Schneider Bird&Bird

JOINING THE CLUB: Collaborative Offsite PPA Structures for Renewable Energy Buyers



Bird & Bird, an international law firm and leading renewable energy practice, and Schneider Electric Energy & Sustainability Services (ESS) partnered to develop this guide. It is intended to be an educational resource for global renewable energy buyers of all sizes, looking to access offsite PPA structures.

In this paper, we will introduce the fundamental concepts of PPAs, examine the opportunities and challenges presented by collaborative smaller sized or aggregated transactions, and provide practical recommendations for buyers interested in pursuing these types of PPA structures.

> **Number 1 law firm** in renewable energy M&A deals globally by volume



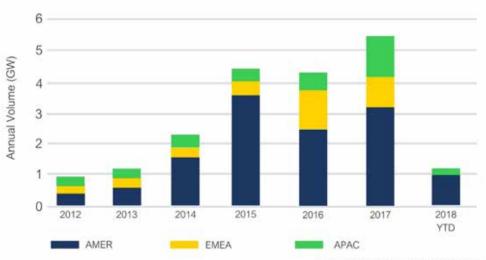
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Introduction

Wholesale renewable electricity purchasing by commercial, industrial, and institutional (C&I) buyers has increased dramatically in recent years, driven predominantly by the increasingly affordable cost of renewable power worldwide. Today, corporations, cities, and universities are actively seeking opportunities to be an offtaker of wind and solar power via offsite, utility-scale power purchase agreements (PPAs).

While corporate purchasing has been concentrated in the U.S., where favorable federal subsidies have decreased the price of renewables, there is sector growth in every geography, with new markets steadily opening to PPAs throughout Europe and Australasia.



Global Cumulative Corporate Power Purchase Agreements

Source: Bloomberg New Energy Finance 2018

To date, most PPAs have been executed on an enterprise-scale by large organizations. The favorable economics of renewables have led smaller buyers to also become interested in PPAs, but these buyers often do not carry the load or credit requirements to execute large scale transactions. There are several approaches to purchasing a smaller portion of a PPA, including (1) *aggregation*, when several buyers group together to benefit from a PPA, (2) *joint tenancy*, where a small slice of a project is available for offtake (where one or more large buyers have already purchased a PPA) and (3) *reseller contracting* where a counterparty purchases a PPA and resells it in smaller quantities to secondary buyers.

As the technologies improve and the market matures, these types of solutions allow a greater number of interested buyers to participate in this market. The possibility for smaller offtakers to collaborate with others also attracts great interest. Collaborative transactions have been successfully used in many markets including the U.S., Mexico and the Netherlands, and there is strong potential for further development of these solutions.

Understanding Corporate PPAs

A PPA is a long-term contract between an electricity generator and an electricity purchaser, or offtaker. Under a corporate PPA, companies purchase their electricity directly from a generator or through a utility. This purchase is typically bundled with Energy Attribute Certificates (or EACs, such as GOs, RECs, and I-RECs), and is dependent on the contracting mechanisms offered by the domestic energy market.¹ The PPA may be for a percentage of the electricity generated by a renewable energy project, or for the total customer volume. Depending on how the contract is structured and the relevant regulatory regime, the purchase can serve as a financial hedge against electricity market volatility. Typically, the contracts are for a fixed-price over a long duration, between 10 and 20 years, and historically have required a minimum size, depending on the market.

PPA Drivers for Generators and Offtakers

Renewable energy projects are usually financed by third parties (via debt from banks, for example), which requires the establishment of a stable income stream for the project over time. In many markets, PPAs from utilities, C&I buyers, or other counterparties provide the required income stream to the generator to support financing. As a result, PPA contracts must be structured in such a way that the generator, offtaker, and financier may all benefit.

To secure financing, generators seek creditworthy offtakers able to commit to long-term offtake. This provides the price certainty necessary to secure repayment of the debt to the financing parties. The PPA contract is a risk-sharing mechanism between the parties; in some instances, there's more risk for the offtaker and in others, for the generator or financier.

