



ENERGY EDGE
strategic energy solutions



Retail Suppliers are Changing the Game for Renewable Energy Buyers

Houston | Dallas | Los Angeles | Orlando | Edinburgh

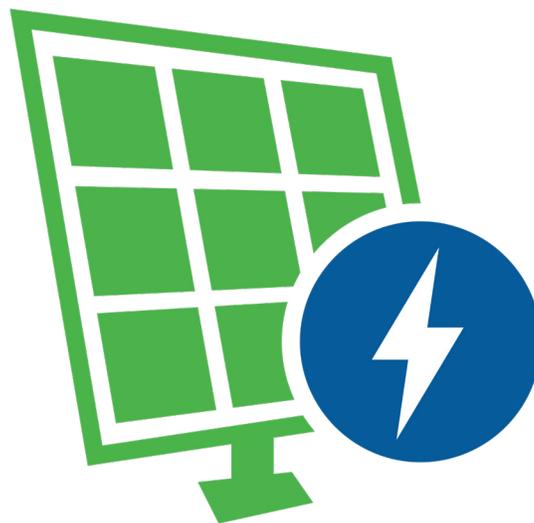
Retail electricity suppliers are changing the game for many corporate renewable energy buyers. Historically, retail suppliers have not been active in offering renewable solutions other than Renewable Energy Credits (RECs) to energy consumers; however, that has changed. The products and solutions offered by retail electricity suppliers now are eliminating many of the challenges that have made buying renewable energy difficult for some. Shorter term contracts, smaller volumes, managing imbalance risk and integrating the renewable purchase with load serving obligations are just some of the solutions that are creating new options for corporate buyers. The retail supplier community is able to provide these solutions, while offering locationality, at prices competitive with direct Power Purchase Agreements (PPAs).

This article will explore in detail the role retail suppliers are playing in helping corporate buyers source renewable energy, the various products and solutions being offered, and the challenges associated with evaluating and comparing these offers to renewable PPAs.

Evolution of Retail Suppliers in the Renewable Market

A decade ago, the primary solution for corporate buyers who wanted to purchase renewable energy was RECs. At the time, solar and wind PPAs were quite expensive when compared to grid power, and corporate adoption of PPAs was difficult to economically justify. Retail energy suppliers were the natural provider of RECs since they were already providing electricity to the energy consumer. In the 2000's, end users who purchased RECs were viewed as having gone the extra mile to support the production of renewable energy and were widely considered as being green.

However, in the early 2010's two things changed in the market. First, the cost of wind and solar projects began to decline. Driven by efficiencies in manufacturing and lower material costs coupled with the existing federal tax incentives, utility scale renewable projects were beginning to look economically interesting. Second, there was an increasing awareness among corporations and their stakeholders regarding climate change and the impact their carbon footprints were having on the environment. This led some corporate buyers to want to do more with respect to purchasing renewable energy than simply buy RECs. They wanted to do something that made a clear statement about their commitment to becoming more sustainable and reducing their carbon footprint.



Naturally, corporate buyers turned to their retail energy supplier for a solution. However, for a variety of reasons, retail suppliers were not able to offer products or solutions that met the new needs of these corporate buyers. This created a gap in the market which gave rise to the corporate PPA. As corporate adoption of renewable PPAs rapidly increased, retail energy suppliers watched as more and more of their customers were purchasing renewable energy from third parties. However, just as the corporate PPA changed the game for end-use consumers several years ago, the game is changing once again. This time, it is the retail supplier community who is bringing innovation into the renewable market.

What Changed in the Retail Supplier Community

As discussed above, during the 2000's, retail energy suppliers were largely unable to offer many of the renewable products and solutions that large corporate buyers were seeking. This was primarily due to the risk policies of most competitive retail suppliers that required them to back-to-back energy sales to end consumers. Meaning, retail suppliers didn't first purchase electricity from the market and then look to resell it. Instead, they first found customers who wanted to buy electricity and then would source what the customer needed from the market (i.e. "back-to-back" energy sales). However, to sell renewable energy from projects either under development or in construction, the retail supplier would have first had to commit to purchase the renewable energy from the project and then look to resell it. This was inherently risky to them.

As the demand for renewable energy continued to grow in the market, retail suppliers recognized they needed to either find a way to offer meaningful solutions to consumers or be completely left out of this market transformation. Many have now become comfortable with the notion of "going long" on renewable energy and reselling it to end-use consumers. The emergence of financial institutions in the renewable space, firms like CitiBank and Bank of America, have also helped retail suppliers develop renewable solutions.

Additionally, and most importantly, retail suppliers have also realized they are uniquely positioned to offer certain value propositions that end consumers cannot get when purchasing directly from a renewable project. It is these benefits that are really changing the game for corporate buyers. The following pages describe some of the unique solutions being offered by retail suppliers.



Evaluating Renewable Energy Purchasing Options

Corporate renewable energy buyers have more options to achieve their sustainability goals today than ever before. While this article focuses on the innovative solutions being offered by retail suppliers, renewable PPAs, virtual PPAs, and onsite renewable projects are still strategies that should be considered. However, with increased options comes increased complexities to understand and evaluate.

*Developing a comprehensive renewable energy strategy that seeks to marry an organization's objectives with the market solution that best meets these needs is paramount. There is no one-size-fits-all solution as different buyers have different goals, stakeholder requirements and risk tolerances. It is important to take time and thoroughly understand the differences between strategies before making a purchase. **Energy Edge is positioned to help your company with those decisions.***

Below is a checklist Energy Edge uses when helping a client think about what is important to achieve with a renewable energy purchase.

