

### THE GRASSROOTS ARE GREENER: A Community-Based Approach to Marketing Green Power

by Rudd Mayer, Eric Blank, and Blair Swezey<sup>1</sup>

*One of the most successful green pricing programs in the country resulted from an innovative partnership between the Land and Water Fund of the Rockies and Public Service Company of Colorado, in which the environmental group helps market the electric utility's green power product. This approach to renewable energy development presents both risks and potential benefits, but may offer a model for other organizations in other states.*

<sup>1</sup> Rudd Mayer and Eric Blank are Green Marketing Program Director, and Energy Project Director, at the Land and Water Fund of the Rockies in Boulder, CO; Blair Swezey is Principal Policy Advisor at the National Renewable Energy Laboratory in Golden, CO. Contact Rudd Mayer at 303-444-1188 x227 or via e-mail at rudd@lawfund.org

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## A Message from the Staff of the Renewable Energy Policy Project

### **What works?**

Across the country, today's electric companies, regulators, renewable energy businesses and environmental advocates are struggling to make sense of a changing electricity sector. In some states, customers can now select an electricity provider — including one selling “green” power — much as they designate a long-distance telephone company. In other states, regulators allow monopoly utilities to offer customers a green power option at a premium price. Driven by business logic and ideological fervor, change seems irresistible.

Amidst the confusion, corporate and public decision makers seeking to promote renewables scratch their heads, asking “what works”? As competitive markets restructure the once-staid electricity sector, can we preserve the modest gains made in renewable energy development during the era of rate regulation? More alluring, can we use market mechanisms to tap directly into the huge latent public support for clean energy? What is the best way to explore the possibilities?

We do not believe that America faces a choice between public policy and markets: any plausible future will be a hybrid, integrating both types of mechanisms. We believe that environmental protection requires, above all, an informed constituency willing both to vote green and to buy green. Indeed, the chief attraction, to us, of emerging markets for green power is the role that they will play in building that constituency: in educating and informing Americans about the environmental impact of energy use, the links between energy-related pollution and health, and the role that renewables can play in environmental preservation. For these reasons, we look to green markets with cautious hope.

Yet restructuring holds both danger and promise for renewables. In the face of that uncertainty, reasonable people justifiably disagree over how to proceed. At this moment, we require above all new ideas: creative strategies, fresh skills, innovative relationships. We need to know which new models work; why they work; and whether they would work in other contexts.

This paper is the latest in a series of REPP case studies describing attempts to fit renewable energy into new market conditions. Earlier releases in this vein include *Cooperative Wind: How Co-ops and Advocates Expanded Wind Power in Minnesota*, by Michael Tennis, Paul Jefferiss and Steve Clemmer, and *Green Power for Business: Good News from Traverse City* by Ed Holt. The former paper describes a partnership between rural electric cooperatives, renewable energy advocates and environmental groups to develop and market wind-generated electricity. The latter report describes participation by small businesses in Traverse City Light & Power's green pricing program. Future REPP case studies will include a release in Fall of 1999, describing experience in incorporating renewable and efficiency in public and private housing. As a group, these papers comprise a set of new strategies, some of which may be reproducible across the country.

**Adam Serchuk**, Research Director and Executive Editor of the *Issue Brief* series

**Mary Kathryn Campbell**, Publications and Outreach Manager

**J. Bernard Moore**, Research Associate

**Roby Roberts**, Executive Director

**Virinder Singh**, Research Associate

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## Executive Summary

Following a series of mostly unsuccessful legal battles in the mid-1990s to win a regulatory mandate requiring Public Service Company of Colorado (PSCo) to invest in wind energy, the Land and Water Fund of the Rockies (LAW Fund) decided to work with PSCo to aggregate demand for wind power in the context of a green pricing program. Under this new program, customers could voluntarily pay more on their electric bill to purchase some or all of their electricity from a new wind power project to be developed by PSCo. The LAW Fund developed a Grassroots Campaign to educate customers about the environmental impacts of their energy choices and to encourage them to purchase wind power.

The cornerstone of the community-based marketing approach used by the LAW Fund is a partnership in which a nonprofit environmental or clean energy advocacy group lends credibility to the product and the marketing message and uses grassroots organizing techniques to reach a broader set of potential customers cost-effectively. A for-profit supplier provides a boost by using more traditional marketing channels such as paid advertisements, direct mail, and bill inserts.

Additional relationships can be built with key governmental, nonprofit, and private entities. Governmental entities at the local, state, and federal level can choose to purchase green power and help generate media coverage. They can also provide staff time, funding, and their own outreach networks to support the marketing campaign. Businesses and nonprofit institutions can buy green power directly and educate their employees about the implications of their energy choices. The hallmark of the grassroots approach to marketing green power is broad-based, community-wide involvement in the promotion and purchase of clean energy resources.

By May 1999, more than 11,000 residences, 200 businesses, and a dozen municipalities in Colorado had signed contracts to pay a combined premium in excess of \$1 million to purchase almost 20 megawatts (MW) of wind power. And five other Colorado utilities were also offering green choices to their wholesale and retail customers. By the end of 1999, an additional 5 MW of demand will likely be aggregated, bringing the green pricing total to 25 MW.

This suggests that a significant number of commercial entities are willing to pay a premium to purchase renewable energy — roughly a fifth of the total demand has come from nonresidential customers. Roughly one in six small businesses contacted is willing to pay a premium of 2.5¢ per kilowatt-hour to purchase, on average, 15% of their total energy from wind power.

In addition to the direct wind subscriptions, the education and customer response resulting from the PSCo/LAW Fund green marketing partnership was a significant factor in creating a separate 25 MW regulatory commitment. By the end of 1999, the green pricing path and the marketing partnership between the utilities and the environmental community will have resulted in roughly five times as much wind power coming on-line as was being advocated in 1996 regulatory proceedings. The windfarms developed to serve this demand represent a \$50-million investment and will reduce greenhouse gas emissions by 3-4 million tons over their lives.

These results should be viewed in light of the operating dynamic in Colorado: the lack of resolve at the state level to mandate renewable energy. The best outcome for advocates would have been regulatory mandates for renewable energy. Failing that, partnering with the utilities in their green pricing programs enhanced the regulatory outcome in the most recent integrated resource planning process and led to further renewable energy commitments.

The lessons learned in Colorado include the following:

### ■ The Message is Unique:

The Grassroots Campaign has the credibility to position the purchase of renewable energy as a community ethic, the cornerstone of any plan for sustainable development. In this context, purchasing renewable energy, like recycling, taps into a spirit of community goodwill, volunteerism, and local participation in the state's energy future.

### ■ Participation is Diverse:

The willingness of business customers to participate seems to hold true in a diverse range of geographic (urban, suburban, and mountain communities), ideological (conservative and liberal communities), and economic settings.

### ■ Outside Funding is Needed:

A successful community-based marketing effort requires outside funding. Although the utility supported various efforts by the environmental community to raise outside monies, no funding came directly from PSCo. The environmental community believed that this was important in order to preserve its credibility.

■ **The Utility/Advocacy Group Partnership is Delicate:**

Situating a grassroots marketing campaign in an advocacy group can be awkward. Often the groups with the most credibility and the greatest organizing experience have been in adversarial policy debates with a utility in either administrative or legislative contexts. Utilities worry that if the groups they are working with on green power attack them on other issues, the controversy will affect green power sales. And when entering into marketing partnerships with utilities, advocates worry that their most valuable asset — credibility — might be compromised.

■ **Training is Needed to Expand the Grassroots Campaign:**

The Colorado case study was conducted by people with significant experience in the electric industry as well as a personal commitment to and passion for promoting renewable resources. As the Grassroots Campaign is expanded to other communities and settings, new leaders must be found, funded, and trained.

The Grassroots Campaign has succeeded in increasing utility investments in renewable resources. The LAW Fund is now working with groups throughout Colorado to expand this community-based marketing approach. In addition, the group is working with others around the country, particularly in competitive markets, to develop an economically self-sustaining market model of the Grassroots Campaign. The hope is that stakeholders in other regulated states, where renewable energy development is stalled, will emulate the Colorado model — and that stakeholders in restructured states will consider the possibilities. The promise of community-based marketing, funded by the operation of competitive markets, is the creation of an “army” of public-spirited individuals educating customers about the environmental and economic impacts of their energy choices.

