

# OFFSITE POWER PURCHASE AGREEMENTS (PPA)

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Offsite power purchase agreements (PPAs) are renewable energy (RE) contracts between a project developer (and likely backed by a financial counterparty) and a company, where the RE installation is not sited at the location of the company's electricity usage. PPAs can deliver the energy physically to a company through the grid or can be financially-settled transactions (i.e. virtual PPA or vPPA). As companies pursue ambitious RE goals or want to use renewable energy as a meaningful cost stabilization tool in their energy portfolios, onsite renewable installations alone cannot typically offer meaningful scale. Companies then look to offsite RE projects to procure larger volumes and achieve better economies of scale. These buyers sign offsite PPAs with the project owner for long-term supply of energy (either physically delivered or financially-settled) and renewable energy credits (RECs).

## WHY SHOULD YOU USE IT?

- Your company has meaningful renewable energy goals that cannot be met with onsite RE installations alone, and utility options are either unavailable or unattractive (e.g. above market costs, no renewable energy additionality claims can be made, locks company in with a retail supplier for a long-term contract, etc.).
- Your company has load in deregulated electricity markets and can pair a properly structured offsite PPA with your retail procurement strategy to utilize the PPA as a cost stabilization and, often at today's PPA prices, a cost reduction tool.
- Your company does not have sufficient options for onsite RE (either due to facility types, load or facility leasing), and is seeking more flexibility. Using Virtual Net Metering is a common option for companies that are unable to utilize their site, or have exhausted the capacity at their sites, but want to continue supporting local renewable energy. While the utility often keeps the RECs generated, these programs typically offer very attractive utility bill savings.

## WHO ELSE IS USING IT?

Initially, the corporate buyers of renewable energy were very large companies. Early movers included Walmart, Amazon, and Google. Today, however, there are companies and institutions of every size participating in offsite PPAs. Below are some of the more recent announcements of companies signing offsite PPAs:

- [Walmart](#) signed three PPAs with EDPR for 233 MW. The purchases through these PPAs will produce enough electricity to power more than 60,000 average homes in Illinois and 15,000 average homes in Indiana with renewable energy each year. Additionally, these wind farms will bring economic benefits to their respective regions and states in the form of jobs, landowner and tax payments, and money spent in local communities.
- [Target](#) signed a 100 MW PPA from Infinity Wind (now Engie) for Kansas wind power. Recharge News reported that this PPA will supply the energy needed to power 150 Target stores in the area. This was Target's second wind PPA, having already signed a PPA in 2016 with Starwood Energy Group for 40 MW from a 211 MW Texas wind farm



- [General Mills](#) signed a PPA with Renewable Energy Systems (RES) for 100 MW of its Cactus Flats wind project. The project's RECs will enable General Mills to reduce its Scope 2 emissions as part of its target of sustainable emission levels across its global value chain by 2050. [General Motors](#) is procuring the remaining capacity from this project.
- [Novartis](#) recently announced a PPA in Texas with Invenegy to supply 100 MW of renewable energy to the grid and to reduce Novartis greenhouse gas emissions by more than 220,000 metric tons per year.
- [General Motors and Bloomberg](#) signed PPAs from a 185 MW project in Illinois owned by Enel that is expected to generate around 570 thousand MWh annually. Bloomberg's PPA secures 17 MW that will go towards supporting its target of becoming 100% renewable by 2025, while GM will purchase 100 MW to support its manufacturing facilities in Ohio and Indiana.
- [The J.M. Smucker Company](#) entered into a PPA with Lincoln Clean Energy for 60 MW from its 230 MW Plum Creek Wind Project in Nebraska. Starting in 2020, the wind energy produced from the Plum Creek project will address approximately 50 percent of Smucker's total electricity use.

## WHAT ARE THE ADVANTAGES?

### SCALE AND IMPACT

For most companies, meeting ambitious renewable energy goals is not feasible using onsite generation alone. Offsite PPAs – whether they are physical, financial (vPPA) or virtual net metering (community solar) – allow companies to fulfill large commits such as [RE100](#) or [Science-Based Targets](#).

