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Green Pricing

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GREEN PRICING

Green pricing is commonly found in energy markets and finances environmentally friendly alternatives to conventional utilities. Interested customers pay an additional fee per kilowatt-hour to purchase clean energy from hydroelectric, wind, geothermal, solar, and biomass sources. Green power markets are still new, and to ensure quality and verify delivery, many utilities apply for certification from independent organizations. Renewable energy credits (RECs) are another method to assist utility companies in financing green energy investments. Although the REC purchaser does not directly buy electricity, REC sales may subsidize renewable energy production.

Research from the National Renewable Energy Laboratory of the U.S. Department of Energy documents that 750 utility companies—a quarter of the national total—offer green pricing programs to over 70 million customers. Yet fewer than one million customers purchase green energy, and sales make up less than 1 percent of total electricity sales. Nonetheless, an increasing number of U.S. customers—an estimated 20–30 percent more each year—would like access to such programs. Sales to nonresidential customers are increasing at twice the rate of sales to residential customers.

Premium pricing for renewable energy has fallen in recent years as a result of the lowering of production costs. Even so, fear of expensive premiums dissuades some customers from purchasing green energy. However, green premiums often only cost 1.5–2 cents more per kilowatt hour. Based on the national average, U.S. households purchase approximately 875 kilowatt-hours a month, so customers who purchase half of their electricity through green pricing should pay less than \$10 per bill. Moreover, under certain circumstances, green energy may actually cost less than energy generated from fossil fuels. As one example, Austin Energy, the largest green pricing utility in the country, purchased wind energy for its Green Choice Program under a 10-year, fixed-price contract. As natural gas prices rose, the wind price remained fixed, and by comparison, rates for green energy customers were cheaper. Nonetheless, the goal of green pricing is not necessarily to reduce energy costs, and when the wind contract sold out, Austin Energy renegotiated its premiums. Still,

a major motivation for some green pricing costumers is the fixed-price contracts that can insulate them from fossil fuel price increases. Yet, in some instances, green pricing programs may create abnormally high costs for consumers. Costs may not reflect energy prices but, rather, a lack of preparation for the transition to renewable energies. One example is Florida Power and Light, which canceled its green power program after spending upward of \$100 on marketing and recruitment per acquired customer, in contrast to the national average of \$38. Investment and marketing constraints to the initiation of green energy programs have encouraged concentration in the U.S. market: the 10 largest programs sell 70 percent of all green power and have 60 percent of customers. Although some utility companies have green energy customer participation rates ranging from 5–17 percent of their total customer base, to achieve high rates of involvement they must invest in marketing and outreach.

Because of mixed results in green energy pricing returns and delivery, independent third-party certification has grown. Green-e, the largest green energy certification organization in the United States, is administered by the Center for Resource Solutions. Green-e's role extends beyond project verification and quality control to stimulate demand for green energy. Green-e participates in market research, promotes green energy technologies and carbon offset markets, and encourages participation by utility companies. Green-e also certifies RECs or "green tags" (also known as renewable energy certificates) for quality purposes, much like their European counterpart RECS International.

RECs have become a popular method to promote green energy without direct connection to a renewable-energy grid. Companies that use green tags split green energy into two commodities, so that the electricity and the RECs are sold separately. Because they help to finance infrastructure, REC purchasers can claim to support green energy even if they are not purchasing the product. RECs are generally sold for between US\$1.50 and \$20 per megawatt-hour on the retail market, although they have been reported to cost as much as \$90 in some instances. RECs now make up more than half of all green energy sales, surpassing traditional green pricing.

The popularity of RECs stems from the perception that they may be used to provide offsets for companies and individuals targeting carbon neutrality, but in fact there is often no accurate quantification of any subsequent emission reduction. In voluntary markets, RECs are often loosely regulated and vary significantly. Some utilities profit from the misuse of RECs by selling credits for preexisting projects without demonstrating "additionality," or that the credits make possible green energy that would not have been otherwise feasible. To address this problem, Green-e oversees a certification system that limits the number and life span of RECs given to a qualifying company. Greene's accreditation may also increase the price of quality RECs and promote their purchase among consumers. Currently REC critics argue that the credits do not play a significant role in the creation of new alternative power projects, as a federal renewable energy tax credit granted during the first decade of production greatly outweighs REC bonuses. Nevertheless, REC sales in the United States increased 50 percent from 2006 to 2007.

Green energy supply is led by a handful of companies because of investment constraints and an institutional learning curve. Green pricing provides important financial support to budding renewable energies, but customer enthusiasm and participation may wax and wane in response to turbulent fossil fuel markets. RECs have outpaced traditional green pricing within electricity contracts, even though REC investment in alternative energy

projects has the potential to be watered down, and it often remains difficult to verify emission reductions in projects lacking independent certification.

See Also: Electricity; Environmentally Preferable Purchasing; Green Energy Certification Schemes; Green Power; Power and Power Plants; Public Utilities; Renewable Energies.

Further Readings

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