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by Rudd Mayer and Eric Blank, Land and Water Fund of the Rockies, and Blair Swezey, National Renewable Energy Laboratory<sup>2</sup>

### PART I: THE GENESIS OF COLORADO'S COMMUNITY-BASED MARKETING CAMPAIGN

The Grassroots Campaign for Wind Power in Colorado grew out of rocky ground. In early 1996, Public Service Company of Colorado (PSCo), the state's largest utility, withdrew from an effort to develop a wind project in Wyoming in collaboration with several other utilities in the region. This project would have provided 10.5 megawatts (MW) of wind energy for all PSCo customers, fulfilling a commitment the utility made in its 1996 integrated resource plan (IRP). Later that year, in the context of a merger proceeding involving PSCo, supporters of renewable energy (see Box on page 4) again sought, but were unable to obtain, a regulatory mandate from the Colorado Public Utilities Commission that would have required PSCo to add roughly 10 MW of renewable resources to its existing capacity.<sup>3</sup>

By fall 1996 there was no viable path for developing regulatory policies to support renewable resources in Colorado. The only way to promote such resources involved a PSCo proposal to create a separate, optional renewable energy tariff — a green pricing program — under which customers could voluntarily pay more on their electricity bills to purchase some or all of their electricity requirements from a new wind power project to be developed by PSCo in north-eastern Colorado. When this program was proposed by PSCo as part of the merger case settlement,<sup>4</sup> it was opposed by the renewable resource advocacy community as being a poor substitute for regulatory requirements funded by all customers.

But once the merger case was resolved, the advocacy community — and in particular the Land and Water Fund of the Rockies (the LAW Fund) — decided to move away from a strictly adversarial role and to work with PSCo to develop the best green pricing program possible. Three considerations led to this decision. First, advocates had exhausted the available avenues to develop regulatory policies in support of renewable resources. Second, the green pricing case provided an opportunity to rebuild relationships that had been strained by the merger litigation and other environmental disputes. And third, the LAW Fund was intrigued by the potential for developing techniques in Colorado for building green customer demand that would be useful in the retail competition markets emerging in California and New England.

PSCo was motivated to pursue green pricing for several different reasons: market research indicated that many of its customers wanted a renewable energy option; senior executives believed that the development of renewable resources should be market-driven, not mandated; and PSCo wanted to diversify its resource base and gain experience with a new technology.<sup>5</sup> The LAW Fund and other advocates believed that, in addition, PSCo appreciated the public relations value of offering a clean energy option to its customers, saw an opportunity to help brand itself as a green power provider in anticipation of competition, and wanted experience introducing and marketing a new electricity product.

<sup>2</sup> The authors would like to thank Adam Serchuk, Ed Holt, Ryan Wiser, Carl Weinberg, Jeff Ackermann, Chris Schoenherr, Alan Miller, Nancy Rader and Jean Wilson for their valuable comments on and suggestions for this paper. The views expressed are the authors', and do not necessarily reflect the opinions of REPP, its Board of Directors or the reviewers.

<sup>3</sup> See Colorado Public Utilities Commission (PUC) Decision No. C96-1235, Docket No. 95A-531EG, August 23, 1996, p. 71.

<sup>4</sup> See Docket No. 95A-531EG, Merger of PSCo with Southwest Public Service Co., Stipulation and Agreement, July 1, 1996, pp. 22-23 (later approved by the Public Utilities Commission), committing PSCo to file a tariff by September 1996 with the PUC implementing a green pricing program.

<sup>5</sup> Conversation with Steve Dayney, former renewable energy project manager, January 14, 1999, and comments by Wayne Brunetti, PSCo COO, in the context of the Colorado Governor's Task Force on Renewable Resources, Fall 1996.

By late 1996, the utility and key renewable energy advocates began working together to develop a green pricing program. Despite the parties' desire to cooperate, some aspects of the PSCo proposal caused concern. The utility initially suggested letting the market set the price. Market research had established a range of prices that customers would be willing to pay. Renewable energy advocates considered it inappropriate for a regulated utility operating in a cost-of-service environment to base the product pricing on whatever the market would bear rather than on traditional cost-based, rate-making principles.

In addition, the advocates were concerned that the utility's marketing plan was vague and would be ineffective. Experience to date with utility green pricing programs had shown that a utility, operating alone, might not be able to market clean energy cost-effectively in amounts large enough to make a significant environmental and economic difference.<sup>6</sup> Because a key aspect of promoting renewable energy is its public interest nature, the advocates argued that it was critical for the utility to form alliances with community-based organizations, particularly nonprofit entities with a track record of promoting long-term public interests. These organizations seek to educate the public on environmental issues and therefore have mechanisms in place for widespread and ongoing consumer outreach and education on the benefits of renewable energy. And because environmental groups have credibility with consumers on these issues, there is a real opportunity to enhance a product's image by jointly promoting it with an environmental group.

### The Renewable Energy Stakeholders in Colorado

- Land and Water Fund of the Rockies (LAW Fund) — a nonprofit environmental law and policy center. The Energy Project, a LAW Fund program, seeks to make it economically and politically possible for key stakeholders in the electric industry in Arizona, Colorado, New Mexico, Nevada, Utah, and Wyoming to invest in clean energy technologies.
- Governor's Office of Energy Conservation (OEC) — a state agency supported by oil overcharge funds. Through the end of 1998, OEC was seeking to implement the recommendations of the Governor's Renewable Energy Task Force for meeting a goal of 250 MW of renewable energy in Colorado by 2010.
- Colorado Renewable Energy Society (CRES) — a nonprofit educational membership organization. CRES has a goal of increasing the public's understanding and use of renewable energy technologies.
- Community Office for Resource Efficiency (CORE) — a nonprofit group in Aspen funded by three local utilities and three local governments. CORE promotes energy efficiency and renewable energy in the Roaring Fork and Eagle valleys.
- Boulder Energy Conservation Center — a 22-year-old community nonprofit organization that promotes energy and resource conservation to Boulder County residents and businesses.
- Sierra Club Rocky Mountain Chapter — a volunteer organization with activists working on environmental issues, from the cleanup of Rocky Mountain Arsenal to transportation plans to air quality.

In the green pricing case settlement eventually reached among the parties, the price of the wind power product (called Windsource) was negotiated. PSCo agreed to a premium of 2.5¢ per kilowatt hour (kWh),<sup>7</sup> which was the lowest point of the market-based price range proposed by PSCo and the upper range of what the advocates considered fair and reasonable based on their cost-based analysis. Essentially, the parties agreed on a specific number and remained silent on the methodology used to reach the number. PSCo also made a commitment to involve environmental and community organizations in its marketing and sales promotion activities.

<sup>6</sup> Research has shown there is a gap between the customer numbers predicted by utility market research and actual sign-ups for utility green pricing programs. One reason for this gap is that most new products are heavily marketed and promoted to inform customers of the product's presence and benefits. Utilities have not done this with green pricing products. E. Holt, *Green Pricing Resource Guide* (Gardiner, ME: The Regulatory Assistance Project, 1997), pp. 13-36. Available at <www.rapmaine.org> or from RAP at (202) 293-2833.

<sup>7</sup> See Colorado PUC Decision No. C97-203, Docket No. 96A-401E, Application of PSCo for Authority to Implement a Renewable Energy Service Adjustment, February 19, 1997 (approving a consensus stipulation developed by the parties).

## PART II: COMMUNITY-BASED MARKETING: HOW IT WORKS

As initially conceived and articulated in a 1997 paper, the cornerstone of a community-based marketing approach is a partnership between the green power provider (often a for-profit electric supplier) and a nonprofit environmental (or clean energy advocacy) group.<sup>8</sup> Ideally, the nonprofit partner lends credibility to the product and the marketing message and uses grassroots organizing techniques to reach a broader set of potential customers cost-effectively. At the same time, the larger, for-profit supplier provides a boost to the grassroots approach by using more traditional marketing channels such as paid advertisements, direct mail, and bill inserts.

Given this core partnership, additional relationships can be built with key governmental, nonprofit, and private entities. These secondary partnerships can act as drivers for public policy and private actions that can create market pull for green power. The strategy is to use pre-existing relationships and networks to educate customers cost-effectively about the environmental and economic implications of their energy choices.

On the public side, governmental entities at the local, state, and federal level can choose to purchase green power and help generate media coverage. They can also provide staff time and funding support for the grassroots campaign, and can use their own outreach networks to facilitate the education process. The idea is to encourage governmental entities to take a series of marketing and public policy actions in support of the green marketing campaign.

Likewise, the core partnership can enlist support from the private sector. Not only can business and nonprofit institutions purchase green power directly, they can also educate their employees by providing information and incentives to encourage them to purchase green power for their homes. And the partners can work with prominent business leaders to promote green power through chambers of commerce and other business associations.

The hallmark of the grassroots approach to marketing green power is broad-based, community-wide involvement in the promotion and purchase of clean energy resources. There are other benefits as well. First, grassroots marketing partnerships can potentially provide a low-cost or more cost-effective means of building awareness of and demand for green power. Second, alliances with groups with good environmental or public interest credentials can help establish credibility for green power suppliers and their products.<sup>9</sup> And third, grassroots marketing can yield long-lasting partnerships among key industry stakeholders and customers, helping to maintain demand for green power over the long term.

## PART III: ADDRESSING INITIAL CONCERNS

Despite the potential benefits of the community-based campaign and the initial working relationship between PSCo and the LAW Fund, problems arose at the outset in both camps. On the environmental side, when the program was launched in spring 1997 the Sierra Club was reluctant to endorse it until a National Environmental Policy Act (NEPA) review of the wind site was done and indicated no anticipated adverse impacts on the land and local wildlife.<sup>10</sup> This delayed Sierra Club support until the fall. Likewise, the Audubon Society had concerns about impacts on birds at the wind site.