C&I buyers are willing to commit to these long-term, offsite offtake agreements for six primary reasons, depending on the market:

- 1. Affordability: locking in a competitive price for renewable power
- Fixed price certainty, which can stabilize energy costs and may result in less price volatility in core products
- 3. Diversification of power sources resulting in security of supply without having to asset manage a renewable project
- 4. The ability to meet carbon reduction goals (such as science-based targets) and/or renewable energy procurement commitments (such as RE100)
- 5. Reporting, disclosure, and marketing of the sustainability profile of the corporate through the associated project environmental attributes.
- Material impact: the ability to claim a role of leadership in bringing a new build renewable energy project—and its associated emissions reductions—to market (sometimes referred to as additionality)

Corporate drivers can differ based on location. In some markets, the ability to use the PPA to make environmental claims may be of primary importance, while in other markets, the ability to reduce costs and stabilize energy budgets may be more motivating.

Several corporate PPA structures are possible, depending on the different roles of the relevant market.

^{1.} Learn more on the differences between a traditional and a renewable PPA here.

Direct / Sleeved / Retail-Sleeved Structure

In the direct, or "sleeved", PPA structure, wholesale electricity is sleeved through the grid by either the utility, a third party, or by the relevant grid operator. [Where the sleeving is a licensed function of the grid operator, there is no need to engage a utility in the structure].

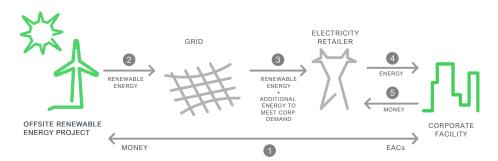
For example, in the U.S. and the U.K., a corporate enters simultaneously into the PPA with the generator and a back-to-back retail supply agreement with the utility, which in turn sleeves and delivers the electricity to the corporate.

In the Netherlands, where the sleeving is done by the relevant grid operator, the corporate can enter the PPA directly with the generator without the involvement of a utility. The balancing of the portfolio is then performed by a balancing party, or as in a more traditional structure, by a utility.

However, direct PPAs can be geographically restrictive, as they require the corporate offtaker to have facilities and load corresponding to the grid through which the power is delivered. Also, in many geographies such as the U.S., retail electricity choice (i.e. retail electricity deregulation) must exist for sleeved PPAs to be possible, unless the regulated utility is willing to put together a special program.

Direct PPAs do have some key advantages, including direct delivery of power via the grid (which some companies prefer due to the transparency and co-benefits of this arrangement), hedge and covariance risk effectiveness, and a more tangible connection between the generator and the corporate offtaker.

The sleeved structure is currently the most commonly used corporate PPA model in Europe. It is also prevalent in the U.S.



Retail (Direct) PPA

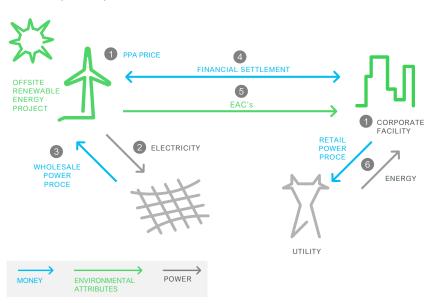


Financial / Virtual / Synthetic Structure

The synthetic, or virtual, PPA (VPPA) structure is a financial contract for differences, also known as a fixed-for-floating swap. Under this structure, the power generator and the offtaker enter into a contract for an agreed upon fixed price for power. The power produced by the generator is then sold into the grid at the prevailing market price. The difference in the fixed price versus the market price is then financially settled between the generator and the offtaker. These contracts are typically settled monthly for all hours or intervals in that month, and the net positive or net negative difference in price determines in which direction the financial settlement will flow. The project developer pays the difference to the offtaker when the agreed upon PPA price is below the market price, and vice versa. The virtual structure is the most commonly used corporate PPA type in the U.S. and virtual structures are becoming more common in other markets including Europe, Australia, and Mexico.