### COST SAVINGS AND STABILITY

PPAs, if structured properly, can provide both cost savings relative to fossil fuel energy as well as protection against electricity price volatility. This requires a company to create a holistic energy strategy that does not look at retail energy procurement and renewable energy procurement in silos. One of the keys to this pairing of strategies is to use advanced analytics to understand how different contracts either add to, reduce, or do not change the overall volatility of a company's energy costs.

### SUSTAINABILITY LEADERSHIP AND REPUTATION

Signing an offsite PPA at a sizeable scale (e.g. 10 MW+) shows the company's commitment to increasing renewable energy on the grid. Many companies incorporate details about these significant transactions in their corporate social responsibility (CSR) reports, investor reports, and through public relations, marketing, and social media channels.

## WHAT ARE THE DOWNSIDES?

### GEOGRAPHICALLY DIVERSE OR REGULATED UTILITY TERRITORY FOOTPRINT OF FACILITIES

Companies usually prefer to enter into PPAs close to their electricity load, and ideally, in deregulated markets that would allow them to use the PPA in synergy with their retail procurement strategy. However, many companies have dispersed load across the U.S. or are behind regulated utilities, so there are no PPA options available nearby. This requires that the company enter into a transaction in a different market. It is very important that the company understands how that market may perform relative to the market(s) in which they use electricity. An experienced advisor with advanced analytics to evaluate these transactions is critical to ensure the company understands what risk this may pose for their energy portfolio as a whole.

### COMPLEXITY

PPAs are complex, structured transactions, and only become more intricate given corporate needs and preferences such as those mentioned above. Most companies use an experienced advisor, such as [Edison Energy](#) or [Schneider Electric](#), as well as external energy counsel. It is critical to choose an advisor with advanced analytic capabilities in order to navigate these complexities and advise on how the PPA fits within the company's broader portfolio. Companies also need to invest internal time and resources to get management on board and ensure the organization is properly educated before entering into a long-term transaction.

### TERM LENGTH

Many corporations are used to procuring energy through short-term contracts (e.g. 2-3 years). While renewable energy from existing assets is often available for short tenor contracts, renewable energy from new-build facilities usually requires at least a 12-year term. Many companies want to



buy from new facilities in order to make renewable energy additionality claims, which entails entering into a long-term contract. Navigating this temporal hurdle while staying attuned to the changes within specific markets over time is challenging but can be properly addressed with the help of an advisor or industry organization.

## WHO SHOULD YOU TALK TO NEXT?

- Reach out to companies that have already executed PPAs. These companies can provide advice, lessons learned, and tips on how to build internal alignment to complete a successful transaction.
- Connect with industry organizations that bring corporate renewable energy buyers together and provide introductory materials to help get companies started. Some examples of these organizations include the [Business Renewables Center](#) and [Ceres](#).
- Talk to external law firms that have an opinion on who is best at structuring transactions, as well as internal senior treasury and finance professionals who understand how to think about financial risk and structured transactions.
- Seek insight from energy advisors, such as [Edison Energy](#) or [Schneider Electric](#), who have advised on many of the corporate renewable energy transactions done in the market to date.

## IN THE MARKET

Historically, offsite wind procured at large volumes (i.e. 100MW+) was the only economic option for commercial and industrial (C&I) buyers, which limited the pool of companies that could participate. Today, smaller contract volumes of wind are available (i.e. 10 MW) and solar has become competitive in parts of the country – both through traditional PPAs and through Virtual Net Metering (Community Solar) PPAs.

The renewable procurement landscape has evolved quickly in the short time it has existed. The market continues to mature, and buyers are becoming more sophisticated as they enter their second, third and fourth deals.

While companies initially sought the lowest PPA prices

returned from a competitive solicitation process, many companies are realizing now that the value of the agreement is more important than the price alone. Value is how the PPA, or other renewable energy procurement, fits within the company's entire energy portfolio. Does it help to stabilize costs or exacerbate exposure in a given market? Value is also looking beyond the expected financial performance of a PPA, or portfolio of PPAs, to the distribution of financial outcomes that may occur depending on market factors over the course of the PPA term. This is why companies are increasingly engaging with advisors that have developed advanced analytics to model PPA and energy portfolio performance to ensure procurement decision-making is done in a comprehensive, risk-adjusted manner.