Attribute	Must Have	Nice to Have	Indifferent
Locationality			
Additionality			
RECs included			
Budget certainty			
Marketability			
Simplicity of transaction			
Contract term optionality			
Generation and load matching			

www.energyedge.com

Retail Supplier Solutions for the Corporate Renewable Buyer

Integrating Renewable Purchase with Load Serving Obligations

A unique value proposition being offered by retail suppliers is the ability to integrate a renewable purchase with how a customer physically consumes electricity. No longer do consumers have to manage both the complexities of a renewable PPA and a separate retail power contract. Now, consumers can enter into one contract for the purchase of renewable energy and retail services. Retail suppliers use the renewable energy to physically serve the customer's load. Unlike virtual PPAs, often standalone contracts that are financially and physically disconnected from where and how a consumer actually uses power, an integrated approach provides budget certainty to the buyer since the renewable energy serves as a hedge against load requirements.

Managing Price Risk

An additional advantage to integrating a renewable energy purchase with a broader retail power contract is that the retail supplier can offer one fixed price for some or all of the energy consumed. Under a traditional PPA approach, the buyer would have one price associated with the PPA and then a set of costs associated with serving their load. Retail suppliers are able to firm and shape both the renewable energy and any additional energy needed to meet load obligations. For the risk adverse buyer, this eliminates many obstacles that might have previously prevented them from purchasing renewable energy.

Simplicity of Contracting

Purchasing power from a retail supplier is a much simpler transaction than buying power directly from a renewable project. The retail supplier has already negotiated and entered into a PPA for the renewable energy. The complexities and risks of those contracts fall upon the retail supplier to manage and are not born by the buyer (for the most part, more on this later). Most of the suppliers who are offering integrated renewable solutions are doing so through traditional retail power contracts. This results in a much shorter and simpler contract for buyers to review compared to a renewable PPA.

Renewable Project Delay & Force Majeure Risk

As mentioned above, the complexities and risks of renewable PPAs, such as project delay risk, force majeure, ISO curtailment and guaranteed energy production generally are not being passed through to the end user but are instead being managed by the retail supplier. This is a big risk mitigating factor for many buyers. Not all end-use consumers have been comfortable accepting these risks, and the uncertainty around these provisions has prevented many corporate buyers from purchasing renewable energy. With that said, it is important to understand the terms and conditions of each retail supplier's offer as not all are approaching these risk elements in the same manner. For example, some retail suppliers accept all risk of the renewable generator failing to produce the contracted quantity of energy for any reason and are obligated to replace the renewable energy while maintaining the contract price. Other retail suppliers may accept some risk, like a project delay for a period or production variations due to weather, but will pass other risks to the buyer like force majeure risk or a project default.



CASE STUDY | The North Texas Municipal Water District provides vital water, wastewater and waste management services to more than nearly two million people in North Texas and consumes 300,000 MWhs of electricity per year within ERCOT's deregulated electricity market. These costs represent a significant portion of the District's annual operating budget and ultimately impact the water prices charged to the communities it serves across North Texas. The District was interested in a long-term solar purchase to serve as a hedge against future spend and engaged ENERGY EDGE to assist with their evaluation and purchase.

ENERGY EDGE helped the District understand the differences between a virtual PPA, a physical PPA and the attributes associated with various renewable products being offered by the District's two incumbent retail providers. Ultimately, the District decided a retail supplier was better positioned to manage certain risk elements that otherwise would have fallen upon the District if they entered into a traditional PPA structure. [To learn more about the District's decision, click here.](#)

Retail Supplier Solutions (cont'd)

Smaller Volume Sales

Another value proposition being offered by retail suppliers is their willingness to sell renewable energy in smaller volumes than what project developers are traditionally willing to do. As recently as a few years ago, project developers were looking to sell the output of renewable project in 50 MW or larger transactions. Equivalent retail transactions are widely available today in quantities as small as 10 MW. Additionally, the retail supplier is willing to sell these smaller volumes close to the price usually associated only with large volume purchases. This is providing opportunities to medium and small corporate buyers who previously were not able to access cost effective renewable energy.

Shorter Term Contracting Options

Historically, direct PPAs required a 20 plus year term commitment to the project developer. Over the years this has shortened, and 10 to 15-year terms are now commonplace. This long-term commitment has been a big deterrent for many organizations. However, retail suppliers are now offering even shorter contract terms to buyers. Five- and seven-year contracts offered by retail suppliers are eliminating the challenge of making a long-term commitment for many buyers.

Navigating the Renewable Energy Market Going Forward

Since 2014, there has been a seven-fold increase in the amount of renewable energy purchased by corporations. Standalone, this figure is impressive by any standard. Yet, this is only the beginning of a larger transformation. More and more corporations are committing publicly to reduce their carbon footprint, and the demand for renewable energy has never been greater than it is today. Increasing the options for corporate buyers will only increase the pace at which this transformation will occur, and retail suppliers are beginning to play a key role in this evolution.

As mentioned above, it is important for anyone who is interested in purchasing renewable energy to first fully understand all the options available to them. Whether it is a physical PPA, virtual PPA, behind the meter generation or an integrated retail solution, the economics and commercial attributes of each option should be considered. What meets the sustainability goals and risk profile of one organization may not be the right path forward for another.

For more information on the products and solutions being offered by the retail supplier community or for assistance in developing an integrated renewable energy strategy, visit www.energyedge.com.



ENERGY EDGE
strategic energy solutions