



CUB's Guide to: Renewable Energy Plans

Are you considering a green plan?

We at CUB hear a lot about “green” or “clean power” plans—electricity offers connected to renewable energy and advertised by alternative suppliers. Signing up for such a plan can be a legitimate choice in Illinois’ electricity market, but it is not your only “green” choice and does not mean your home will be directly powered by wind or solar energy. To better understand these plans, it is helpful to learn about how the power grid works and what “Renewable Energy Certificates,” or RECs, are.

What is renewable energy?

According to the Environmental Protection Agency (EPA), “renewable electricity is produced from resources that do not deplete when their energy is harnessed,” like sunlight, wind, waves, water flow, and geothermal energy.

Where does my electricity come from?

Whether you’re on your utility’s standard rate, or with an alternative electricity supplier’s green plan, there’s no easy way to determine where the electricity you’re consuming is coming from. Our electrical system is constantly being fed power by thousands of sources. When you turn on your TV, charge your cellphone, or crank up the A/C, chances are good that the electrons entering your home are coming from a combination of nuclear, coal, wind, natural gas, and other types of generators.

What are RECs?

When you sign up for an alternative supplier’s green plan, the company you chose will take some of your money to buy Renewable Energy Certificates, or RECs. Also known as “renewable energy credits,” RECs were created to measure the positive environmental qualities of that renewable energy and give developers an incentive to build more renewable energy. For one megawatt-hour (1,000 kilowatt-hours) of electricity produced by a renewable energy generator, like a wind turbine or a solar panel, one REC is also created.

RECs are then traded in special energy markets and eventually bought by such parties as utilities that need to meet state renewable energy requirements, alternative suppliers that offer green plans, and individuals looking for ways to lessen their environmental impact.

How do RECs work?

Beginning in the late 1990s, a system for tracking clean energy became necessary, as consumers became more interested in renewable energy and a number of states (including Illinois) adopted Renewable Portfolio Standards requiring utilities to acquire a percentage of their energy from renewable resources. Here’s an example of how RECs work: When a wind farm adds 1 megawatt-hour (MWh) of electricity to the power grid, a buyer can purchase both the electricity generated and a REC representing the environmental benefits of that clean electricity. The buyer can also choose to purchase the electricity only, and the REC can be sold to another buyer at market value by the wind farm.

In short, someone who purchases and claims a REC is ensuring that—even if the power they consume isn’t coming from a renewable resource—renewable energy is being added somewhere on the electric grid. Once a REC is bought, it is retired to prevent someone else from buying it.

How much does a REC cost?

Just like the price of soy beans or the stock value of a corporation, REC prices go up and down. The value of a REC depends on a number of factors, including the technology used to generate the electricity (solar, wind, etc.), the vintage (the year the power was generated), the region where the power was generated, and the amount purchased.

How do I know my money is actually funding renewable energy?

Each REC is uniquely numbered, and there are seven major regional tracking systems set up to create, manage and retire RECs. The tracking systems allow states and other entities to demonstrate that they've complied with renewable energy standards and environmental policies under which they operate. The PJM-Generation Attribute Tracking System (PJM-GATS) and Midwest Renewable Energy Tracking System (M-RETS) manage and track RECs in Illinois.

If you're thinking about signing up for an alternative supplier's green plan, find out if they're "Green-e" certified. Green-e is a global standard for clean energy certification and a good place to check if you want to be sure of an offer's credentials: www.Green-e.org.

How do the alternative suppliers' "green energy" options work?

Signing up for one of these plans does not mean that the electricity supplier will send energy produced by a solar or wind farm directly to your home. Rather, the supplier is buying RECs on your behalf to offset up to 100 percent of the energy that you use.

For example, if a person enrolls in an alternative supplier's "50 percent green" plan and uses 1,000 kilowatt-hours (kWh), or one MWh, of electricity in a month, that customer would claim RECs for half of his or her usage, 500 kWh. If that same customer were on a "100 percent green" plan, that person would be claiming RECs that offset his or her entire electricity demand for that month.

Consumers almost always pay a premium for these plans—but the quality of the RECs vary. Shop carefully. It is possible that the higher price a customer is being charged is only partially due to the additional cost of purchasing the RECs, while the rest is a markup designed to increase the supplier's profit margin. **Be advised:** CUB has seen prices for green plans that are significantly higher than the utility's price (double the utility rate or more).

If you're interested in signing up for a green plan, CUB recommends verifying the quality of the RECs. Find out from the supplier where the RECs are from, how old they are, and whether they're Green-e certified. (Green-e is a consumer protection program from the California nonprofit Center for Resource Solutions. It is designed to help people buy renewable energy from reputable, verifiable sources.)

You can also buy RECs independently. Visit Green-e.org and be sure to read the fine print before signing up for any offer.

Do ComEd and Ameren use RECs?

Yes. The state's Renewable Portfolio Standard requires the Illinois Power Agency (IPA), which buys power on behalf of ComEd and Ameren customers, to obtain at least 25 percent of their customers' power demand from renewable resources by 2025. To help Illinois meet this goal, CUB helped pass a law called the Future Energy Jobs Act, under which the IPA will buy RECs from solar and wind projects in the state.

Does CUB support buying RECs?

CUB supports a consumer's right to buy RECs to offset his or her electricity demand and help fund renewable energy projects. However, RECs shouldn't distract from even better ways to help the environment:

1. Reduce your electricity consumption through energy efficiency.
Ameren and ComEd offer discounts and rebates for a wide range of efficiency upgrades.

2. Move your electricity demand to off-peak hours.
Adjusting the bulk of your electricity usage helps reduce the need for dirty power plants, and it's good for your pocketbook. Check out Ameren's PowerSmart Pricing and Peak Time Rebates programs and

More information on these programs is available at www.CitizensUtilityBoard.org.