

## **100% Renewable Clean Energy – Do you have a choice?**

Have you received a phone call or email from a clean energy supplier introducing “Clean Energy for Everyone,” or “When it comes to energy, now you have a choice” followed by a message similar to:

*Clean energy is accessible for everybody. You don't need to install equipment or even own your home, apartment, or business space to reduce your impact on the environment. You simply make the switch to 100% clean energy. Sign up in just minutes; we'll source your electricity from renewables, pay your energy bill, and provide an energy app so you can track your energy usage.*

Some members have, so BEC investigated the story behind the headlines.

Can clean energy suppliers source your power from renewables? Clean energy for everyone is certainly a nice proposition. However, they cannot source the electricity to your home. The clean energy provided by these suppliers is, in fact, renewable energy certificates (REC), aka renewable energy credits or green tags. RECs are a way to offset carbon-based power generation and support the development of “greener,” cleaner energy.

What exactly is a REC? A renewable energy certificate, or REC, is a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation. RECs are issued when electricity is generated and delivered to the electricity grid from a renewable energy resource<sup>1</sup>.

Clean energy suppliers (REC providers) do not change where your physical electricity comes from—instead, they purchase REC's from the actual company generating clean energy somewhere in the United States, not necessarily Montana. The actual electricity flowing through your house comes from the same place it always has—however, by buying RECs through the clean energy supplier, you “own” the environmental benefits of that clean energy and in essence, have supported the development of renewable energy resources.

All electricity, whether it is sourced from a coal plant, hydroelectric dam, nuclear power plant, or solar panel, looks the same once it is placed on the energy grid. The power used by consumers varies by state. In 2016, Montana's energy supply was sourced from 51% coal, 36% hydro, 8% wind, 2% both natural gas and oil and 1% other (petroleum coke, other gasses, biomass and geothermal). It is important to know that 44% of the power on the Montana energy grid is supplied by renewable clean energy<sup>2</sup> (hydro and wind).

Clean energy suppliers offer several donation billing products. One such product is to pay your monthly electric bill to your utility and then invoice you for what your regular utility charges, plus the clean energy charge (RECs). The clean energy charge is typically based on your monthly electricity (kWh) usage. For example, if you use 1,000 kWh per month, you may be charged your utility costs plus up to an additional 1,000 kWh per month for the clean energy. Dependent on the clean energy supplier, typically clean energy costs range from .8 cents up to 1.5 cents per kWh (\$8.00 to \$15.00 per month). The 1000 kWh usage match provides a 100% clean power offset to the power used in your home. Many clean energy suppliers also supply an energy application (app) to allow you to track your electricity usage each month.

Why sign up with a clean energy supplier? It allows you to financially support green energy projects even if you cannot install a system at your home, you do not have a project to fund in your area or you want the “feel-good social responsibility” that comes with supporting renewable energy. Your contribution to clean energy helps make the overall energy mix in the grid cleaner, albeit on the grid wherever the renewable energy source is located. Clean energy suppliers in Montana are mostly offering RECs from wind projects in North Dakota or Texas. These REC suppliers are allowing you to completely offset your personal electric carbon footprint by replacing any carbon-emitting power used from the Montana energy grid with electricity derived from renewable sources.

Be educated about your clean energy provider and make sure they are Green-e Certified. Check with the Center for Resource Solution’s Green-e energy program, which verifies the RECs your money is funding are used for energy projects on the voluntary market and produce the amount of clean energy they say they do. Other donation options also are available to support renewable energy efforts including signing up for a REC supplier through your favorite social organization like Sierra Club or the League of Conservation Voters, donating to carbon offset projects like forest restoration or landfill methane gas projects, or supporting clean energy manufacturers with product purchases<sup>3</sup>.

Did you know Beartooth Electric is carbon-footprint and clean energy conscious, implementing new member services and long-range power supply contracts to improve the environment here at home?

In June, BEC implemented the SmartHub system with automatic enrollment to each previously enrolled ebill member. SmartHub provides members the ability to view their electricity usage approximately every 27 hours as the current “turtle” meters read usage. Not enrolled? BEC members may sign up for SmartHub on the BEC website at [www.beartoothelectric.com](http://www.beartoothelectric.com).

Also in June, the BEC Board of Trustees signed a two-year wholesale power contract with Energy Keepers, Inc. and the Seliš Ksanka Qlispe Project (formerly known as Kerr Dam), located about five miles southwest of Polson, which encompasses a three-unit hydroelectric plant with the capacity to generate 194 megawatts of electricity<sup>4</sup>. The BEC Board of Trustees sees a great benefit to having power sourced in Montana by Energy Keepers, Inc.

The BEC Board has also approved a new meter installation project scheduled to kick-off in early 2018. Each BEC member’s meter will be upgraded to provide BEC engineering with enhanced system management and maintenance information, and each member will have access to hourly electricity usage information, peak power usage as well as monthly and yearly comparison data. The new meters will utilize the same power line carrier technology as the current “turtle” system.

A personal choice to reduce one’s carbon-footprint is always available. Many daily activities such as using electricity, driving a car and disposing of waste cause greenhouse gas emissions. Together these emissions make up a household's carbon footprint. A carbon-footprint calculator typically estimates your footprint in three areas: home energy, transportation and waste. Everyone's carbon footprint is different depending on their location, habits, and personal choices. The EPA offers an easy to use calculator at <https://www3.epa.gov/carbon-footprint-calculator/><sup>5</sup>.

No matter if you choose to donate to REC sellers (clean power suppliers), calculate and manage your household carbon footprint or sign up for paperless billing and autopay

at the BEC SmartHub—you can know your member-owned Beartooth Electric Cooperative is effectively and efficiently managing operations and wholesale power supply while providing members opportunities to fit their lifestyle and personal goals.

## REFERENCES

- <sup>1</sup>EPA. What is a renewable energy certificate (REC)? [Online]. Available: <https://www.epa.gov/greenpower/renewable-energy-certificates-recs>. [2017, August].
- <sup>2</sup>Muyskens, John; Keating, Dan and Granados, Samuel. March 28, 2017. The Washington Post. Mapping how the United States generates its electricity. Online. Available: [https://www.washingtonpost.com/graphics/national/power-plants/?utm\\_term=.bf5570fc94b2](https://www.washingtonpost.com/graphics/national/power-plants/?utm_term=.bf5570fc94b2). [2017, August].
- <sup>3</sup>Find Green-e Certified. Online. Available: <https://www.green-e.org/certified-resources>. [2017, August].
- <sup>4</sup>Energy Keepers, Inc. The Señalí Ksanka Qispe Project. Online. Available: <http://energykeepersinc.com/>. [2017, August].
- <sup>5</sup>EPA. Online. Available: <https://www3.epa.gov/carbon-footprint-calculator/>. [2017, August].