

# **Integrated Market-Based Efficiency and Supply for Small Energy Consumers: The Consumer Energy Cooperative**

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## **ABSTRACT**

In states where utility restructuring has occurred, it has tended to benefit large energy customers, with little or no benefit accruing to small residential customers, and this is especially true for low-income households. These residential consumers often find themselves paying increased energy costs while large consumers enjoy price reductions. For this reason small consumers see little promise from utility restructuring.

Energy efficiency efforts in Vermont have focused on primarily on electricity savings, but less than 6% of Vermont households heat their homes with electricity. Therefore, there is enormous opportunity to create a market-based, unsubsidized retail service business to serve the segments of the market that have been typically ignored.

This paper describes the development of the statewide energy services cooperative - "Consumerco" - that is dedicated to providing its members with the lowest possible total overall energy bills. Consumerco will provide both efficiency measures and fuels, to optimize both efficiency investment and energy mix for each member. It will use fossil fuels as the primary revenue source in its start-up, and will add electricity at a later date.

Consumerco has undertaken a pilot program with a local community action program and its Weatherization Assistance Program to offer "energy case management" services to its low-income members. Early results of this pilot will be discussed in this report. In the final sections of this paper the results of the business plan financial model are discussed. Profitability and margin analysis are presented, supported by the list of assumptions used in formulating the business plan.

## **Project History**

John Plunkett and Beth Sachs co-authored an ACEEE paper in 1998 (Plunkett and Sachs, 1998) on the subject of aggregating large numbers of residential consumers into an energy cooperative that would purchase and sell electricity. At the time, electricity deregulation loomed, and the concern then, as it still is to some today, that residential consumers could expect competition to result in an increased cost of electricity. The concept of the Consumerco developed as a way to provide a source of competitively priced electricity which coupled with co-op-sponsored energy efficiency measures, would result in lower energy bills that would offset rises in the price of electricity. The strategic plan has been to use energy efficiency to attract customers to the Consumerco's competitively priced electricity and fuel products.

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<sup>1</sup> The authors acknowledge the contributions of our colleague Max Galvin of Vermont Energy Investment Corp.

In early 1998, when it became clear that Vermont would not have retail competition anytime soon, the Consumerco effort was forced to take a hard look at rethinking its plans [or strategies]. The business plan was changed the business approach from a relatively large volume electricity seller to one establishing a more sustainable business with lower-volume, higher-margin fossil fuels sales. The prominence of electricity in the product offering for Consumerco was reconsidered, and a decision was made to focus initially on the sale of fossil fuels. With margins as high as 30-40%, they could provide a better and immediate platform to launch the initiative, while offering ample opportunity to pass along modest price reductions to consumers. The Consumerco would still offer electricity later when possible, but it would be bundled with other margin-enhancing products. Consumerco was retooled with the economic drivers being propane, fuel oil and kerosene.

With fossil fuels providing a sustainable cash flow, the business plan could focus on how to fulfill the mission statement “*to lower the overall energy bill of the member*”. Consumerco would still provide all the products and services its creators had originally set out to provide, only now it would concentrate on using oil and propane as launching pad for the business.

## **Vermont Energy Market**

Vermont’s energy market is unique. There are 280,000 households in the state, 70% of which heat their homes with fuel oil or propane. Energy prices in the state are among the highest in the nation, and the winters among the coldest. Fossil fuel dealers are not only unregulated, in some areas they are in the midst of an industry consolidation and appear to be establishing monopoly territories. Despite its small size, Vermont’s electricity is supplied by a patchwork of 22 regulated utilities, the largest of which are in severe financial turmoil and may be facing bankruptcy. Within two years, restructuring of the electric industry is expected to allow customers to choose their electricity provider.

At the behest of utility regulators, significant energy efficiency efforts were undertaken in the 1980s and early 1990s, but have waned dramatically since then. The decline in utility DSM spending since 1994 has been halted by the formation of a statewide Energy Efficiency Utility (EEU), which was created by statute in 1999 and became operational in early 2000. The EEU is a single entity funded by a line charge to provide energy efficiency programs, with an emphasis on market transformation and lost opportunity programs. It is an innovative approach to providing efficiency services, but does not provide the services that the Consumerco will – ***residential retrofit services***. Residential retrofit has been left to market forces, and Consumerco intends to become one of those forces.