PSCo took steps to address these concerns. The company conducted the NEPA review even though this was not required for a windfarm sited on private land. It worked with a state raptor biologist and the U.S. Fish and Wildlife Service to conduct a site study. It hired a vertebrate ecologist to look at the site. And it had a cultural analysis performed by the State Historical Preservation Society and the Colorado Historical Society. All these activities were part of an extensive monitoring program that would continue after the windfarm began operation to allow for mitigation of any potential problems.<sup>11</sup> PSCo kept the environmental groups informed about these activities, in particular the Audubon

<sup>8</sup> Rudd Mayer, Eric Blank, Randy Udall, and John Nielsen, *Promoting Renewable Energy in a Market Environment: A Community-Based Approach for Aggregating Green Demand*, U.S. DOE/LAW Fund Report, May 1997. Available from the LAW Fund at (303) 444-1188 ext 231, or from the General Marketing section of the Library at <[www.eren.doe.gov/greenpower/](http://www.eren.doe.gov/greenpower/)>.

<sup>9</sup> Chris Schoenherr, who runs the highly successful green pricing program Energy for Tomorrow at Wisconsin Electric, says their experience is that environmental group endorsement is one of the key factors consumers use in making a buying decision. Electronic communication, March 1999.

<sup>10</sup> Conversation with Rich Ferguson, Sierra Club representative, spring 1997.

<sup>11</sup> Presentation by Rick Thompson, PSCo, March 18, 1997.

Society, the Sierra Club, and the LAW Fund. When the NEPA review determined that there were no major flyways in the area, that there were no raptor nests within a half-mile radius, and that the area had little vegetation and no groundwater to attract birds, the Audubon Society and the Sierra Club agreed to support the project.

Other clean energy advocates were opposed to PSCo's green pricing program on principle. They initially took the position that voluntary payment programs are inappropriate and that because renewable energy investments are a societal good, all customers should pay. Over time, as the PSCo Windsource program gained community-wide support, these advocates began to appreciate not only its educational value but also the fact that the program brought more wind energy capacity on-line than would have been achieved by any of the proposed regulatory requirements.

On the utility side, other issues were raised. The LAW Fund had developed a detailed plan for working with PSCo to educate customers and to market Windsource. PSCo had agreed to a specific marketing budget over a number of years and committed to sponsoring regular meetings of a Marketing Advisory Group to help coordinate the efforts of interested parties. But the utility was reluctant to have the LAW Fund and other community groups independently approach its customers. PSCo was also concerned about the advocates' initial desire to use a strong message about the impacts of PSCo's coal-fired generation in Colorado. These issues were ultimately resolved through an agreement by the advocates to limit references to the environmental impacts of coal and instead to emphasize the positive benefits of renewables. Likewise, PSCo agreed to let the LAW Fund approach its customers if appropriate PSCo managers and/or sales representatives were notified in advance. Both these agreements provided the basis for a positive working relationship that allowed a fair test of the Grassroots Campaign.

A grant from the Department of Energy (DOE) Commercialization Ventures program (designed to buy down the cost of and help commercialize U.S. renewable energy technologies) also helped guide the utility/clean energy advocate partnership through rough waters. PSCo was awarded \$3.1 million for the project. It was agreed that these funds were mainly to be used to enable PSCo to lower the costs of the first 20 MW of the wind project from \$20 million to \$17 million (a 15% reduction). But a small portion — \$70,000 — provided initial funding to the environmental commu-

nity to begin implementing the Grassroots Campaign. This was critical to the project because it allowed the LAW Fund to assign a staff person full-time to the project and to fund the development of some initial marketing materials. It also allowed the Community Office for Resource Efficiency (CORE) to work with the Holy Cross Electric Association (a PSCo wholesale customer) to promote wind power in the Aspen area.

## PART IV: LAUNCHING THE GRASSROOTS CAMPAIGN

When PSCo announced its green pricing program for wind power in spring 1997, the LAW Fund began a coordinated effort to initiate the partnerships that would drive the grassroots marketing campaign. Extensive positive media coverage of Windsource helped with this effort (see Appendix B). This may, in part, have been the result of the unusual nature of the partnership between former adversaries — PSCo and environmental groups. At any rate, the positive media coverage created fertile soil for the leadership activities of important players in the grassroots strategy. The Grassroots Campaign derives its power from the participation of these key players in the community — which includes state and local government, the business sector, citizens, and a number of local utilities that are buying wind power wholesale from larger utilities.

### THE GOVERNOR

In summer 1996, Governor Roy Romer formed a Renewable Energy Task Force — composed of 25 leaders in the utility and renewable energy fields — to explore approaches for acquiring 250 MW of renewable energy in Colorado by 2005.<sup>12</sup> As green pricing programs became available in early 1997, the Task Force decided to strongly endorse them as an important component for reaching the 250 MW target. In releasing the results of the Task Force, the governor gave these programs a strong boost and helped stimulate media coverage.

In addition, Governor Romer also purchased wind for the Governor's Mansion and installed solar panels on its roof. He hosted a press conference to commend PSCo and the other utilities for offering a wind power choice for the first time and to acknowledge the environmental partner groups.<sup>13</sup> Most important for catalyzing the support of the business community, he saluted the six wind power "champions" (see Box on following page) that had committed to a specified level of

<sup>12</sup> See Executive Order, B005 96, Creating the Renewable Energy Task Force, signed June 7, 1996.

<sup>13</sup> Other utilities offering wind power at that time were Fort Collins Utilities, Colorado Springs Utilities, and Holy Cross Electric Association.

wind power purchases. PSCo's CEO and representatives from the wind power champion companies also lent considerable weight to the occasion. The event was featured in all the major newspapers and on the evening news by three local TV stations.

Through the end of his term in January 1999, the Governor continued to use his office as a bully pulpit for renewable resource deployment in the state. Almost a year after the press conference, when a July heat wave spurred power outages, he made headlines by urging the state to stop relying so heavily on coal and to use diverse sources of power such as wind and the sun.

Funding for the grassroots community-based marketing effort also can be traced to the Governor's support. His Office of Energy Conservation awarded a series of grants to nonprofit organizations to expand the community-based approach to aggregating demand for wind power more widely in Colorado.

In 1999, eight nonprofit organizations are using the methods and collateral materials developed by the Grassroots Campaign to educate customers about the environmental benefits of their energy choices:

- the Clean Air Campaign of the Pikes Peak Region in Colorado Springs,
- Keep Colorado Springs Beautiful in Colorado Springs,
- the Grand Valley Earth Coalition in Grand Junction,
- Solar Energy International in Carbondale,
- the Colorado Renewable Energy Society in Denver,
- the Boulder Energy Conservation Center in Boulder,
- the Central Rocky Mountain Permaculture Institute in Basalt, and
- the Sheep Mountain Alliance in Telluride.

The LAW Fund is now helping other nonprofits get funding to replicate the campaign elsewhere in the state where utilities (in particular, 14 of the Tri-State Generation & Transmission Association member co-ops) are now offering wind power.

## The Windsource Champions

The six Windsource champions — IBM, U.S. West, Rocky Mountain Steel Mills, Coors Brewing Company, and the cities of Boulder and Denver — are each buying at least 250 100-kWh blocks of wind power each month (15% of the output of one turbine) for a contract period of three years. They were motivated to buy Windsource by a number of reasons. They liked the product features (environmental benefits) because these companies pay attention to how they are perceived in terms of the environment, in some cases both nationally and globally. And they all expressed a desire to be involved with something new that benefits Colorado. The publicity and recognition created by a press event with the Governor was also a strong inducement to become one of the first companies to buy Windsource, according to the PSCo product manager. PSCo committed to promoting the champions by including their names in all press releases and press interviews about Windsource.

Although the Governor's actions did not produce significant wind purchases by state agencies, his actions sparked substantial media coverage and provided support for ongoing Grassroots Campaign efforts to convince businesses and city governments to invest in wind power.

## MUNICIPALITIES

City and town governments have played a critical role in furthering community interest in wind power. Their purchase of wind power provides community leadership for this renewable source, garners media attention, and helps to certify that green power is a credible, environmentally preferable product. In addition, cities and towns have used their own channels — such as municipal bills, cable TV programs, and newsletters — to heighten people's awareness of the economic and environmental implications of energy choices and to publicize local businesses that choose to purchase wind power.

Denver and Boulder, as wind power champions, played a strong role in the new opportunity to use green power. Boulder, in particular, was important in the Grassroots Campaign. The city purchased enough wind to run half of its Municipal Building. The mayor hosted a press conference on the lawn outside to announce the purchase and to recognize a number of Boulder businesses that had made early purchases of wind power to demonstrate their environmental responsibility and community stewardship. Boulder residents Frank Shorter, an Olympic gold medalist in the marathon, and Dave Scott, a world champion triathlete, talked about

buying wind power to invest in the kind of future we want, especially for our children. This event generated coverage in the Boulder and Denver papers and got spots on the evening TV news.

