MORE ACCESSIBLE SOLAR

> Community Solar & Pricing Programs Democratize Solar Benefits

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ILLUME

Voluntary clean power programs (like *Community Solar* and *Green Pricing* programs) are critical among clean energy sources that are needed to aggressively decarbonize the grid. They also equalize access to clean energy for a wide variety of customers.



Consider **Aidan** who lives in an apartment, **Gloria** who lives next to an old oak tree, or **Jocelyn** who plans to move after she retires in a few years. All would like to support renewable energy but are unable to install systems on their own rooftops.

Voluntary clean power programs promise to expand clean energy generation and the population of people who can participate in and benefit from clean energy generation.

Historically, rooftop solar programs have only been accessible to a smaller, wealthier group of homeowners. Subscription-based or renewable energy credit (REC) -purchasing programs open solar up to individuals like Aidan, Gloria, and Jocelyn, who are renters, condominium owners, and homeowners surrounded by mature trees, and those for whom the upfront cost of rooftop solar is a barrier. The appeal of community solar and green pricing programs shows up in the stories we hear from customers and in the national trends: cumulative community solar capacity has grown by about 1305 year over year since 2010.¹ The National Renewable Energy Laboratory (NREL) has tracked the voluntary clean power market since the 1990s: In 2019 the number of customers participating in green pricing programs surpassed one million with high participation in the west and Midwest.^{2,3}

Voluntary Clean Power Market

Voluntary markets allow a consumer to support renewable energy at levels above what policy mandates that the utility provide. This includes green pricing programs, community choice aggregation, and competitive suppliers offering green power products.

Green Pricing Programs

Customers pay a premium on their electric bill to support the development of renewable energy sources, for example, solar or wind. The utility uses the premium to retire RECS on behalf of the customers.

Community Solar

Customers can buy or lease a portion of solar panels at an off-site array. Customers receive a credit on their electric bill for electricity generated by their share of solar panels. Despite this phenomenal growth, opportunity remains. We know that program availability does not guarantee participation. For programs to be successful, program administrators need to reach customers with the right messaging and motivators to ensure programs are fully subscribed and that they are reaching an equitable cross-section of the customer population.

In early 2021, we surveyed 540 voluntary clean power participants and nonparticipants from a southeastern utility territory. The offers available to those customers were premium programs that allowed customers to purchase blocks of renewable energy or to offset up to 100% of their usage through solar. Our findings at once reflected national trends and showed regional particularities. **Considering both, our takeaways on voluntary clean power programs are:**

Don't Shy Away from Promoting Clean Power Values in Your Marketing and Communications

The customers we spoke with were motivated to support renewable energy production, reduce their carbon footprint, and help fight climate change. More than 50% of current participants selected these as top reasons for participating in the programs. About half of current participants had investigated solar for their home before participating in one of the clean power offers. Participants noted that installing their own rooftop solar was "not an option" and that the program was an "easy way" to support solar "without the hassle" of installing their own panels. Nonparticipants who expressed interest in the offers also identified these as top reasons they were considering participation. These findings are consistent with research from other regions.^{4,5}



Aidan, who lives in an apartment, cares deeply about climate change. He has more limited options for actions he can take in his home but learning about how green pricing programs support clean energy will motivate him to sign up.

Use Local Renewable Energy but Expand to Sources in the Region if Demand is High

Customers expressed diverging opinions on the importance of "local" when choosing to participate in a clean power program. While many named generating renewable power locally as an important factor in their decision to participate, few current participants indicated they would drop out of the program if the solar energy came from sources outside their state.

Make Sure Customers Understand How the Program Works - Financially

While some customers have a sophisticated understanding of how the costs of premium programs affect their bill, most do not. In fact, less than half of participants were clear that participation resulted in an additional charge on their bill with some commenting that they were uncertain how their bills compare to what they would pay if they were not participating in the program.



Jocelyn is sticking to a budget to save for moving after she retires. She still wants to support clean energy. Fun online videos and bill comparison tools can ensure she has no surprises when her bill comes.

Current Participants Don't Reflect the Population

But research suggests it doesn't have to stay that way. Make efforts to include more people with climate-forward messaging.

In our study, current participants were more likely to be young, white, wealthy, homeowners with a college degree. Nonparticipants who found the offers appealing after reading about them tended to be more racially diverse, lower income, and were more likely to be renters. National research on program participation is divided – some studies find t hat h igher-income customers are more likely to be interested in voluntary clean energy programs while others found that level of education is a stronger determinant.

However, national research on concern about climate and support for climate-related programming shows high interest across race, income, and age categories.⁶ Voluntary clean power programs can leverage this interest by messaging to a wide array of customers, rather than just to customers typically perceived to be more interested in these offers.



Gloria is a first-generation homeowner. Her home is modest, but she loves the old oak tree in her yard as much as she is committed to taking care of the Earth for her children. With more inclusive messaging and images around clean power programs, Gloria would carefully

consider an invitation from her utility to participate.

Images are Powerful and Affect Attitudes, So Choose Them Carefully

Community solar and green power pricing offers can appeal to customers with vastly different homes and life situations. Communicating that these offers are for Aidan, Gloria, Jocelyn, and many others, means using a wide range of images and messaging. We found that images matter. An image of a child playing was more appealing to larger families while an image of a singlefamily home surrounded by trees was appealing to customers with shady roofs. Conversely, images can be limiting. For example, multifamily housing comes in many forms and someone living in a high rise may not see themselves in images showing garden apartments.

Lead by Example: Customers Want to Know That We're in This Together

Customers who are committed to clean energy want to know that their utility is doing its part. The customers we spoke to want their utility to be "pitching in" and "leading the way" and not making clean energy use solely the customers' responsibility. Demonstrating how the utility is supporting a clean energy future is critical to winning over customers, especially for green pricing programs that ask customers to pay a premium to support renewable energy.

Rooftop solar provides many benefits to homeowners who have the ability and resources to install their own rooftop system. Gloria, Aidan, and Jocelyn are three people who are unable to install systems but have a keen interest in renewable energy. Expanding the reach and appeal of clean power programs will support renewable energy and help more people benefit from clean energy resources as work toward a decarbonized future. 1. "U.S. Voluntary Green Power Market 2020" Open Energy Information, October 2021. https://openei.org/wiki/US_Voluntary_Green_Power_Market_2019.

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