## **Conceptual Description**

The Consumerco has an immediate opportunity to establish a unique retail energy-services business. It will be the state’s first comprehensive energy-services business dedicated to providing its customers with the lowest possible total energy bills. It will provide comprehensive energy services at competitive prices by undertaking the following activities:

- pooling customer demands to acquire propane, oil and, later electricity at the lowest possible prices;

- providing energy efficiency products and services, including financing;
- furnishing superior customer service, including special services for its low-income members; and
- striving to benefit its members - not to pursue “profit” since it will be organized as a consumer-owned cooperative.

The Consumerco will prepare low-income and other residential consumers for the impact of restructuring by establishing a sustainable business based on fuel and efficiency sales. Because we assume that people are less willing to do business with a start-up venture, Consumerco will begin operations by purchasing a fuel oil and propane business.

Consumerco will use the power of a customer base rooted in fossil fuels to launch a full service Btu-neutral energy business that will provide all energy, energy efficiency services and renewable energy resources. It will offer its members a complete menu of fossil fuel, efficiency and renewable energy options through a buyers cooperative owned and controlled by its members. Consumerco will offer competitive solutions otherwise available only to the largest consumers.

Consumerco will market and deliver this full-service, fuel-neutral menu of energy services. It will compete on the basis of lower bills, not the lowest price, by integrating competitive fuel procurement and delivery with comprehensive energy efficiency. Energy efficiency adds value, both by lowering bills and by reducing environmental impacts. Providing fossil fuels helps optimize both efficiency investment and energy mix, while overcoming individual energy supplier disincentives’ to improve efficiency.

It is the bundling of products to provide the member’s total energy needs that creates the opportunity for Consumerco to help members optimize their mix of energy products and services. Providing “value-added” efficiency services transforms an otherwise homogeneous commodity (energy) into a package of tangible amenities (such as a more comfortable, less drafty home), reducing consumers’ overall costs in the process.

Consumerco services can be grouped as follows:

- Fuel Delivery and Heating System Service - Consumerco will offer full service propane and fuel oil delivery.
- Energy Efficiency Diagnosis - Consumerco will offer comprehensive, on-site energy evaluations using state-of-the-art equipment to identify problem areas and suggest specific measures to address them.
- Energy Efficiency Measures - Consumerco will directly install (or arrange to install) energy efficiency measures for members.
- Safety and Maintenance - Consumerco staff will address safety concerns for a variety of common household appliances and equipment, as well as provide annual maintenance services.
- Energy Education - Consumerco will educate its customers on “best practices” to achieve maximum energy efficiency using a variety of methods.
- Bill Consolidation and Flexible Payment Options - Consumerco will combine all of a member’s energy products and services on one, easy-to-read monthly statement. Monthly accountings for efficiency measures and renewable products purchased by members using Consumerco financing will be integrated into this one statement, as will energy and social-assistance credits for low-income members. In addition, Consumerco payment options will include the ability to spread prorated energy costs evenly over the year.

- Energy Case Management - Consumerco will explore all available options for reducing energy bills and providing financial assistance to low-income members. Consumerco staff will work with members to ensure there is no disruption in energy service due to past-due payments.

Consumerco will use this full service approach and its personal relationship with its *members* (not *customers*) to differentiate itself from conventional energy retailers. The cooperative nature of the business is expected to have both substantive and promotional advantages. By aggregating member demands, the Consumerco can gain enough market power to obtain and offer competitive prices for fuel oil and propane and use electricity as a low- or no-margin “loss leader”. In addition to lowering its members’ total energy bills, Consumerco is committed to the principle of democratic member control and ownership of the enterprise.

One early partner attracted to Consumerco idea has been the Washington Electric Cooperative (WEC) in Montpelier, VT. WEC has recognized the advantage of offering enhanced services to its by making available additional products to round out their electricity offering. The management of Consumerco will leverage these affinity relationships to facilitate the rapid acquisition of members.

Consumerco has also recently undertaken a pilot project with a large fuel distributor in Vermont (50,000 customers) to provide their customers with one-stop enhanced energy services financed by the fuel dealer. The goal is to understand how much people might be willing to pay for the service, what types of services they are interested in getting, and how much it costs to deliver the services. This type of arrangement with fuel dealers and weatherization providers has great potential throughout the state, even beyond the scope of the Consumerco. The pilot is designed to compare Consumerco’s audit costs with margins earned on efficiency installation. As long as the net margin is not significantly negative, then providing high-value efficiency services hold great potential as a competitive tool for Consumerco’s energy business.