Boulder also demonstrated leadership by linking its wind power purchase to investments in energy efficiency. The city planned to use the savings from efficiency investments to cover the additional cost of the wind power. These actions underscored the ethic of sustainable energy use and helped educate Boulderites about ways to embrace this ethic.

Other cities and towns have followed the lead of Boulder and Denver by investing in wind power. These range from the mountain communities of Aspen, Snowmass Village, Nederland, and Carbondale to the large Denver suburb of Littleton. In all, cities are purchasing almost 17,000 kWh of wind power a year and are one of the most effective components of the Grassroots Campaign even though their wind purchases are generally a small percentage of their total electricity use. (See Appendix A for a list of the cities and towns buying wind power.)

### **BUSINESSES**

The leadership of prominent businesses — from large national and international corporations to small, locally owned shops — is critical to marketing green power in the community. Like public-sector purchases, private-sector purchases set an example of community stewardship and create media interest and coverage. In the case of large corporations, the purchases also have the potential to produce significant market pull for renewable energy if the companies promote them to customers in their own marketing efforts and also encourage their employees and suppliers to follow suit.

On the other hand, environmental groups (including the LAW Fund) often have mixed feelings about selling green power to a large, well-known corporation because it potentially allows the company to “greenwash” its operations by shifting the focus from environmentally damaging activities. Some have viewed PSCo’s Windsource program in this light. Conversely, some companies are wary of promoting their green power purchase because of the possibility of greenwashing accusations by the environmental community. Several large companies have told Grassroots Campaign staff that even if they were to purchase all of the wind that PSCo had to offer they still might not gain a public relations benefit. In spite of their skepticism, some of these companies have made the decision to buy wind power anyway as one way to try to improve their environmental image.

Negotiating business participation is sometimes a challenge for the Grassroots Campaign. Companies want the positive PR kicker from buying wind power, and the renewable energy advocates want to sell as many kilowatt-hours of wind power as possible to as many companies as possible. For some people, a problem arises when the advocates essentially provide a green stamp of approval to a large company that agrees to buy wind power but in a small amount relative to its size. Yet even a small purchase by a large company represents a relatively large number of kWhs of wind power compared with the purchases of most small companies.

In the course of selling wind power to businesses, the LAW Fund and PSCo learned how to work together as a team, and the partnership started to run more smoothly. This involved open-mindedness and a willingness to respect different organizational goals and beliefs — protecting the environment for the LAW Fund versus making a profit for PSCo. The LAW Fund learned the importance of being able to speak the language of business and to temper the passion and zeal that can make the corporate world uncomfortable. PSCo accepted the LAW Fund’s lead in the process of educating customers about the environmental benefits of renewable energy. This cooperative approach had the positive result of getting a broad spectrum of business customers to buy wind power.<sup>14</sup>

Businesses can be approached in a variety of ways. Sometimes, with more environmentally oriented companies, the Grassroots Campaign is a more effective messenger because of its credibility and involvement in environmental issues. Where environmental groups are viewed with skepticism, a local community group or utility may have more acceptance. When approaching particularly conservative businesses, such as banks, the utility can handle the customer on its own without an environmental group that might potentially be viewed as anti-business. In still other situations, the LAW Fund and the PSCo service representative meet jointly with a company to sell wind power. This is usually the case with larger businesses, where honoring PSCo’s relationship with the customer is especially important.

Thus PSCo took the lead in selling wind power to a Boulder company long accustomed to attacks in the press by local environmental groups. And the LAW Fund is making more headway with the University of Colorado, based on the LAW Fund’s connection with a number of student environmental organizations and ongoing relationships with influential faculty and administrators. One important lesson learned is that there are significant differences in marketing to small businesses and large corporations.

<sup>14</sup> Conversation with Jeff Ackermann, Windsource product developer, PSCo, July 1997.

## THE SMALL BUSINESS MARKET

High-profile service businesses — such as hospitals, churches, restaurants, nonprofit community organizations, bookstores, natural food markets, outdoor clothing and sporting goods stores, microbreweries, small boutiques, coffee houses, and theaters — are particularly likely to purchase green power. Any market segment that provides a social service for the community, sells a product that relates to the environment in some way, or has customers who are likely to admire businesses for their environmental actions also may be willing to pay more to purchase a clean energy product. Certain business groups are a natural focus for marketing green power, such as Boulder's PACE (Partners for a Clean Environment) program. And local newspapers are a good source for learning about businesses that have a policy of supporting social or environmental causes in the community.

The Grassroots Campaign has been particularly successful in getting contracts for wind power from small businesses. Statewide, more than 200 have signed up. Many of these are retail or other storefront businesses that are helping to get the word out about wind power in their community by displaying stickers in their windows that read "This Business Powered by Colorado Wind Energy." Owners of nearby businesses notice the stickers and often sign up for wind power themselves.

Most of the participating businesses are in Boulder County, where the Grassroots Campaign has been active the longest. Hundreds more are likely to participate if there continue to be resources to support the efforts of local groups to promote wind power.

Initiating contact with small businesses begins with a personal letter. This is followed by a phone call and, if there is interest, a personal visit to discuss the particulars. There is also a "street team" approach that can be used in high-density commercial districts such as the Boulder pedestrian mall. This involves simply walking into an establishment and talking to the owner or manager or leaving a packet of materials for the decisionmaker. The LAW Fund has pioneered this approach by hiring three former environmental canvassers to call on all the businesses along a particular street. Their familiarity with cold calling techniques, such as adjusting their presentation of an environmental

message to appeal to people with a variety of views and belief systems, has helped them market wind power. In the end, getting a small business to buy wind power usually depends on the business owner's personal interest and belief in the value of using renewable energy.<sup>15</sup>

As of April 1999, the street team had approached 900 businesses over one year, with approximately 150 responding favorably by signing three-year contracts. These small to medium-sized business customers chose to purchase roughly 15% of their total energy requirements from wind power — on average, 10 blocks or 1,000 kWh a month. The combined efforts of the street team have resulted in an investment of roughly \$1 million in wind power, allowing an additional 1-2 turbines to be constructed in Colorado.



*Sticker used by retail and other storefront businesses that helps get the word out about wind power in their communities.*

Chambers of commerce, as nonprofit organizations, can play a useful role in marketing to small and, in some cases, large businesses. They can provide key contacts, publicize the wind purchases of member companies, and generally add credibility to the marketing effort. Moreover, they lack the negative public image sometimes associated with environmental groups

<sup>15</sup> See Edward A. Holt, *Green Power for Business: Good News from Traverse City*, REPP Research Report (Washington, DC: July 1997).

that use adversarial tactics, and they do not face the distrust sometimes directed toward utilities. They also enjoy a strong relationship with the media. And they can function as the catalyst organizing group for a grassroots marketing effort in communities that lack an established environmental group to provide the necessary leadership and coordination.

In Vail, for example, the Chamber of Commerce was the only local organization with the staff and institutional capabilities to carry out a grassroots marketing effort. The Vail chamber represents nearly 600 businesses in nine communities throughout the Eagle Valley — restaurants, lodges, hotels, summer and winter activity companies, professional services, real estate, and construction companies. The chamber can capitalize on these relationships to get widespread involvement in the wind power campaign. And in Boulder, the president of the chamber offered to contact members personally about the opportunity to buy wind power.

## MARKETING TO LARGE COMPANIES

Large national corporations that buy wind power and promote it to their employees, suppliers, and customers can create market pull for renewable energy. These companies are often influential with their peers and can be effective promoters of wind power to other corporations. For these reasons, approaching and working with large customers to adopt a comprehensive corporate clean energy strategy is a high priority for the Grassroots Campaign.

Because it is time-consuming and often an uphill battle to educate management about the value of corporate environmental responsibility, it can be more efficient to target companies where this ethic is already in place.<sup>16</sup> Good candidates are companies that are members of socially responsible business groups such as the Pollution Prevention Partnership of the Environmental Protection Agency (EPA), Business for Social Responsibility's ClimateWise Partners, and the Washington-based Pew Center on Global Climate Change. Other companies to target might be those whose shareholders have placed climate change proposals on the ballot at recent annual meetings. The environmental community and the renewable energy stakeholder network provide another gateway to large companies.

To approach large companies, initial research could investigate their Web sites and annual reports. Based on this research, a proposal can be developed to promote the renewable energy purchase both internally and to the public. This involves suggesting a "story" that can give their renewable energy investments significance to their employees and customers.

If the company has a large number of employees, another opportunity involves working with management to market wind power internally to employees much like corporate United Way campaigns. The Grassroots Campaign and company management can draft a marketing plan that states a goal of signing up a certain percentage of employees and describes a program of incentives to achieve the goal. Each situation is different, but the idea is to have management and employees derive the utmost benefit from their commitment to use renewable energy.