VPPAs are flexible and can help companies aggregate their own load within a market under a single PPA, regardless of whether individual facilities are in regulated or deregulated utility territories. The VPPA is a separate financial contract that, in fact, does not affect the traditional electricity supply for a company directly. The company continues to purchase electricity from the utility or retail provider and, *in addition*, enters the VPPA for renewable energy. The VPPA provides two distinct benefits to the corporate offtaker: (1) the financial result of the VPPA (which, when positive, can be used as savings against electricity spend) and (2) the carbon/sustainability benefits via the EACs, which are typically bundled with the contract for differences. The relationship between the (1) above and a company's electricity expenditure is important to understand. If these are closely tied, a VPPA could be an effective hedge against price volatility.

As the contract for difference qualifies as a financial instrument, there are some important elements to consider, such as accounting treatment. In Europe, most companies utilize the IFRS accounting standard, which can complicate the treatment of a VPPA compared to U.S. GAAP accounting principles.² In practice, it is important for internal corporate teams to involve accounting and treasury early in the PPA process to anticipate and avoid any roadblocks.



Financial (Virtual) PPA

2. It is recommended that the VPPA contract be written so that the structure does not qualify as a lease or financial instrument for IFRS purposes. For more information or advice on financial treatment of VPPAs, please *contact us*.



Collaborative PPA Solutions

To date, the majority of offsite corporate PPAs have been relatively large in size. Buyers of these contracts have high electricity consumption, are creditworthy, are comfortable with long-term contracts, and are familiar with risks to achieve the economic and environmental benefits from the PPA.

However, smaller buyers—or even larger buyers that are looking for smaller projects—are an emerging customer class among corporate PPAs.

In many cases, the corporate may feel that its consumption is not enough to participate in a PPA. There certainly is an element of truth to this; there is a threshold under which offsite PPAs of any size probably do not make sense. However, there is a range where smaller sized PPA solutions can work and, depending on the market, there are a few proven collaborative contract structures that can be leveraged. These structures can be designed in various ways depending on the market, corporate energy consumption, and risk tolerance.

Collaborative Structure Examples

Aggregation (Buyer Consortium)

The Dutch Wind Consortium—AzkoNobel, DSM, Google, and Royal Philips—made news in 2016³ when it announced that it had executed two utility-scale, offsite wind PPAs as a joint venture. While not the first of its kind, the Consortium is noteworthy because it brought together four major players already active in the corporate renewables marketplace. In the U.S., several successful buyers' consortiums have executed offsite deals, each with a university as one of its members.⁴

In this aggregation model (variously known as a buyer consortium or club), corporate buyers unify to achieve similar goals: aggregate their energy offtake, achieve an economy of scale, and contract together to optimize energy prices and the offtake profile. The aggregation model also allows for the pooling of resources and development of purchasing models that are easily replicable.

^{3.} Learn more about the Dutch consortium from the Business Renewables Center.

^{4.} For example, MIT, ASU, and American University.

While attractive, the aggregation model is not without its challenges. Chief among these are the legal and relationship needs for any joint venture: partner selection, governance, exit arrangements, and avenues for conflict resolution.

- Partner Selection: It is important that the partners have aligned goals and ideas on how to achieve those goals—in terms of risk tolerance, responsibilities, and processes. Considerations include size/energy load requirements, competitive pressures, geographical location of partners, maturity level of partners, and creditworthiness.
- Governance: As with every joint venture, contractually structured or through a special purpose vehicle (SPV), the success stands or falls with its governance. It is important for all members of the buyer consortium to have a similar mindset and agree up front about how to manage certain situations. It is also important to have a balanced risk allocation between the consortium partners. It goes without saying that the more partners that participate, the more important and difficult the governance may be.
- Exit Arrangements: The joint venture will contain the appropriate exit arrangements for all parties, and it is critical that the financing banks have a clear understanding as to what will happen if one or more consortium partners decide to leave. The repercussions for the consortium will depend on whether the market will be able to secure the steady cash flow for the project.
- Conflict Resolution: The consortium members should agree on how to resolve conflict situations before they arise. A logical first step is to invite the senior management of all the members to meet and try to resolve the matter at hand. If, after a certain period, no agreeable resolution is achievable for the members, other measures should be explored. Once conflicts arise, members might benefit from different solutions, therefore it is important to agree upon these steps in advance so that the members can focus on the conflict itself rather than on the process to resolve the conflict.