Consumerco sent a mailing and is in the process of telemarketing to 100 high-use, budget-plan fuel dealer customers, offering half the group home energy audits at no charge and the other half audits at a cost of \$99. A total of 65% of those offered the service at no cost accepted the offer, and less than 5% of the \$99 offers were willing to accept the service. The low response rate to the \$99 audit offer is consistent with Residential Conservation Service (RCS) program experience of the early 1980s.

The audits that have been performed have turned up significant efficiency project opportunities in the homes that were evaluated. Consumerco staff is now working with homeowners scheduling the work suggested by the evaluators. Consumerco has contracted with the Northeast Employment and Training Organization (NETO) to deliver the efficiency retrofit measures to the homes that result from the audits. Through the careful use of mutually acceptable unitized pricing, Consumerco auditors are able to provide audits, projected savings and costs in one visit. This information is presented to the homeowner with a contract for the services if they choose to proceed. Should they choose to proceed, the signed agreement provides the work order information for the NETO crew to schedule the work and gather the requisite materials.

The theory being tested is whether the projects resulting from the free audits generate enough in the way of margin dollars to cover the cost of the audits. Consumerco need only break even on the audit process to continue, as the sales of fossil fuels will provide most of

the operating profit. The early results of the free audits show that the efficiency and HVAC work generated provide break even to slightly negative margin when considering the audit process by itself. It is believed that with a higher number of audits the cost per audit will decrease, improving margins the slightly negative margin to neutral. Future testing with lower audit fees (e.g., \$25 and \$50) will seek to determine whether Consumerco can improve margins from efficiency services even further without diminishing their value and appeal to consumers.

### **Competitive Advantages**

There is currently no entity or enterprise in the Vermont, cooperative or otherwise, that sells the full mix of products and services Consumerco will offer. Some larger companies in metropolitan areas have tried to combine low-margin commodities such as electricity and natural gas into product bundles with efficiency, but few if any have tried this with unregulated fuels. Nonetheless, Consumerco will face considerable competition on individual products, especially fossil fuels. The current competitive environments for each major product area are briefly described below.

### **Fossil-Fuel Competition**

There is fairly rigorous competition in the fossil fuels business in Vermont. There are currently about 150 fuel oil and 85 propane companies in the state (some sell both fuels). The greater number of oil companies corresponds to the fact that a majority (62%) of Vermont homes is heated with oil.

Most of Vermont's fossil fuel dealers fall into one of two categories: small, locally owned operations, and regional or national companies. The locally owned businesses usually serve only their surrounding area, typically delivering to 500 to 1,500 heating customers with one to two trucks. These operations usually purchase their fuel from the closest wholesale dealer. The regional or national companies serve wide geographic areas from multiple locations, and typically have 5,000 to 15,000 customers. These companies have national or regional supply contracts and essentially act as their own wholesale suppliers.

There has been significant consolidation in the fossil fuels business over the past ten years. The larger companies are purchasing the small operations to such a degree that relatively few small firms remain. In fact, of approximately 235 fossil-fuel dealers listed in the state, there are only 100 different companies, and many of those share common ownership, making the number of different organizations actually only about 50. For the most part, this consolidation is not visible to the public. Because customers routinely express a preference for doing business with a local supplier, savvy operators have left the original company's name on their trucks and billing statements, while reaping the benefits of better wholesale supply purchases and improved operations.

Competition varies by geographic area within the state. In some parts of Vermont, such as the Burlington area, there are many companies vying for the same business. In others, there is virtually no competition, especially in the propane market, where the industry often appears monopolistic. Anecdotal evidence indicates that, in some cases, dealers have carved out distinct service areas, referring potential customers who call from outside the areas to other dealers.

The propane market in Vermont is growing only at rate of 3% to 5% per year and is considered mature in most respects. As a result, most of the customers acquired by Consumerco will be at the expense of other dealers. One exception is new construction, where propane is achieving a disproportionately large market share. Since propane companies pay for the tank and piping, and propane furnaces and boilers are incrementally cheaper than oil, developers can significantly reduce their construction costs by installing propane systems. This preference for propane is occurring in some urban areas in anticipation of natural gas pipeline construction, since equipment used for propane can later be inexpensively converted to natural gas. Propane is promoted as a “clean” environmental fuel because it has fewer pollutants per Btu than oil.