## WHAT DRIVES CORPORATE PURCHASES

Many businesses with management teams that are sensitive to environmental issues, such as Patagonia and New Belgium Brewery, agree that the environmental, political, and public relations value of green power can far outweigh the additional cost.<sup>17</sup> In Colorado, the Windsource champions got substantial public relations benefits, including recognition by the Governor, that were likely far in excess of their \$22,500 commitment over the three-year contract period.<sup>18</sup> At this time, however, no one has attempted to quantify the PR value of buying green power.

Some companies also believe their customers may prefer to do business with an environmentally responsible company, and therefore welcome the opportunity to demonstrate their commitment to the environment by buying wind power.<sup>19</sup> And companies are aware that early adopters receive the most press — as evidenced by the national coverage of Toyota's million-dollar wind purchase for its facilities in California.

Other companies in Colorado make a strictly business case for purchasing wind power. A Fortune 100 firm — which was aggressively seeking a large federal government renewable energy contract — used a Windsource purchase to try to gain a competitive edge in the bidding process. Public statements by management also emphasized the company's inter-

<sup>16</sup> For a discussion of corporate environmental responsibility and green companies, see J. Ottman, *Green Marketing: Opportunity for Innovation* (Chicago, IL: NTC Business Books, 1998), pp. 61–86.

<sup>17</sup> *Ibid.*, pp. 205–07.

<sup>18</sup> See *Denver Post*, August 22, 1997.

<sup>19</sup> Ottman, *op. cit.* note 15, pp. 15–16 (the role of corporate environment and social responsibility in consumer's purchasing decisions).

est in strengthening the renewable energy industry in the United States and the idea of sustainability — investing in renewable resources because fossil fuels are running out.

Nevertheless, for small and large businesses alike, the extra cost of wind power is the most common reason given for deciding against or not being willing to consider a purchase.

## RESIDENTIAL CUSTOMERS

Given the staff time involved in personally contacting individual business customers, PSCo and other green power providers have spent most of their dollars marketing wind power to residential customers. The residential market is, by sheer numbers, the driving force behind green power programs. Bill inserts, direct mail, press releases, and media events have been the mainstays of many utility marketing strategies, along with print ads, radio, and (less frequently) television spots.

The Grassroots Campaign strategy for residential customers is designed to supplement and enhance these marketing techniques. One key component of the grassroots approach is staffing booths or tables at community events such as art fairs and festivals or at high-traffic locations in a community, such as natural foods markets, pedestrian malls, or farmers' markets. At these venues, volunteers can educate customers directly about the green power ethic and can get them to sign up on the spot for wind power. A LAW Fund wind power table at the Boulder Creek Festival over Memorial Day weekend in 1997 signed up almost 100 customers. In Fort Collins, the Sierra Club recruited volunteers to staff a table at a local natural foods market that, over a weekend, signed up 14% of the customers needed to meet the initial program goal of Fort Collins Utilities Wind Power Pilot program.<sup>20</sup>

Making presentations at meetings of Rotary clubs and other local community organizations is another way to build residential customer awareness about the choice of wind power. In addition, a grassroots campaign could have a presence at community forums that pertain to sustainability, such as workshops on pollution prevention or activities in conjunction with Earth Day.

Newsletters provide a further opportunity for grassroots marketing. A number of environmental and nonprofit organizations have run articles about wind power and included sign-up

## The “Wind Cam”

In 1996, at a Marketing Advisory Group meeting, the environmental groups suggested that the first windfarm in Colorado (and the daily wind speeds there) might be a catchy addition to the nightly news. PSCo liked the idea and pursued it with Channel 9, the local NBC affiliate. The result is not only spots about the windfarm during the weather segment and promotion of Channel 9's own purchase of wind to run the lights and equipment in its Weather Center, but also a solar-powered wind camera that provides live pictures of the turbines for Channel 9 viewers. PSCo has spent more than \$70,000 on the installation of the solar photovoltaic system that runs the wind cam, the cable that connects it to the substation, microwave equipment, and the pole that the camera sits on. Channel 9 is providing the camera itself.

forms in their newsletters. These publications reach thousands of households concerned about the environment and other societal issues.

Overall, information tables, presentations, and newsletters primarily function as education and awareness-building mechanisms; they often do not produce a substantial number of actual wind power sign-ups. It seems likely, however, that these activities may result in future sign-ups that are triggered by utility bill information, direct mail appeals, or word of mouth.

In addition, a new Colorado Wind Power web site may be a vehicle for immediate enrollment for wind power. The site, [www.cogreenpower.org](http://www.cogreenpower.org), was created and is maintained by the Grassroots Campaign. Cogreenpower.org highlights information about each of the utility green pricing programs in the state, provides sign-up forms for each utility program, and furnishes an interactive environmental benefits calculator. Also, a list of businesses buying wind power will be posted to recognize their leadership in purchasing clean energy.

PSCo's residential customer marketing involves placing program information and sign-up forms in the *Update*, a general informational newsletter included in customers' monthly electricity bills (this is not a separate Windsource insert). In addition to a media event at the windfarm, a small direct-mail campaign to 20,000 ZIP-code targeted customers was extremely successful — with a response rate of almost 6%.<sup>21</sup> PSCo also placed Windsource information in a Colorado

<sup>20</sup> Phone conversation with Steve VanderMeer, Fort Collins Utilities, November 1996.

<sup>21</sup> Direct mail consultants consider a 1% response rate for direct mail good, according to Alexandra H. Mayer, marketing consultant, October 1996.

## ■ THE GRASSROOTS ARE GREENER

Guidebook issued by the nonprofit group Volunteers for Outdoor Colorado, and Windsource sponsors several programs on public television and public radio.

Yet clean energy advocates have criticized PSCo for not buying more advertising for Windsource. In planning the Grassroots Campaign strategy, the LAW Fund assumed that PSCo, like other green power providers, would use print ads, radio, television, or all three, because Windsource is an entirely new product. The Fund and other advocates believe that this would give wind power validity and legitimacy in the market — and would increase the effectiveness of the community-based marketing activities. The environmental coordinator at the national headquarters of a business in Boulder, for example, told the LAW Fund that the company would prefer to wait to buy wind power until it is a more established product. It has been frustrating to see PSCo spend millions of dollars on branding and image ads on television that never mention or feature the new wind power product. The LAW Fund is aware, however, of the difficulties that utility marketing staff face in getting a significant amount of their budget dedicated to promoting the utility's green power products. In 1997 and 1998, PSCo spent roughly \$250,000 marketing Windsource.

Until mid-1999, PSCo's position on its low marketing profile was that the company has been in an awareness-building mode and that its efforts, coupled with the enormous amount of free media coverage of Windsource, have driven subscriptions twice as fast as the marketing strategy projected. In the first six months of the program, nearly 10 MW had been sold (5 MW were expected by this point). PSCo had thought it would have to go into a more active mode just to sell the first 5 MW. At the April 1999 Marketing Advisory Group meeting, PSCo indicated that its number one Windsource marketing cost in 1999 will be advertising, followed by direct mail and then bill inserts. During the spring and summer, several direct mail pieces, using various degrees of targeting, were planned.

Given PSCo's lack of aggressive advertising in 1997 and 1998, it seems clear that the Grassroots Campaign and the endorsement of environmental groups made a major contribution to the unexpected early success of Windsource as well as the other utility green pricing programs in the state. More than 30% of total residential customer sign-ups and over 50% of business purchases are from Boulder County, where the LAW Fund has been piloting the Grassroots Campaign.

**Table 1: Utility Wind Commitments in Colorado as of May 1999**

Utility	Capacity (MW)	Energy (MWh/yr)	Capacity as % of Peak Demand
<b>PSCo</b>			
Current Green Marketing	15.0	34,118	—
Future Green Marketing*	5.0	11,388	—
IRP	25.0	56,940	—
<b>Total – PSCo Retail</b>	<b>45.0</b>	<b>102,446</b>	<b>1.0</b>
Colorado Springs Utilities	1.0	2,278	0.2
Holy Cross Electric Assn.	3.0	6,833	1.5
Platte River Power Authority**	4.2	9,566	1.0
<b>Total – all utilities</b>	<b>53.2</b>	<b>121,123</b>	<b>1.0</b>

\*Based on current expectations.

\*\*Provides wind power to Fort Collins Utilities, Tri-State Generation & Transmission Association, the City of Loveland, the City of Longmont, and the City of Aspen.

**OTHER UTILITIES**

Fort Collins Utilities launched the first green pricing program in Colorado in September 1996. The support of the city council, the citizens on the local electric board, and the local chapter of the Sierra Club turned initially sluggish customer response into a fully sold out program (two 600-kW turbines) in three months, meeting the utilities' December deadline for ordering wind turbines. For the LAW Fund, the Fort Collins experience provided anecdotal evidence that community-based efforts can indeed stimulate customer interest in and purchase of wind power. By April 1999, Platte River Power Authority, the wholesale provider to the municipal utilities of Fort Collins, Loveland, and Longmont, had invested in four additional 660-kW turbines to provide wind power to Fort Collins (an additional one and a half turbines), Loveland (one-quarter of a turbine), Longmont (one-quarter of a turbine), Tri-State (1 turbine), and the City of Aspen through MEAN, a wholesale supplier (1 turbine).

