gas

Corporate PPAs: An International Perspective 2025

Leaders in the Energy Transition

The renewable energy sector is experiencing unprecedented growth worldwide, driven by technological innovation, evolving regulatory frameworks, government support and corporate commitments to achieve net-zero targets. This rapidly evolving industry and the shift to clean energy presents complex legal challenges, which our dedicated legal specialists can help you to overcome.

We have extensive experience advising on the full spectrum of renewable energy projects, including:

- Wind (both onshore and offshore)
- Solar
- Biomass
- Biomethane
- Emerging technologies (BESS, EVs and green hydrogen)

With over 500 green economy cross-border deals completed in recent years, our expert team has developed unparalleled expertise in efficiently structuring and managing renewable energy transactions and financing projects. We understand every stage of renewable energy project development, from initial feasibility studies and site acquisition through construction, commissioning, and long-term operation. Our comprehensive approach covers all legal and regulatory requirements using a sophisticated risk-based methodology that ensures projects are delivered on time and within budget. We can support you to develop, build, operate, finance and invest in projects.

We advise on a wide range of legal issues within the renewables and cleantech sector including advice on land lease, project contracts (EPC, O&M), service agreements, permitting, and marketing agreements (PPA, direct marketing agreements, optimiser agreements). Our experience furthermore includes advice on the use of carbon credits and trading schemes, solar and wind feed-in tariffs, unbundling of European energy supplies and protection and maximisation of intellectual property assets.

Our clients include developers, landowners, contractors, energy buyers, regulators, banks and corporate purchasers of energy.

Corporate PPAs

Our industry experience has meant we have closely tracked the emergence of PPAs of all types (including route-to-market, corporate (physical and financial) and private wire). This includes longstanding experience on corporate PPAs where global multinational corporations are buying electricity directly from renewable developers on a physical or financial basis. This completely revolutionises the market for renewable power from subsidy and utility driven to market demand driven. We are at the forefront of this market, having developed and negotiated innovative contract and business PPA structures.

Bird & Bird's lawyers advised on some of the earliest Corporate PPAs (in 2007 in the Netherlands and in 2009 in the UK). We have become an experienced advisor on these structures globally. Since Bird & Bird's initial engagement on some of the earliest Corporate PPAs, the appetite for Corporate PPAs has grown considerably.

Market recognition

We have one of the leading international energy practices in the world. Our Energy & Utilities Group has been recognised by the Clean Energy Pipeline Legal League Tables 2025, ranked as the Most Active Legal Adviser in both Clean Energy Project Financing and M&A transactions, resulting in being named as one of the most Influential Law Firms in Renewable Energy.

Bird & Bird ranked second place in both categories, highlighting our integral role in supporting clean energy development and financing. Bird & Bird took the lead in deal count, advising on 88 transactions and ranking second by influence for clean energy project financing.

In the M&A rankings, Bird & Bird were once again the most active firm by number of deals (86), placing second by influence. The 2025 edition of the Clean Energy Legal League Tables report ranks the most influential law firms in the global renewable energy market. Clean Energy Pipeline's ranking system is based on the work of the law firms as legal advisers on Project Finance and M&A transactions in the renewable energy sector in 2024.

Our energy transition work has won us The Lawyer's Energy & Infrastructure team of the year in 2021 & the European Corporate Team of the Year Award at The Lawyer European Awards in 2022.

No.1 ranked as the Most Active Law Firm for Clean Energy M&A

No. 3 ranked Most Active Law Firm for Clean Energy Project Financing

Clean Energy Pipeline, 2025

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