Electric co-ops in other parts of the country that have branched out into fossil fuels have reported relatively easy customer acquisition at the outset, followed by an awakening by the competition who then develop improved marketing efforts targeted at regaining lost customers. Consequently, Consumerco expects to experience an initial period of fairly rapid customer acquisition, after which competition will stiffen. To counter this expected response, Consumerco’s will place significant emphasis on training of its customer –service staff in retaining customers during periods of increased competitive marketing.

Customers appear satisfied with their fossil-fuel providers. In a survey by Washington Electric Cooperative (WEC), almost 80% of non-members said that they were satisfied with their supplier. However, when electric co-op members were asked about their propensity to switch, 87% said that they would switch and buy fossil fuels from the co-op, if it were to begin selling them. Indeed, one of the major competitive advantages that Consumerco will have is its ability to do “affinity marketing” through groups such as electric co-ops and credit unions.

Providing energy efficiency services will give Consumerco another major advantage over the competing fossil fuel providers. Consumerco will also compete against other fuel providers based on service. Research indicates that service levels vary considerably from dealer to dealer, but poor quality of service always ranks near the top of customer complaints. Consumerco will simply offer more of the services consumers want from their energy suppliers.

**Energy-Efficiency Competition.** Several companies in Vermont offer a variety of energy efficiency services, including Vermont Energy Investment Corporation, Conservation Services Group and Center for Ecological Technology. The developers of Consumerco see these companies as allies rather than competitors. Consumerco will use the services of these organizations where it makes sense economically and geographically to do so. The developers see no reason to duplicate these services provided they can be obtained at cost effective rates.

There are also five community-based organizations that deliver weatherization services to qualifying low-income households. Three of these providers have formed for-profit subsidiaries to deliver efficiency services in the marketplace on a “fee-for-service” basis. These companies have not made any concerted efforts to market the services to the general public, and their market penetration has been minimal. They also have not combined energy-efficiency financing or other energy sources (fuel oil, kerosene and propane) to bridge the common market barriers to implementing energy-efficiency measures. Most important, these companies have indicated a willingness to work in partnership with

Consumerco. As one example, Consumerco is using Northeast Employment and Training Organization, a weatherization contractor, to deliver efficiency products and services in a pilot program that combines energy efficiency and fuel choice to provide the optimal “Btu-neutral” approach to a home energy management.

One potential competitor for the delivery of energy efficiency services in Vermont is the newly formed Energy Efficiency Utility (EEU). The EEU, now known as Efficiency Vermont, was formed to unify design and consolidate delivery of a set of “core” energy-efficiency programs for the entire state of Vermont. These core programs are designed to influence residential efficiency transactions in new construction, remodeling, lighting and appliance purchases, as well as low-income retrofits. Current core programs therefore do not address the non-low-income residential retrofit market. The Consumerco is designing and plans to deliver its efficiency services to take advantage of rebates and other offerings of Vermont’s residential core programs. For example, Consumerco lighting installation pricing will incorporate to the maximum allowable extent all rebates available for efficient lighting products. The Consumerco will also integrate its low-income services with the core low-income program delivered by Efficiency Vermont.

**Electricity Competition.** The framework of future electricity competition in Vermont is difficult to predict at this time, although it is difficult to imagine that the state will not restructure the electric utility industry in some form in the next few years.

For electricity retailers, a critical factor in formulating a business strategy is the floor price set by the utility regulators. This is often called the “standard offer” (in Massachusetts and California) or the “shopping credit” (in Pennsylvania). In Massachusetts and California, these offers have been quite low, which satisfies consumers in the short run but may be detrimental over the longer term.

A low floor price means that retailers must operate on very slim price margins for electricity. Often only incumbent utility companies can manage such margins, so the existing infrastructure tends to be perpetuated, and new competition is thwarted. Higher standard offers like that in Pennsylvania foster more competition but raise consumer prices. Vermont legislators must try to determine whether consumers will be better off with lower short-term prices, and probably less competition, or with somewhat higher initial prices but stronger competition, which will keep the market healthy over the long-term.