Due to the organizing and outreach efforts of the LAW Fund and, in particular, of CORE in the Roaring Fork Valley, several smaller utilities such as Holy Cross Electric Association and Aspen Municipal expressed an interest in purchasing wind power wholesale from PSCo, eventually committing to buy 1.75 MW of wind power from PSCo. By April 1998, with almost 2% of their customers signed up, they had committed to another 1.25 MW, for a total of 3 MW. These initial wholesale purchase commitments were important in helping focus the attention of senior management at PSCo on the business aspects of wind power.

Soon after, largely in response to the positive media attention received by PSCo, Colorado Springs Utilities launched its wind power program in August 1997, originally buying 0.5 MW of wind from PSCo. That amount was sold in one year. By April 1999, the utility had committed to buying an additional 0.5 MW and had sold wind power to more than a thousand residential and commercial customers.

In 1998, Tri-State Generation & Transmission Association, the largest co-operative utility in the state, announced that it would make green power (from new turbines at a windfarm in Wyoming) available to its 34 member co-ops. This appeared to be a response to the market success and media coverage of the other green pricing programs in the state. By April 1999, 14 of Tri-State's member utilities were offering wind power to their customers.

**PART V: QUANTIFYING THE RESULTS**

All told, there are likely to be approximately 50 MW of wind coming on-line to help meet Colorado's electricity demand by the end of 1999 (see Table 1 on page 12). Of this total, a little over 14 MW result from the existing subscriptions of PSCo retail customers, another 5-7 MW come from commitments that are anticipated during the remainder of 1999, 5 MW is associated with other utilities in the state, and 25 MW will be installed by PSCo as a result of regulatory agreements. This 50-MW commitment to wind represents a \$50-million investment that, over the life of the project, will reduce carbon emissions in Colorado by 3-4 million tons, nitrous oxide by 12,000 tons, and sulfur dioxide by 4,500 tons.<sup>22</sup>

**Table 2: PSCo Windsource Program: Annual Commitments by Customer Class as of May 1999**

Class	Capacity (MW)	Energy (MWh/yr)	Customer Premium (\$/yr)	% of Total
Residential	11.6	26,420	\$660,504	61
Small Business	1.6	3,621	\$90,535	8
Municipalities	0.8	1,777	\$44,413	4
Large Commercial	1.0	2,300	\$57,509	5
Other Utilities*	4.0	9,110	\$227,760	21
<b>Total</b>	<b>19.0</b>	<b>43,228</b>	<b>\$1,080,721</b>	<b>100</b>

\*Colorado Springs Utilities and Holy Cross Electric Association (wholesale customers of PSCo).

<sup>22</sup> These total emission reductions are based on average ton per GWh emission rates implicitly contained in PSCo's 1996 Draft Integrated Resource Plan (IRP), October 1996, p. 111. Given that total annual carbon emissions in Colorado were in excess of 30 million tons in 1990 (and have subsequently increased substantially), the savings from the wind investments can be viewed only as a small but somewhat significant first step.

The green pricing totals for PSCo break down as follows: the residential sector accounts for a little over 60% of the total; wholesale utilities take 20-25%; small businesses, 10%; large commercial customers, 5%; and municipalities, 3%. Although the commercial customers have a smaller commitment in annual terms, they have signed three-year contracts as opposed to the one-year terms of residential customers. The exact breakdown for PSCo's green pricing effort — in MW, MWh, and dollar terms — is shown in Table 2 on page 13.

Finally, the community-based marketing campaign appears to have had a significant impact on customer response, particularly in light of the lack of aggressive marketing by PSCo. The LAW Fund estimates that Boulder County accounts for only about 5% of PSCo's total customer base. In contrast, almost 40% of total customer subscriptions are from Boulder County, where most of the marketing effort was concentrated. The trend is even more pronounced in the medium-sized and small-business sector, with Boulder County accounting for half of the aggregated capacity and energy. This is likely due to the impact of the street team strategy and the Grassroots

Campaign's general focus on smaller businesses. Table 3 summarizes the relative contribution of Boulder County, by customer class, compared with the remainder of PSCo's service territory.

Most of the programs in Colorado have more subscribers than they have wind power currently available, and they continue to receive both residential and business customer sign-ups. Customers — especially businesses, which essentially receive free PR from the moment they subscribe — do not seem bothered by the fact that wind power is not immediately available and that they will not be billed for it until more turbines are erected. Most important, from the advocates' perspective, PSCo has committed to erecting as many wind turbines as it takes to meet customer demand.

In addition to the direct results of the green marketing effort, PSCo agreed, in the context of its most recent IRP case,<sup>23</sup> to include in its regulated rate structure an additional 25 MW of wind.<sup>24</sup> Although a number of factors influenced this decision, the stronger-than-expected customer response to the

**Table 3: PSCo Windsource Program – Impact of Grassroots Approach on Retail Demand as of May 1999**

<b>Retail Purchases</b>	<b>Capacity (MW)</b>	<b>Energy (MWh/yr)</b>	<b>Customer Premium (\$/yr)</b>
<i>Residential</i>			
All	11.6	26,420	\$660,504
Boulder County	4.1	9,338	\$233,454
<i>Non-Residential</i>			
All	2.6	5,922	\$148,044
Boulder County	1.4	3,189	\$79,716
<i>Municipal</i>			
All	0.8	1,777	\$44,413
Boulder County	0.2	364	\$9,110
<b>Total Retail</b>	<b>15.0</b>	<b>34,119</b>	<b>\$852,961</b>

<sup>23</sup> See Docket No. 997A-297E, PSCo IRP Proceeding Before the Colorado Public Utilities Commission, Stipulation and Settlement Agreement (approved in PUC Decision No. C98-1042 adopted October 2, 1998), p.15.

<sup>24</sup> PSCo is planning to acquire this wind resource through a purchase power contract. The costs of this contract will be included as an expense in the utility's revenue requirement.

Windsor source program was one clear reason identified by PSCo in support of this regulatory commitment.<sup>25</sup> This leads the LAW Fund to conclude that the Colorado experience provides evidence that green marketing can help drive public policy support for renewable energy. The LAW Fund and PSCo have agreed to use this utility commitment to demonstrate to Windsor source customers that their choice of energy source is also important in terms of influencing utility resource decisions.<sup>26</sup>

Perhaps the most dramatic result of the grassroots marketing activities has been the continuing media coverage. The unexpected early market success of wind power, especially with the business community, has spurred scores of articles in newspapers throughout the region. The *Denver Post* has run three editorials in support of wind power. The local television news has covered all major events, such as when the first wind turbine in Colorado was erected. Major stories also have appeared in local weeklies and alternative papers.

And in April 1999, the LAW Fund's community-based green marketing program won a national award from the President's Council on Sustainable Development and from Renew America for programs that demonstrate leadership in integrating environmental, economic, and community sustainability.

## PART VI: ECONOMICS AND TRANSFERABILITY

A variety of governmental and foundation funds supported the development and implementation of the community-based marketing approach in Colorado. Governmental funders included DOE, EPA, and the Governor's Office of Energy Conservation. Several private organizations — including the Greenville, Rockefeller Family, and Energy Foundations — also provided support. This core funding was further leveraged by a wide variety of in-kind contributions — staff time, use of pre-existing networks, marketing materials, and newsletters — from municipalities, state agencies, local community groups, nonprofit organizations, and others.

Although any marketing effort entails costs, community-based marketing is an efficient method, especially when the costs are appropriately allocated over a customer's entire electricity use. Unfortunately, most utilities will ascribe the marketing costs only to the green power portion of the sale. The rationale for this is that the company is already satisfying customers' electricity requirements with system power; the only change with the green power sale is that a certain number of kilowatt-hours of green energy are being substituted. Thus any costs associated with the sale of the green electricity are allocated solely to that portion of the product.

To illustrate, the LAW Fund estimates that the street-team effort to subscribe business customers cost about \$40,000 from July 1998 through April 1999. Over this nine months, the street team aggregated purchase commitments of roughly 1,500 blocks of wind power from 150 customers, yielding total annual wind power sales of 1,680,000 kWh. In all, about 900 customers were approached, 150 agreed to purchase some amount of wind, and roughly the same number declined, with responses from about 600 customers still pending.

Taking just the firm purchase commitments to date, the street-team effort cost 2.4¢/kWh of annual aggregated wind power subscribed, assuming that the marketing costs are recovered in the first year.<sup>27</sup> The marketing costs, then, are almost equivalent to the 2.5¢/kWh cost of the wind energy itself. Clearly, if marketing costs were recovered in the wind energy premium, the attractiveness of the purchase would be reduced substantially, as customers would be facing a premium close to 5¢/kWh.