Readily Meets Goals	Requires Consideration
• By collaborating with like-minded, similarly mature	• Aggregated deals increase administrative
buyers, aggregation can achieve an economy of	burden, as both the performance of the PPA, and
scale that makes finding the right sized project at a	the performance of the joint venture, must be
competitive price highly feasible.	maintained.
• Working together and creating a purchasing model	Consortium members must demonstrate and
has the potential to accelerate the execution of offsite	maintain similar creditworthiness to equitably
PPAs in the aggregation model.	partner in the joint venture.
 The cohesion required to execute the aggregation model also leads to the ability to advance renewable energy development in a powerful, material way— reinforcing claims to additionality. 	• Not all consortium members may be comfortable with the duration of the contract term, or other key deal terms. This must be considered in the negotiations, and may significantly complicate PPA negotiations.

Anchor/Joint Tenancy

In a joint tenancy structure, the corporate offtaker contracts for a small portion of a project that already has a larger-percentage offtaker (either another corporate, or utility, also known as an *anchor tenant*). In this scheme, the corporate is the sole purchaser of the small project percentage, and is responsible for executing their own PPA (which could be a sleeved or virtual PPA structure).

This scenario still requires the buyer to demonstrate creditworthiness and risk tolerance, just as a larger-scale PPA will do. However, the relatively smaller size of the piece, and a developer's desire to find offtake for the smaller percentage, can work in the corporate buyer's favor. For instance, if most of the project is financed by the anchor tenant, it may be easier for a smaller buyer to contract the PPA with lower credit or for a shorter contract length. However, in some cases the developer may be reluctant to be flexible on deal terms with smaller buyers—or for that matter, offer a compelling price—since a very small offtake agreement may not help the project achieve financing.

Readily Meets Goals	Requires Consideration
• As projects executed under the anchor tenancy model are effectively stand-alone, the administrative burden of executing these projects rests solely with the corporate purchaser. This will likely accelerate the process over the aggregation model.	• As buyers are subject to choosing from projects with available extra capacity, this may constrain the selection. In turn, this may result in less favorable project price or terms.
 Unlike the aggregation model, buyers taking on smaller pieces of projects with extra capacity are subject only to their own creditworthiness and project terms, which may be more favorable. 	 The timing of project execution may be outside the control of the purchasing organization, who is subject to market availability of smaller project tranches.
	• Although small buyers may be able to make a claim to material leadership by offtaking a portion of a project (which may not have been fully financed or operational otherwise), their lesser role in the origination of that project may be subject to scrutiny.

Buyer Be Aware: Aggregation Solutions by C&I Anchors

You might have heard of aggregation solutions being structured by anchor tenants. Generally a large company, the anchor buyer contracts for a PPA and then invites smaller players to buy portions of that deal. While these deals have the benefit of removing barriers to executing smaller PPAs, it is important to be mindful of the restrictions they place on smaller offtakers. Although they may be sold as a way for smaller buyers to gain access to the broader PPA market, the reality is that by offering pieces of a pre-negotiated deal, tenancy options give smaller offtakers very little flexibility and minimal choice regarding major deal terms, advisors and external counsel used, etc. As a buyer, it is important to treat anchor tenancy projects as any other product in a market of increasingly vast choices; consider alongside other projects, structures, and developers to evaluate whether the deal truly meets your goals.

Reseller Contracting

An emerging model available to smaller buyers is that of pre-contracted, resold tranches of a larger PPA. In this scheme, a large-scale buyer—such as a corporation, commodity bank, or wholesale electricity provider—posts credit, and potentially even financing, to purchase the total offtake from a project. This offtake is then divided into smaller parcels that are then resold to other counterparties, including corporates and retail electricity providers.

While this is an attractive option to small buyers—in theory, the work required to execute this type of resale is less than a full PPA—it is not without its cautions. For example, in this model, the secondary corporate counterparty will have a difficult time making a claim to additionality, or material impact, which has become a critical component for many companies seeking to support new build projects to demonstrate leadership.

