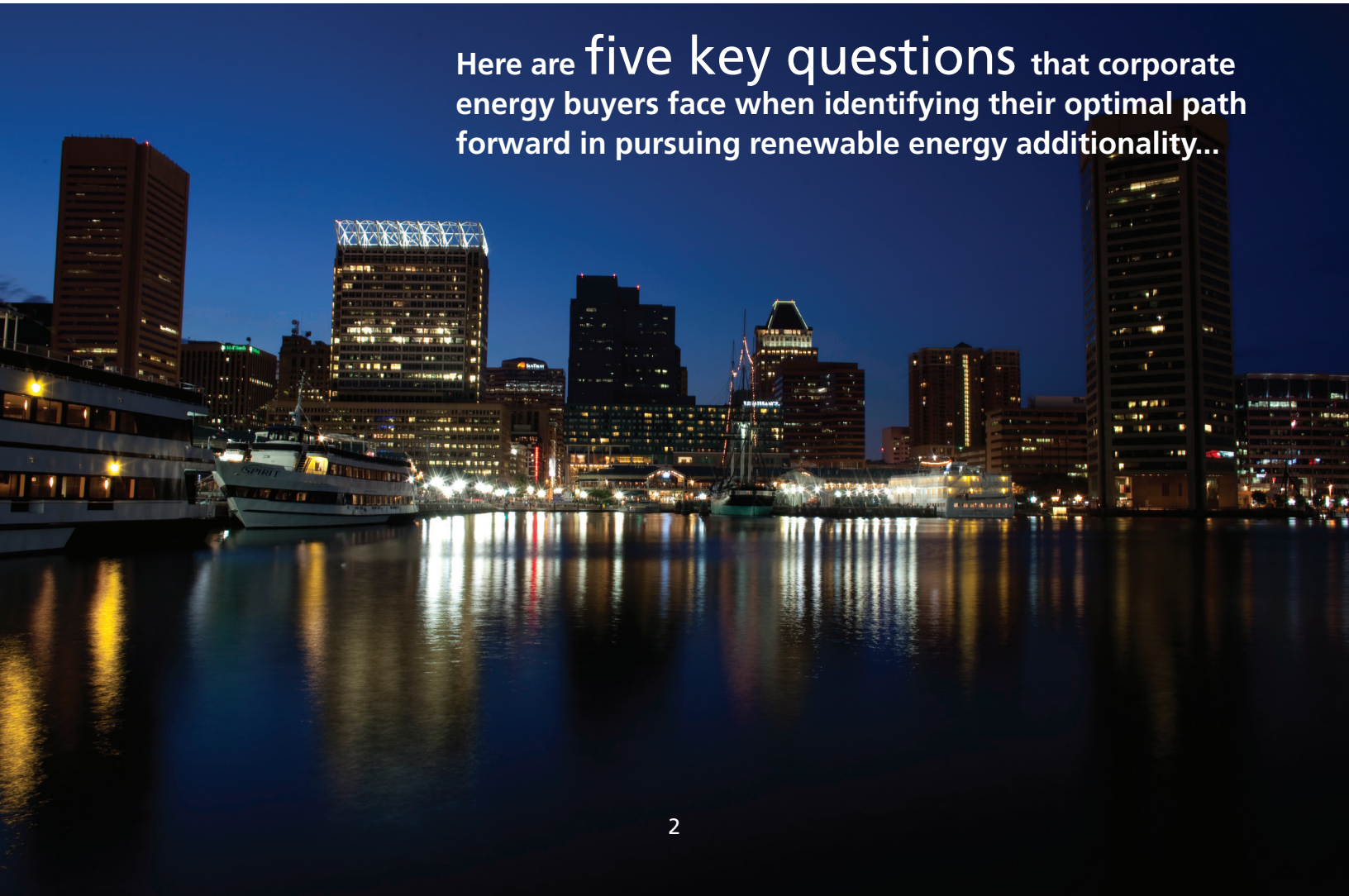
EDF renewable energy

How to Move Beyond RECs and Accelerate Your Company's Commitment to Clean Energy Additionality

The corporate energy buyer's primer for achieving additionality with your renewable energy purchasing

ACHIEVING ADDITIONALITY

While the purchasing of Renewable Energy Certificates (RECs) has historically been a popular method among corporations to make claims of their carbon impact mitigation efforts, customers are increasingly demanding that carbon reduction "additionality" be achieved by their suppliers' renewable energy efforts. Customers know that, by demanding renewable energy "additionality" among their suppliers, they can effectively see past those suppliers who merely purchase REC certificates and identify which suppliers actively reduce the world's carbon footprint by enabling the construction and addition of new renewable energy sources into the world's electricity grid.



Here are five key questions that corporate energy buyers face when identifying their optimal path forward in pursuing renewable energy additionality...

1 How should I pay for my renewable energy additionality?

...more than three-quarters of corporate buyers have pursued their renewable energy additionality via long-term PPAs...

You and your company's Chief Sustainability Officer might agree on everything under the sun when it comes to pursuing such a noteworthy cause as renewable energy additionality, but realistically your idea will never gain the necessary traction without the support of your CFO.
There are two main purchasing options for a corporate buyer to choose from in its pursuit of additionality: outright purchase and ownership of the electricity generation facility (wind farm, solar array, etc.), or the execution of a long-term Power Purchase Agreement (PPA) with the energy seller.

