



CASE STUDY

Advancing Renewable Energy Through Green Tariffs

At Facebook, we aim to minimize our energy, emissions and water impact, while embracing the responsibility and opportunity to impact the world beyond our operations.

The opportunity

A key part of our sustainability mission is to advance the rapid deployment of renewable energy on the electric grid while also supporting 100% of our global operations with new renewable energy by 2020.

Companies have been setting ambitious renewable energy goals to reduce their environmental impact for many years. While some companies are able to invest in on-site generation options like rooftop solar, it is not always practical nor possible to serve a facility directly on-site. Data centers are large energy consumers, and the scale of projects required to support them with 100% renewable energy make on-site solutions nearly impossible.

As a result, we've used a variety of innovative mechanisms to find renewable energy solutions for our global footprint, while also working to bring other large customers along with us.

The solution

In looking for solutions, Facebook works with many different market participants to create mechanisms that will add new clean and renewable energy to the electric grids where our data centers are located. This means that our renewable energy projects feed energy onto the same electric grid that we pull energy from. Sometimes this is through a direct contract with a solar or wind project in a wholesale market, but other times we need to create a solution with a local utility partner.

In some US markets, customers are required to purchase energy from their local utility, which is in turn regulated at the state level. In these cases, it may not be possible to sign contracts directly with a renewable energy project. Further, many local utilities do not have an electric rate (or "tariff", as utilities call them) that allows customers to support their facilities with renewable energy, or the utility's existing renewable energy program does not meet our stringent criteria for new renewable energy projects. In these situations, we work closely with our utility partners to create new rates, called green tariffs, to meet our renewable energy goals.

By 2020, we've set a science-based target to reduce our greenhouse gas emissions by

75%

“We are committed to supporting all of our data centers with 100% renewable energy.”

These utility-created programs allow corporations to purchase energy and renewable energy credits from specific renewable energy projects at a fixed price. This provides the financial certainty that projects require to secure the financing for construction, making it possible for new renewable energy projects to be built.

The process of creating green tariffs can be time intensive, as new tariffs often take months to negotiate and approve. Multiple stakeholders must be involved to ensure we create tariffs that are equitable, sustainable and meaningful while maintaining the best interests of the system as a whole. Sometimes, we will work with a local utility to create a new tariff before we have decided to build a data center in its service territory, as the ability to meet our renewable energy objectives is a key siting criteria for new data centers. When possible, we use existing utility programs that meet our high standards. For example, we recently worked with Pacific Power to use its Schedule 272 tariff to support our Prineville Data Center with 100% new solar energy.

The impact

We have used green tariffs and other tools to make significant progress towards supporting all of our global operations with renewable energy, but that isn't enough. We have also worked hard to make sure that our green tariffs are available to other customers, making it possible for more companies to achieve their renewable energy objectives as well. Our utility partners in this effort include Pacific Power, Rocky Mountain Power, Tennessee Authority, Walton Electric Membership, Dominion Energy and Public Service Company of New Mexico.

Today, there are more than 20 green tariffs proposed or approved across 15 states within the U.S. that make renewables more accessible and drive clean energy use. We are proud to have played a part in creating several of these programs and supporting over 1,000 MW of new wind and solar capacity so far. We look forward to continuing our efforts toward our target of 100% clean and renewable energy by 2020, while making it possible for others to purchase more renewable energy as well.



We've partnered with utilities to bring over 1,000 MW of new wind and solar capacity onto the U.S. power grid"

Key examples of green tariffs that we helped create:

- In Eagle Mountain, Utah, we worked closely with Rocky Mountain Power to design Schedule 34, a tariff that allows qualified customers to receive power from completely renewable sources. The 970,000-square-foot Eagle Mountain Data Center will be operational by 2020 and will be the first to use this tariff. Our work in this region helps renewable energy projects thrive, making renewable energy a more viable option for Rocky Mountain Power customers now and in the future.
- In Alabama, we worked with the Tennessee Valley Authority (TVA) to create a renewable energy tariff that will allow both Facebook and other customers to purchase clean and renewable energy. We are also working with TVA to identify new solar projects in the area, meeting 100% of our data center's needs through the tariff.
- In Georgia, our Newton Data Center will be served by Walton Electric Membership Corporation in partnership with Morgan Stanley. This consumer-owned utility will work with Morgan Stanley to meet our facility needs with 100% renewable energy.

More information

For more information visit our Sustainability site at sustainability.fb.com