Taking a conservative view, the business plan assumes a low standard offer will be implemented. Consumerco will be able to effectively compete in a low-standard-offer environment because it will have an established membership base and infrastructure. While the low margins available from electricity make it difficult for companies to prosper from electricity sales alone, Consumerco’s overhead will be supported by its broad range of products and services. Electricity will simply be another incremental offering and a natural addition to its product portfolio.

In states where electricity restructuring has occurred, the number of people who have switched electricity suppliers has been minimal because standard offers have prevented new competitors offering significantly better rates. Few of these companies have offered any other products besides electricity. In addition, they have tended to envision the markets as “virtual,” so they often do not put any local infrastructure in place, which adds to their “outsider” image. As a result, consumers have not considered these companies as viable alternatives to the incumbent supplier, and the new entrants have generally not fared well. As

a Vermont-based business with eventual representation in all areas of the state, Consumerco will have staff throughout Vermont.

### **Environmental Improvement**

Consumerco will advance environmental policy objectives in two ways. First, comprehensive energy efficiency investment will reduce energy consumption and thus production. Lower energy output will lead to lower emissions of a number of pollutants, including greenhouse gases. Second, Consumerco will reduce environmental impacts associated with energy use by helping transform the market for renewable supply. Elevating and meeting the demand for green electricity supply will reinforce market transformation. Although Consumerco intends to offer green electricity, the authors hold the belief that there is no greener power than the power that is not consumed.

### **Education and Low-Income Consumer Protection**

Information and education are essential tools in Consumerco's mission to help members make better energy decisions in their lives - better both for their household finances and for the environment.

Energy efficiency education will be an integral part of Consumerco's ongoing relationship with its members, as efficiency is an essential component of lower energy bills. However, most members are likely to avoid making major cost-effective investments immediately upon joining Consumerco. Consequently, Consumerco will need to educate members on a continuing basis so they can take progressive steps toward greater efficiency, as they are ready.

Among the mechanisms Consumerco will employ to provide energy education are:

- a periodic newsletter to all members with energy-saving tips, energy "success stories" of individual members, information about new technologies, references to additional energy resources, etc.;
- speaking engagements at public events and meetings of civic, environmental, consumer, trade, low-income and other community organizations;
- articles in daily, community and organizational newspapers and newsletters;
- a computer-based energy-audit tool that can be used to assess energy opportunities and illustrate the value of efficiency in members' and prospective members' homes; and
- a web site coordinating opportunities to purchase energy-efficient products and providing links to related sites.

In addition, Consumerco will provide members with information about state and federal programs or rebates that may apply to them. Consumerco will function as a clearinghouse of information aimed at directing members to agencies and institutions dedicated to reducing energy consumption and decreasing the burden of energy bills.

In addition to these broad-based educational activities, Consumerco will provide in-depth Energy Case Management (ECM) services to low-income members. ECM will involve building long-term relationships with low-income members to help them make energy more affordable. Consumerco's ECM service will consist of a combination of some or all of the



following components, with others to be identified in a pilot program funded partially by a REACH grant from the U.S. Dept of Health and Human Services:

- determining eligibility and helping members sign up for all federal, state and local assistance programs for which they qualify, including the Weatherization Assistance Program and fuel assistance;
- developing a personalized “energy affordability plan”;
- providing ongoing money-management counseling;
- developing a budget payment plan incorporating not only the energy bill, but “credits” for such benefits as fuel assistance and welfare payments and, if available, state payment-assistance funds;
- conducting an energy analysis to determine the most cost-effective measures; and
- providing on-bill financing of energy efficiency measures in situations where members are not eligible for low-income weatherization assistance.

Consumerco is conducting a pilot program using ECM services with a limited number of low-income households. This will help identify the costs and benefits of the various components, which can then be developed into the most cost-effective package. Once the pilot is completed and the costs of the optimal ECM services determined, those costs will be integrated into Consumerco’s operating budget.

### **Energy Case Management Pilot – Preliminary Results**

A major objective of Consumerco development is to learn how to deliver energy services to help low-income households better manage their energy bills as part of their household budget. The Consumerco development team initiated a pilot program to understand what services are of value, how much they cost to provide, and then see if they can be sustained by spreading their cost among all members of a consumer energy coop. In this pilot, Consumerco provided staff to work at a local community action agency, to identify potential Consumerco members and provide them with enhanced weatherization services, energy education to reduce consumption and costs, and energy bill counseling.

