# INTRODUCTION TO THE VIRTUAL POWER PURCHASE AGREEMENT

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# ABOUT US

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Rocky Mountain Institute (RMI)—an independent nonprofit founded in 1982—transforms global energy use to create a clean, prosperous, and secure low-carbon future. It engages businesses, communities, institutions, and entrepreneurs to accelerate the adoption of market-based solutions that cost-effectively shift from fossil fuels to efficiency and renewables. RMI has offices in Basalt and Boulder, Colorado; New York City; Washington, D.C.; and Beijing.

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## ABOUT THE BUSINESS RENEWABLES CENTER

Rocky Mountain Institute's Business Renewables Center (BRC) is a member-based platform that streamlines and accelerates corporate purchasing of off-site, large-scale wind and solar energy. With over 250 members, including major corporations, leading renewable energy project developers, and transaction intermediaries, the BRC embodies the know-how of the industry. Today, BRC members account for over 13 gigawatts of renewable energy, and more than 98% of US corporate renewables deals to date have included a BRC member. With a goal to help corporations procure 60 gigawatts of renewable energy by 2030, the BRC is at the leading edge of the fastest-growing sector of renewable energy procurement. More information on BRC can be found at http://www.businessrenewables.org.

## GET INVOLVED

For more information on BRC membership and resources and its online member portal, please contact:

**brc@rmi.org**

This paper serves as an introduction to the virtual power purchase agreement (VPPA)—its place in the off-site renewable energy procurement market, how the VPPA works, and why VPPAs have been a popular instrument in the United States thus far. This paper is aimed at renewable energy buyers who are seeking to understand the VPPA mechanism.

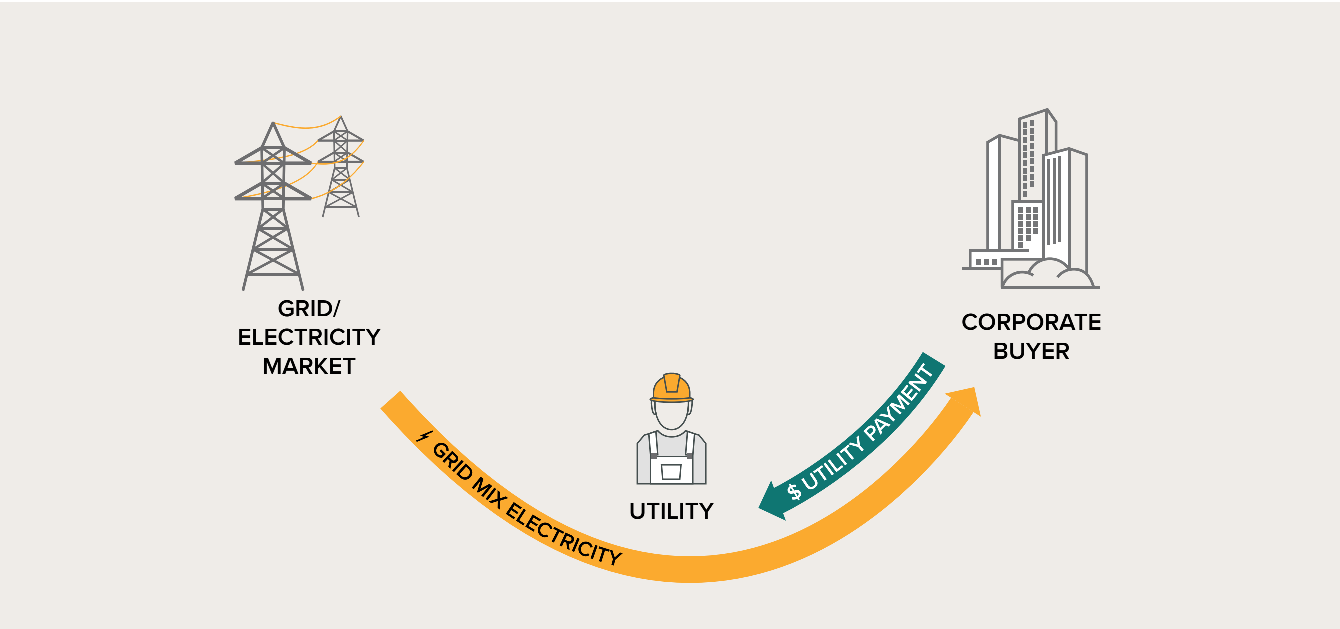
There are two types of off-site power purchase agreements (PPAs) in the market:

1. Physical PPA—Within a physical PPA contract, the corporate buyer takes ownership of the electrons produced by the renewable energy project. This transaction places responsibility on the buyer for monetizing/selling the electrons, which is typically achieved by selling them into the wholesale electricity market. Depending on the contract structure, the buyer could also pay for transmission charges.[1]

2. Virtual PPA—Within a VPPA contract, the corporate buyer does not own and is not responsible for the physical electrons generated by the project. The VPPA is purely a financial transaction, exchanging a fixed-price cash flow for a variable-priced cash flow and renewable energy certificates (RECs).[2] Because the VPPA is purely financial, the buyer still needs to meet its electricity load through traditional channels—therefore, the VPPA means the buyer's relationship with its utility at the retail level remains unchanged (see Figure 1).[3]

**FIGURE 1**

UNDER A VPPA, THE BUYER CONTINUES TO CONSUME AND PAY FOR ELECTRICITY AS USUAL




[1] For a more detailed review of physical PPAs, refer to the Business Renewables Center's (BRC's) "Deal Structure Primer" on the online member portal. Contact BRC staff for more information.

[2] To read more about what RECs are and how they work, see: https://www.wri.org/publication/bottom-line-renewable-energy-certificates.

[3] An exception to this is found with large corporate buyers that purchase their electricity from wholesale markets.