But the green power sale represents only 15%, on average, of the business customer's monthly consumption. If the marketing cost were spread over the customer's entire consumption, as would be customary for a new customer acquisition, it would be less than 0.4¢/kWh, before accounting for the possibility that some of the 600 undecided customers might still choose to purchase wind energy. In contrast, in competitive markets for-profit providers often spend 1.7-5.0¢/kWh to obtain new residential customers.<sup>28</sup> Although this residential number is

<sup>25</sup> Through the green pricing program, PSCo's customers stepped forward to pay more to purchase wind power. In the course of the IRP proceeding, the LAW Fund and other advocates suggested that PSCo and the regulated system should exercise similar leadership, as these customers are making a real and significant commitment to wind power. This argument seems to have resonated with the utility.

<sup>26</sup> This PSCo IRP case before the Colorado PUC was resolved through a comprehensive settlement that addressed all disputed issues. Prior to the settlement, it was highly uncertain whether or not the Colorado PUC would order PSCo to acquire a fixed amount of wind, given strong utility objections.

<sup>27</sup> However, any subsequent commitments received from the 600 pending customers would reduce the marketing cost accordingly.

<sup>28</sup> Ryan Wiser et al, *Green Power Marketing in Retail Competition: An Early Assessment*, Topical Issues Brief (Golden, CO: National Renewable Energy Laboratory, February 1999).

not directly comparable to the costs of reaching small businesses, it suggests that the grassroots approach is highly cost-effective.

In Colorado, a market that remains regulated, much of the success of the community-based marketing approach relied on the ability of the LAW Fund and other groups to cover their costs by raising funds from government and foundation sources. By capitalizing on the experience gained so far in Colorado, the LAW Fund estimates that the Grassroots Campaign could be successfully replicated for less in other regulated settings. Even hiring one full-time person in a service territory to work with the utility supplier can make a real difference in terms of lending credibility to the wind power product and creating community-wide support for clean energy.

In a competitive market, the costs associated with running a community-based effort could potentially be recovered in the retail price of the green power product. This would allow the costs of the green marketing to be spread over the entire sale, not just the green component. Indeed, one of the most promising applications of the community-based approach is to fund it in a market environment. For example, if one individual using the street-team approach in a retail competition setting could generate sufficient revenues to cover the fully allocated costs, then this approach would be replicable with little limitation. And it would be economically possible to employ an army of publicly spirited individuals — 10, 20, or 100 — to educate customers about the economic and environmental impacts of their energy choices.

There are also new types of funding mechanisms being established in restructuring legislation. These include system benefits charges and funds allocated for customer education programs that could conceivably be tapped to extend the reach and effectiveness of a Grassroots Campaign in a competitive market environment.

## PART VII: LESSONS LEARNED: THE GOOD, THE BAD, AND THE UGLY

On balance, the benefits associated with the community-based grassroots campaign in Colorado greatly outweighed the problems. For the LAW Fund, the bottom line is that the amount of renewable resources acquired through green marketing far exceeded the amount likely to have been obtained through the regulatory process. The challenge will be to find ways for advocates to support green marketing that will be economically sustaining in a competitive market.

## THE GOOD

- **Resource Acquisition:** The Grassroots Campaign and utility efforts will likely result in 25 MW of new wind capacity coming on-line in Colorado by the end of 1999. Just as important, the education and customer response resulting from the utility/advocate green marketing partnership was a significant factor in creating an additional 25 MW regulatory commitment. By the end of 1999, the green marketing path will likely be responsible for roughly five times more wind power coming on-line as could have been obtained from the regulatory proceedings in 1996 under the best possible scenario. This is a real achievement. Furthermore, this market-based approach should be more insulated from political shifts in the state.
- **Diversity of Participation:** Before the Colorado community-based marketing began in 1997, most utility green pricing programs had focused on residential customers, believing that commercial customers would be less willing to pay more for a clean energy product. The Colorado experience strongly suggests that a significant number of large and small commercial customers are willing to pay a premium to acquire renewable energy. One out of every six small businesses approached in the Grassroots Campaign paid a premium of 2.5¢/kWh to purchase, on average, 15% of its energy from wind. This willingness of commercial customers to participate seems to hold true in a diverse range of geographic (urban, suburban, and mountain communities), ideological (conservative and liberal communities), and economic settings.
- **A Unique Message:** Grassroots marketing allows green power to be sold in a different context. A Grassroots Campaign can position the purchase of renewable energy as a community ethic, the cornerstone of any plan for sustainable development. Buying electricity from renewable sources then becomes a value shift similar to recycling, where the idea was encouraged by community organizations and is now institutionalized in most parts of the country.<sup>29</sup> In this context, purchasing renewable energy taps into a spirit of community goodwill, volunteerism, and local participation in the state's energy future. Households and businesses feel empowered by behaving in an environmentally responsible way. Marketing green power as an ethical action also may ensure that most customers continue to purchase their electricity from clean sources over the long term.

<sup>29</sup> Eric Lombardi, EcoCycle, remarks at the Boulder Windsource press conference, September 30, 1997.

■ **Transferability:** The Grassroots Campaign should be transferable to other places, technologies, and market structures. For example, wind has been successfully marketed in different geographical settings in Colorado. The LAW Fund is preparing to transfer the lessons learned in Colorado to Utah and New Mexico, where similar green pricing programs will be offered to customers. Grassroots marketing techniques should also be applicable for other renewable resource technologies. In Arizona, the LAW Fund and several local groups are in the planning stages of marketing a solar product. Initial analysis suggests that the same techniques and approaches piloted in Colorado for wind power are likely to work for solar power in Arizona.

The most exciting opportunity associated with the Colorado work is transferring it to a retail competition environment. The challenge is to create a self-sustaining pilot in which the costs of grassroots, community-based green marketing are supported by the market. If this were possible, outside funding eventually would not be needed and the Grassroots Campaign could be expanded from a handful of people. At this time, the LAW Fund believes there is no obvious reason why community-based marketing could not be applied in competitive markets such as the ones emerging in Pennsylvania, New Jersey, and elsewhere.

## THE BAD

■ **Funding:** A successful community-based marketing effort may require significant outside funding. In Colorado, a mix of federal, state, and foundation money was used to pilot the approach. Although the utility supported various efforts by the environmental community to raise outside monies, no funding came directly from PSCo. The environmental community believed that this was important in order to preserve its credibility. However, the funding issue is central because most groups cannot afford to engage in grassroots education, outreach, and marketing activities without outside support.

■ **The Utility/Advocacy Group Partnership:** Situating a grassroots marketing campaign in an advocacy group can be awkward. Often the groups with the most credibility and the greatest organizing experience have engaged in adversarial policy debates with a utility in either administrative or legislative contexts. As a result, there may be institutional tension as marketing activities expand or if the environmental group needs to engage in additional adversarial proceedings. Utilities are well aware of the

tenuous nature of an ongoing relationship with the environmental community. They are concerned that if a separate adversarial issue arises outside of the context of the green pricing program, the opposition by advocates might adversely affect their green products. Conversely, however, the working relationship developed through the marketing partnership in Colorado has helped to facilitate agreement on other contentious environmental issues.

There is also the potential that by working with utilities, environmental groups will harm their credibility as effective advocates. Indeed, a number of customers and industry stakeholders initially assumed that the LAW Fund was being paid for its work by PSCo, and considerable effort has gone into assuring the public and others of the LAW Fund's financial independence from the utility.

- **Public Credit for Grassroots Efforts:** The Colorado experience suggests that for-profit green power suppliers and political leaders may be cautious about publicly acknowledging their involvement with nonprofit environmental groups. This likely reflects the desire to be acknowledged for acting on their own as well as the adversarial history of the advocate/utility relationship. For example, Governor Romer shared the dais at his press conference on wind power with civic, business, and governmental leaders but not with environmental groups. And, although PSCo listed the names of environmental groups on the letterhead for its direct mail piece, the company continues to make little reference to the Grassroots Campaign in its communications materials. Likewise, Channel 9 only focuses on the efforts of the utility in its "wind cam" coverage of the site and tends to ignore the role of the Grassroots Campaign.
- **Training Other Groups:** The Colorado case study was conducted by people with significant experience in the electric industry as well as a personal commitment to and passion for promoting renewable resources. As the campaign expands to other communities and settings, new leaders must be found, funded, and trained. The economics of this training function have not been fully assessed.

## THE UGLY

■ **Branding the Incumbent as a Green Supplier:** One reason that regulated utilities are interested in marketing clean energy products is to establish their reputation as a green provider. Through marketing partnerships, environmental or clean energy groups can facilitate this process in a significant way and potentially cause adverse competitive impacts. In essence, the environmental community may be helping to brand the incumbent utility in a regulated market, with the result that when competition does come, it will be more difficult for new green power suppliers to attract a critical mass of customers. On balance, the LAW Fund believes that the benefits being achieved today from working with utilities on this program in Colorado — in terms of resources acquired, pollution emissions reduced, and increased community awareness of energy choices — outweigh the anti-competitive issues. There is no denying, however, that adverse competitive impacts are a real concern.