Consumerco began the Energy Case Management pilot with Central Vermont Community Action Council (CVCAC) in November 1999. CVCAC entered into a contract with Consumerco, whereby project funds were provided to CVCAC to hire an Energy Case Manager. During her tenure, the ECM spent a lot of time doing outreach and delivering education, counseling and referral advice to low-income households. During that three-month period (including Christmas and New Years), she:

- developed a database to track 250 households;
- tested variety of outreach strategies (distributed 211 direct mail pieces, made 53 cold telephone calls, 20 cold in-home calls, 109 other contacts);
- directly installed efficiency measures in 50 households, estimated to save an average of \$43 per year per household, for a total savings of 17,000 kWh; and
- made referrals to other programs.

Implementation has been delayed by the departure of the ECM. A new ECM has been hired to continue providing services and collecting information. Results of this pilot will be reviewed and incorporated into service delivery when the Consumerco opens this summer.

## Feasibility Analysis

This section contains two sets of analyses. The first compares the gross margins of the Consumerco to industry national averages. The second compares the net profits of Consumerco to national averages.

### Gross Margins

Industry comparisons are available for oil and propane businesses. Consumerco's oil and propane cost centers were modeled separately, so their gross margins could be directly compared to national industry averages. Table 1 compares the gross margins of Consumerco's individual cost centers in Year 3 with national averages for oil and propane businesses. In addition, the industry data was blended (using weighted averages) to reflect an oil and propane business in the same proportions as Consumerco. Hence, the table also compares overall Consumerco Year 3 results to the blended national averages. All figures are percentages of total revenues.

All financial models projected the blend of efficiency services, financing and installed product margins to show a slight positive cash flow. Efficiency work performed by Consumerco staff and subcontractors was structured to break even or turn a profit. In market research performed for the business plan, clear customer preference was shown for receiving energy efficiency as part of the packages of services offered by fossil fuel dealers. In the research, the propensity to switch fuel dealers was more strongly affected by the ability to access more efficiency service than it was by a 10% price reduction. When reduction and efficiency were combined in one offer, which is what the Consumerco intends to do, the switching behavior was very positive.

Remember when looking at the numbers in Table 1 that Consumerco's numbers include energy efficiency as part of the standard package offered to all members.

**Table 1: Consumerco Year 3 Gross Margins vs. Industry Gross Margins**

Product		Gross Margin (% of total revenues)
Oil	Industry	21.4%
	Consumerco	21.74%
Propane	Industry	42.5%
	Consumerco	49.18%
<i>Weighted Industry</i>		36.25%
<i>Total Consumerco</i>		34.24%

## Net Profits

Because Consumerco has overhead that is applicable to all its cost centers, net-profit figures for each cost center could not be easily computed. However, net profits from the business as a whole were available to compare against industry averages. Table 2 compares Consumerco's net profits (as a percentage of revenues) to national averages and to a weighted (hypothetical) oil and propane business with the same product breakdown as Consumerco. Note that Consumerco's results in the early years are negative because the business loses money at the outset. As the business reaches maturity in Years 4 and 5, however, Consumerco's results are consistent with the national averages.

**Table 2: Consumerco Net Profits vs. Industry and Weighted Industry Net Profits**

Business Entity	Net Profit
<i>Consumerco Year 1</i>	(3.82%)
<i>Consumerco Year 2</i>	(1.83%)
<i>Consumerco Year 3</i>	0.03%
<i>Consumerco Year 4</i>	1.4%
<i>Consumerco Year 5</i>	3.23%
<i>Oil Industry</i>	1.4%
<i>Propane Industry</i>	5.0%
<i>Weighted Industry</i>	3.93%

## Assumptions

At the outset, Consumerco's primary economic driving force is likely to be fossil-fuel sales. Sales of energy efficiency and renewables are essential to Consumerco's mission, but they are not as large or consistent as fossil-fuel sales. Fuel sales will provide most of Consumerco's initial cash flow, thereby helping to support an infrastructure of people and facilities that can also promote efficiency and renewables.