Under the resale model, the secondary buyer may also be constrained by the terms of the contract. Whereas a single buyer or buyer consortium has the flexibility to source the best project at the best price, the secondary offtaker has less influence over the PPA terms and performance risks. While this could potentially work to a buyer's advantage—by offering a reduced term length or less risk—it could also mean that the project profile and performance don't meet the buyer's goals.

Readily Meets Goals	Requires Consideration
 Purchasing portions of a resold project may be easier, as the administrative burden lies with the original purchasing entity. Purchases can also be made at the buyer's leisure, from available projects. 	• The ease of this type of purchase comes with a potential cost. Buyers are heavily restricted in the type and location of projects, and the project price and terms may be unfavorable in comparison to the open market.
 Resold projects may also have much greater flexibility in both creditworthiness and terms, and may be less restrictive than other PPAs. 	• A role of material leadership is questionable in this model—as it could be demonstrated that it was the original purchasing entity, and not the secondary offtaker, who was responsible for construction of a new project and the associated emissions reductions.



Getting Started with Collaborative PPA Solutions

One challenge for buyers considering these types of PPAs is where to begin. We suggest the following checklist to help get you started.

- Determine whether a PPA is appropriate for your organization in the first place by assessing your company's goals and interest in renewables. What are your key drivers? They may include additionality, leadership, market competition, GHG/carbon reduction, cost savings, hedging electricity price volatility, internal or external stakeholder/shareholder pressures, or more.
- Assess your power consumption in the market in which you are considering a PPA, what you are paying for that power, and how you pay for it (for example, do you have retail choice?).
- ✓ Identify the electricity price forecast for your region(s). Seek to understand the trends that will impact those energy prices over the next 5 20 years.⁵ Would fixing a price today make sense if it were possible?
- Determine whether the cost and volatility of your electricity consumption is affecting the price of your core products. Would stabilizing the cost of your electricity benefit your product price?
- Explore available projects in your region(s) for a sleeved PPA, or projects outside your region(s) for a virtual PPA. Connect with others that have successfully transacted on PPAs. You can gain access to project developers, peer companies, and market intelligence through platforms like Schneider Electric's <u>NEO Network</u>.
- Determine which approach makes sense for your situation. Is your organization capable and creditworthy enough to execute an offsite PPA on its own? If not, are you able to take advantage of a collaborative model like aggregation, joint tenancy, or resold PPAs to meet your goals?
- ✓ If considering the aggregation structure, begin by identifying co-offtakers with similar corporate portfolios and maturity, and by seeking assistance from the outset to help you construct an appropriate, successful joint venture.
- ✓ If the aggregation structure is not for you, investigate whether there are existing projects either in need of additional offtakers or for resale—that possess similar terms to the projects that are of interest to you.
- Ensure that you have a thorough understanding of all project terms, prices, and risks before executing any contract(s).
- If you determine that offsite PPAs of any structure are not a fit for your organization, consider investing in onsite generation, green tariffs, or the purchase of unbundled EACs to meet your goals. Keep in mind that the market changes rapidly and new products and technologies are continuously emerging and becoming cost competitive.

Conclusion

It is an exciting time to be a corporate energy buyer. Diverse solutions to meeting renewable energy and carbon reduction goals—for buyers of any size, scale, or location—are increasingly available. While this explosion of opportunity means that the right solution is inevitably available, it takes diligence and commitment to identify and execute a successful deal.

Now more than ever, careful analysis of all potential renewable energy options is the key to finding the right structure. Whether a direct or virtual PPA, at an enterprise-scale or smaller, with one or multiple offtakers, working with trusted partners makes all the difference.

^{5.} No matter the type of PPA you are considering, it is critical to seek the help of legal counsel and a buyer's advisor to ensure you receive the most favorable deal terms and fully understand the risks involved.

About Bird & Bird

Bird & Bird LLP is an international law firm. We combine exceptional legal expertise with deep industry knowledge and refreshingly creative thinking. We have over 1,200 lawyers in 28 offices across Europe, the Middle East and Asia, as well as close ties with firms in other parts of the world.