While some corporate buyers prefer the outright ownership of the renewable energy facility for various reasons, including their ability to monetize tax credits or their leadership's philosophy on real asset ownership, more than three-quarters of corporate buyers have instead chosen to enter into long-term PPAs (usually 15 years or longer), which can be structured as a physical energy deal or a purely financial contract also known as a "Virtual PPA" (for more info on the mechanics of a Virtual PPA, please refer to the column published on the SED website, October 2016). The ownership option requires the buyer to incur significant up-front capital expense (often disliked by the CFO) to complete the purchase of the renewable energy facility, whereas the PPA deal structure allows the buyer to pay for the renewable energy as it is generated during the life of the contract, effectively capturing more of a pay-for-performance deal spirit.

2 How should I pick where to geographically locate my renewable energy additionality project(s)?

Corporate buyers tend to prefer to locate their renewable energy projects as close to their physical electric load as possible, and often their load profile is dispersed over a wide geographic footprint. But due to the fact that renewable energy project economics favor the largest-size deals possible, it is usually not economically feasible to execute several smaller-scale projects throughout the corporate buyer's geographic footprint, and often times the pursuit of onsite renewable energy projects (such as rooftop solar) is not feasible due to physical space restraints or lease restrictions. For these reasons, large-scale offsite renewable energy projects are the most popular choice for tackling renewable energy additionality, but selecting a location is not as straightforward as picking an offsite wind or solar project located next to the buyer's largest electric load pocket.

Corporate buyers are typically driven to select projects located in the geographic markets where the most financially-optimal deals are available to them. This is primarily based on comparing the project's offer price (i.e. PPA price in dollars per MWh) with the floating market price. While the optimal economic project may not be as closely located to the buyer's load as one would prefer, corporate buyers typically ensure that the project's location is at least within the same country or regional electric grid (regional ISO, in the United States) as its electric footprint, or located within the "dirtiest" electric regions from a carbon emissions perspective. This ensures a strong sustainability message from a public relations standpoint, while providing the flexibility needed to secure the most economic additionality projects.

> ...selecting a site is not as straightforward as picking the wind or solar project located nearest to the buyer's largest electric load...

3 What technology should I choose for my renewable energy additionality project(s)?

...the technology type will be overwhelmingly determined by economics...

Whether your additionality project is powered by wind, solar, biogas, geothermal, or another renewable energy technology, the integrity of your corporate carbon reduction claim will be strengthened by demonstrating that the project is additional. As with the selection of its geographic location, the technology type of your corporation's additionality project will be overwhelmingly determined by economics. In certain geographic regions such as California, the U.S. southeast and the desert southwest, solar is currently the most economic renewable energy source, but this is in stark contrast to the regions located throughout America's heartland where wind power is often the most economic form of energy available (renewable or otherwise) to corporate consumers.

4 Which supplier should I choose for my renewable energy additionality project(s)?

The renewable energy supplier market is extremely fragmented in the U.S. and internationally, so it can seem daunting to feel confident that you've selected the best renewable energy supplier to work with. Seeking out renewable energy suppliers based on their volume of experience (both in terms of years in business as well as the number of successful projects contracted and constructed) is certainly a key component to an educated selection. However, it is equally important to pay close attention to the volume of projects a supplier has successfully executed with non-utility customers such as a corporate buyer, because corporate buyers typically have a lower risk appetite than do utility buyers, and some suppliers are more flexible than others in this regard. Also, working with a supplier who has the financial strength needed to build the project without requiring third-party construction financing will increase the certainty of your additionality project actually getting built, as opposed to hitting roadblocks due to a lack of construction funding.

If your corporation's renewable energy goals include international markets, one additional consideration when selecting a supplier is to determine the extent of their overseas experience. One popular strategy is to forge a successful partnership with the same renewable energy supplier in both the U.S. and international markets in order to continue working with a provider who is already familiar with the specifics of your corporate energy goals and risk limitations.

...forge a successful partnership with the same renewable energy supplier in both the U.S. and international markets...

5 Do I need a trusted external renewable energy advisor? If so, then how do I choose one?

While many corporate buyers of renewable energy additionality successfully select projects and execute deals without the support of an external consultant or broker, many corporate buyers do avail of such assistance and the marketplace of such advisors is almost equally as fragmented as that of project suppliers.

An easy first step for any corporate buyer considering renewable energy additionality would be to contact a non-profit organization dedicated to educating corporate buyers and providing a marketplace where buyers could directly interact with renewable energy suppliers, advisors, and fellow buyers.

Ultimately, the likelihood of enlisting an external advisor will depend on your corporate team's bandwidth and willingness to put in the time to roll up your sleeves and educate yourself on the market and on the deal process, which has become easier to do in this increasingly mature corporate renewable energy market. The service fees charged by an external consultant (usually in the form of a success fee paid by the seller) are not insignificant, and its impact to the overall project economics should always be evaluated before deciding to contract a consultant.

> ...the impact of the consulting fee to the project economics should always be evaluated...

This guide is written by Michael Pariser. Michael manages commercial and industrial customer relationships for EDF Renewable Energy's wind, solar, and battery storage offerings throughout the United States, and has successfully sourced and structured long-term Power Purchase Agreements with several Fortune 500 renewable energy buyers. From 2014-2016, Michael served as a Founding Executive Board Member of the Rocky Mountain Institute's Business Renewables Center. Michael holds a B.S. in Finance and International Business from Georgetown University and an MBA from Rice University. He resides in San Diego with his wife Katherine and their two young children.

ABOUT EDF RENEWABLE ENERGY

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