■ **Divisions in the Environmental Community:** Some environmentalists and consumer organizations have been vocal in their criticism of green pricing programs and the support of these programs by environmental groups. Public Citizen, a Washington-based watchdog group, believes that it is misguided to sign people up to buy green power before motivating them to become active in support of renewable energy policies. The group considers the time spent by clean energy advocates working with regulated utilities to be time lost advocating for public policy support for renewable energy at the state and federal level — time lost mobilizing citizens in support of strong clean energy policies.<sup>30</sup>

The LAW Fund and other clean energy advocates see support for green marketing and public policies as reciprocating rather than opposing efforts. The choice of buying clean power allows people to take near-term effective action in their communities and intertwines green consumerism with green citizenship.<sup>31</sup> Given that a competitive electric market appears to be some distance in the future, the grassroots marketing effort has led to new renewable energy generation in Colorado where policy approaches have failed. In any event, the divisions in the environmental and renewable energy advocacy communities engendered by green marketing have been real and acrimonious, and pose a challenge to green marketing efforts.

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<sup>30</sup> See *Green Buyers Beware: A Critical Review of Green Electricity Products*, Public Citizen's report on green marketing in California, November 1998.

<sup>31</sup> Ed Smeloff, Pace University Energy Project, energy advocates listserve, December 3, 1998.

## APPENDIX A – COLORADO WIND POWER BUYERS

(This is a partial list. For a comprehensive list, visit [www.cogreenpower.org](http://www.cogreenpower.org), a web site which is updated regularly.)

### Governmental Entities

City of Aspen  
 City of Boulder — Municipal Building  
 City of Denver  
 City of Ft. Collins  
 Denver Public Library  
 National Renewable Energy Laboratory  
 Pitkin County  
 State of Colorado — Governor's Mansion  
 Town of Carbondale  
 Town of Nederland  
 Town of Basalt  
 Town of Snowmass Village

### Commercial & Industrial Customers

(based on electricity use)

Aspen Skiing Company  
 Celestial Seasonings, Inc.  
 Coors Brewing Co.  
 IBM  
 Lockheed Martin Astronautics  
 McStain Enterprises, Inc.  
 New Belgium Brewing Company, Inc.  
 Portercare Hospital (Avista)  
 REI  
 Roche Colorado  
 Rocky Mountain Steel Mills  
 US West

### Non-profits

Boulder Chamber of Commerce  
 Boulder County AIDS Project  
 Boulder Museum of Contemporary Art  
 Collage Children's Museum  
 KGNU

### Environmental Organizations

American Solar Energy Society  
 Boulder Energy Conservation Center  
 Environmental Defense Fund  
 Global Response  
 Land and Water Fund of the Rockies  
 National Wildlife Federation  
 Rocky Mountain Institute  
 Sierra Club SW Office  
 The Nature Conservancy

### Churches

Holy Cross Lutheran Church  
 Sisters of Loretto  
 Sisters of the Good Shepherd  
 Boulder Mennonite Church  
 First Plymouth Church  
 Trinity Lutheran Church  
 University Lutheran Chapel

### Schools

Colorado College  
 Colorado Rocky Mountain School  
 The Naropa Institute  
 Regis University  
 September School  
 Sunflower Preschool

### Businesses

6 Directional Gallery  
 9News (KUSA-TV)  
 Absolute Wellness Center  
 Accounting Specialists  
 Altair Energy, Inc.  
 Austin Chiropractic Center  
 Bank of Boulder  
 Bartlett Interiors  
 Barrett-Steele Architects  
 Beale Fine Arts  
 Bill Cronin Goldsmith  
 Boulder Computer Company  
 Boulder Drug  
 Boulder Valley Asthma and Allergy Center  
 Boulder Yamaha  
 BRMF Plaza  
 Buffalo Lock & Key  
 Denver Technical Specialists  
 Design Concepts  
 Dr. Alan Reisman, DDS  
 Easy Lube  
 Eldorado Artesian Springs  
 E Source  
 European Flower Shop  
 Global Imaging, Inc.  
 Grandrabbit's Toy Shoppe  
 Hotel Boulderado  
 Independent Motors  
 Liquor Mart  
 Magnolia Pottery  
 Mahr-Day Ltd. Partnership  
 Marolt/Truscott Housing  
 Meow Meow  
 Mercury Framing, Inc.  
 Moby's Machine Shop  
 Mountain Ear  
 Nederland Feed & Supply  
 Patagonia, Inc.  
 Quinn's Billiards  
 Rocky Mnt. Center for Botanical Studies  
 Sensational Eyes Vision Clinic

Sew Good/The Black Tie  
 Sky Chairs, Inc.  
 Strawcrafters  
 Thunder River Lodge  
 The Gift Box  
 Valley Chrysler Dodge Plymouth  
 Wild Flowers

### Bookstores

Acoma Books  
 Books West  
 Troubadour Bookstore  
**Copy Centers & Graphic Design**  
 Aspen Graphics Services  
 Business Copy Center  
 Zaremba Visual Communications, Inc.

### Music & Video

Bart's CD Cellar & Record Shop  
 Cheapo Discs  
 Robb's Music

### Food & Restaurants

3rd Street Chai  
 Annie's Café & Bakery  
 Breadworks  
 Bullfrog's Pub & Grill  
 Café Siena  
 Caffé Luna  
 Cannon Mine Coffee Co.  
 & Antiques  
 Foolish Craig's Café  
 Juice Planet  
 Lick Skillet Bakery  
 Mijbani Indian Restaurant  
 Mountain People's Co-op  
 Rio Grande Mexican Restaurant

### Sport & Clothing

A Formal Affair  
 Act II Clothing  
 Full Court Press  
 Happy Trails Bicycle Specialists  
 The Hemperor's New Clothes  
 High Country Shirt Works  
 Patagonia, Inc.  
 Plenty  
 Starr's Clothing  
 Zapa Toes

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- Power to the People: How Local Governments Can Build Green Electricity Markets*, by Peter Asmus, January 1998.
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- The Environmental Imperative: A Driving Force in the Development and Deployment of Renewable Energy Technologies*, by Irving Mintzer, Alan Miller and Adam Serchuk, April 1996.

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- The Grassroots Are Greener: A Community-Based Approach to Marketing Green Power*, by Rudd Mayer, Eric Blank, and Blair Swezey, June 1999.
- Evaluation of a Proposal for Green Power Price Insurance*, by Robert Means, May 1999.
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- Green Power for Business: Good News from Traverse City*, by Edward Holt, July 1997.

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*Renewable Energy, Insurance and an Integrated Consumer Financial Product*, by Joel Gordes. Under electric restructuring many believe the bundling of services to be innovative. This paper examines bundling property-casualty insurance, a retirement annuity and electrical service into a single billing wherein any savings from reduced electricity bills pay for a PV system. This could spur investment in PV production and other market-driven climate change mitigation strategies.

*Whole Buildings II: Renewable Energy & Efficiency in Buildings*, by Ed Cohen-Rosenthal and Bernard Moore with Don Bradley. This paper explores the “whole buildings” concept from the micro level by examining the projects underway as well as policies that would encourage future development. Two on-going construction projects by Bradley Builders and Developers are used to illustrate what can be done in the housing market, while exploring additional institutional mechanisms that would make these types of projects the standard instead of the exception.

*Model State Programs for Clean Air and Renewable Energy* by Van Jamison and Anne Polansky. How can states integrate renewable energy programs with policies under the Clean Air Act? This Special Report, intended for state energy officials and air regulators, will suggest ways to do this so that reducing air pollution also encourages a sustainable energy infrastructure.

*Replacing Stationary Diesel with Renewable Energy* by Virinder Singh, Adam Serchuk and Jeff Wilks. This paper examines the diesel and renewable energy industries and recommends efforts that can transform the market so that renewables can have a greater market share, thereby cleaning the air and serving many energy needs.

*Project Siting: Comparative Case Studies and Lessons Learned*, by Robert Kahn and John Grattan. This paper examines case studies of renewable energy project siting, and provides lessons for project planners, renewables advocates, local environmental advocates, and local planners who need to balance access to good renewable resources with local environmental and aesthetic concerns.

*Making Technology Happen: Case Studies of the Government's Role in Innovation*, by Adam Serchuk and Bernard Moore. This paper explores the role of the Federal government in promoting diverse consumer technologies, including the fax machine and recycled paper, to supply background for a discussion of an appropriate Federal role in developing renewable energy technologies.

*Reducing Emissions: Getting the Most Out of Renewable Energy*, coordinated by Anne Polansky. Two Special Reports will identify ways to make renewables an integral strategy to reduce multiple air pollutants. One report will identify promising “cap and trade” emissions trading policies that can encourage renewable energy use. Another report will examine ways to monitor and verify emissions reductions from renewable energy use - a key issue for air quality regulators and the regulated community.

### ISSUE BRIEFS

*Renewable Energy Policies in Europe and Japan*, by Curtis Moore. This paper surveys policy mechanisms used by Japan and selected European countries to promote renewable energy technology, both domestically and as an export product.

*Renewable Energy and Clean Air Incentives: A Guide for the Renewable Energy Community* by David Wooley and David Allen. This paper answers the following pressing questions: What does the Clean Air Act mean for renewable energy, and how can the renewable energy community make renewables a more central strategy for both air quality regulators and clean air advocates?

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