Our Energy and Utilities team of over 150 lawyers spread across our network advise on energy and utilities matters across all of our practice areas. As an international team, our sector approach is not broken down by offices but into sub-groups that focus around particular aspects of the Energy and Utilities sector. A key focus area for us is renewable energy, covering solar, wind, biomass, anaerobic digestion, energy from waste and energy efficiency.

We believe we have one of the leading international renewable energy practices in the world, and have recently been ranked as the most active legal advisers on both renewable energy M&A and project transactions in Europe. We are a cohesive and expert team who understand how to work together to complete renewables projects to international investor standards.

This industry experience has meant we have closely tracked the emergence of Corporate PPAs, where global multinational corporations are buying electricity directly from the developers of wind and solar parks. This completely revolutionizes the market for renewable power from subsidy and utility driven to market demand driven. We consider we are at the forefront of this market, having developed and negotiated innovative contract and business PPA structures, from direct/physical PPAs to synthetic/virtual PPAs.

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About Schneider Electric Energy & Sustainability Services

Schneider Electric is leading the Digital Transformation of Energy Management and Automation in Homes, Buildings, Data Centers, Infrastructure and Industries. With global presence in over 100 countries, Schneider is the undisputable leader in Power Management – Medium Voltage, Low Voltage and Secure Power, and in Automation Systems. We provide integrated efficiency solutions, combining energy, automation and software. In our global Ecosystem, we collaborate with the largest Partner, Integrator and Developer Community on our Open Platform to deliver real-time control and operational efficiency. We believe that great people and partners make Schneider a great company and that our commitment to Innovation, Diversity and Sustainability ensures that Life Is On everywhere, for everyone and at every moment.

Schneider Electric's Energy & Sustainability Services helps thousands of companies in more than 100 countries buy energy smarter, use energy more efficiently, and drive sustainable growth.

ESS' Renewables & Cleantech team is a pioneering global supplier of renewable energy and clean technology products and services—including the New Energy Opportunities (NEO) Network(TM)— for the C&I sector. For more than 15 years, the team has been providing unparalleled experience and expertise on strategic renewable energy procurement. The ESS team has advised on more than 4 GW of new wind and solar capacity and is the recognized global leader in cleantech consulting, serving more clients than any other procurement advisor, worldwide.

Contact us to learn more about how strategic renewable PPAs can accelerate your energy goals.

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Appendix: Key Terms of Corporate PPAs

- Term Corporate PPAs are long-term contracts, often between 10-15 years, depending on whether the renewable source is solar or wind. Solar linked PPAs tend to be shorter than wind linked PPAs. This is to enable the affordability of the set price(s) formula and to secure the repayment of debt. In countries where there is still government support for the development of renewable projects, the term may be linked to such support schemes.
- **2. Pricing** Pricing for corporate PPAs can vary widely by country, region, technology, subsidy schemes, developer, and more. Depending on the different phases of the development of the project, different pricing formulas may be agreed. A competitive process can assure the best project at the best price.

One of the key features of corporate PPAs is that the corporates upgrade their sustainability profile. If this is a goal, companies must ensure that in addition to the power from the contract, they also take possession of the Energy Attribute Certificates⁶, or environmental attributes, of the power. This can also affect the PPA price.

3. Grid issues – It is important to ascertain the (timely) connection to the grid as the revenues of the project will be needed to secure the repayment of the debt, for which the payment obligations usually start at the completion date of the project.

Also, any transmission congestion issues in the grid need to be reviewed in order to facilitate timely sale of the power onto the grid to secure repayment of the debt. The PPA contract should address risks and foresee solutions to any anticipated issues including possible grid outages.

- **4. Change in law risk** Many national systems, including European schemes, are currently changing. It is therefore important that the corporate PPA address an appropriate risk allocation.
- **5.** Forecasting Given that the production of renewable energy is subject to volatility, it is important to agree to strict forecasting rules and a penalty if these are not properly followed. The penalty can be linked to the additional costs that are incurred by the other party.
- 6. Credit support Depending on the credit rating of the relevant corporate, there may be a need to provide further security, such as parent company guarantees or bank bonds. A corporate may also require a guarantee from the generator, however, given that the generator often does not have a strong balance sheet, this may be a difficult requirement.

^{6.} Learn more about global EACs in our Definitive Guide.