Given Vermont's demographics and related market conditions, the purchase of an existing fuels business is preferable to starting an operation from scratch. By purchasing an existing business, Consumerco will be able to start operations with a stable cash flow, primarily because it will "inherit" a solid customer base in a specific geographical area. This customer base would also provide a more significant presence from which to promote and market Consumerco.

Research of the retail fuel oil and propane business reveals that propane companies have several advantages over oil. In short, pricing is more flexible, consumption is somewhat

less seasonal, and customer loyalty is higher (due in part to the fact that the companies provide the storage tank). Propane profit margins are also significantly higher than oil. Consequently, Consumerco will give preference to purchasing a propane business with a base of 2,500 to 3,500 customers. Such a business is expected to cost between \$2.3 million and \$3.7 million.

Two geographic areas have been identified as attractive potential sites for the purchase of a propane business and the launching of Consumerco Washington County and Chittenden County. The Washington County area is desirable because of the opportunity for cooperative marketing efforts and/or partnership with affinity groups familiar with the cooperative structure. Chittenden County is attractive because of its large population and proximity to fuel suppliers. Potential acquisitions have been identified in both areas.

In the event that a purchase is concluded in one area, marketing efforts would be designed to grow toward the other while Consumerco simultaneously builds route density in the initial area. For the first year, the propane business is projected to grow at about ten customers per month. Subsequently, it will increase at the rate of about 15 customers a month.

Fuel-oil delivery will commence in the fourth month and as a start-up rather than a purchase. The four-month delay will provide time to stabilize the propane business gear up marketing efforts. Because of the much greater size of the oil market, the oil business is projected to grow at the rate of 40 customers per month. This rate of growth, combined with the initial customer base realized by the purchase of the propane business, will result in approximately 5,500 customers by the end of the third year.

Perhaps the single most plausible area with “upside potential” involves more rapid acquisition of customers. Washington County contains more than 16,000 households. It is highly likely that a comprehensive marketing effort co-sponsored by Washington Electric Cooperative in the county could result in 5,000 to 6,000 customers before the end of the third year. This is roughly the break-even point, so attaining this growth earlier would have a significant positive impact on Consumerco’s finances. Another opportunity exists regarding non-residential customers. No such customers have been included in the current projections, yet Consumerco is certain to serve many.

Among the other Consumerco Base Assumptions:

- Consumerco’s oil prices will be about 5% below the going rate, and its propane prices will be roughly 8% less.
- About 50% of the oil and propane customers will be on a 12-month levelized payment plan.
- Customers will be eligible to receive approximately \$50 worth of free, basic energy-efficiency measures. More than 65% of Consumerco customers are projected to participate on one level or another over time. This is expected to be a significant marketing inducement.
- A second level of efficiency measures worth approximately \$300 will be offered with “positive cash flow financing.” Consumerco will “split” the resulting savings with the customer over three to five years, enabling the co-op to recoup most of its costs while the customer still receives a monthly bill reduction. Approximately 10% of Consumerco customers are projected to participate.
- Advanced efficiency measures and solar installations will be subcontracted and bank financed. The co-op will realize a modest markup and a financing-

origination fee on these transactions. Roughly 10% of the Consumerco customer base is projected to participate.

- Efficiency and solar installations will begin modestly and phase in over 24 months.
- The projections show a reduced consumption of oil, propane and electricity to account for the effectiveness of energy-efficiency measures.

Electricity sales will commence in July 2001, the estimated conclusion of Vermont's electric deregulation process. Participation among existing customers will grow to 50% over the five-year period. Current projections assume Consumerco can net approximately 3 mills per kWh.

## **Conclusions**

Consumerco is a completely and profoundly new way of selling and supplying household energy service, offering all the energy services customers need under one roof — a roof they own. The co-op offers competitive prices and better, more convenient service than that provided by traditional suppliers. Consumers know they can trust the co-op because they themselves own it - they are the co-op.

Consumerco provides access to energy efficiency services that most customers have never had access to before. The principal challenges and opportunities facing Consumerco are first convincing consumers of the financial benefits of energy efficiency, and then delivering the services and savings it will take to realize those benefits. This is not a one-time service for members but a lifetime affiliation with an energy efficiency expert providing consistent timely advice to reduce the energy use of its members.

As of the date of this paper the Consumerco has been incorporated, a purchase and sales agreement has been signed to purchase and oil company, and negotiations are well under way to purchase a propane company.

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