

Subgroup 5 Report

INFORMATION/CONSUMER EDUCATION

**Recommendations for the Commonwealth of Virginia
Submitted to the Virginia State Corporation Commission**

Case Number PUE-2007-00049

October 1, 2007

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Executive Summary

The Virginia General Assembly has directed the State Corporation Commission (SCC) to determine whether an established goal of reducing electricity consumption by retail customers by 10% by the year 2022 is achievable. The SCC has established a Workgroup comprised of a wide variety of stakeholders, including state and local government agencies, utilities, consumers, environmental groups, and others, tasked to provide input and ideas to the SCC. The Workgroup has divided into five subgroups to address the feasibility of the goal of a statewide reduction in electricity use from different assigned perspectives.

Subgroup 5 has been specifically tasked to consider how information and consumer education fit within the overall goal of reducing consumption. Our focus has been deemed to include the following aspects: What justification exists for a new consumer education program? What are the impediments to implementation? What market research is needed? What are some of the immediate, short-term, mid-term, and long-term consumer education components? What are some effective ways to design and deliver information in a consumer education campaign? Who should oversee and implement the program? How much could it cost and how could it be funded? What legislative action is necessary to facilitate these efforts?

Our subgroup acknowledges that many consumer education programs currently offered in the Commonwealth provide important conservation and energy efficiency messages but believes that a new core program is urgently needed. Significantly, we note that all of the states that have achieved highly energy-efficient economies have already launched statewide consumer education campaigns. The subgroup has reached consensus that Virginia needs a centralized, innovative, comprehensive electric energy consumer education program to transform the overall energy efficiency awareness that existing programs already have generated into widespread consumer action that can be tracked, measured, and evaluated.

We have identified several impediments to the development of a new Commonwealth-wide energy education program, and we discuss ways to overcome these market barriers throughout this report. We recognize the compelling need for market research to assist with the design and delivery of the program and to enable tracking, measurement, and evaluation of results.

To implement a successful electric energy consumer education campaign for the Commonwealth, our subgroup envisions a clear and concise message that will resonate with all Virginia consumers. For education to create change three things must occur: (i) Education must inspire; (ii) Education must inform; and (iii) Education – most importantly – must enable. The consumer education campaign should focus on simple behavioral changes in the home and at the office, which could also be tiered based on no-cost, low-cost, and high-cost efforts.

The subgroup recognizes that most people do want to do something to save money and energy but do not know where to start. The campaign should focus on helping homeowners identify what they can do, the efficiency savings available, and where they can start. Toward that end, we have identified immediate, short-term, mid-term, and long-term components of a consumer education campaign that we believe would help ensure its success. We have addressed the information needs of residential, commercial/industrial, and institutional sectors in this report, but we do not include a specific messaging package.

There are many different ways the Commonwealth-wide consumer education campaign could be effectively managed. Initially, the SCC could manage the electric utility re-regulation portion of the program. Third-party marketing organizations should be engaged to design and/or deliver the consumer education campaign. Ultimately, the program would be most efficiently managed either within the SCC or within the Department of Mines, Minerals and Energy (DMME); or by an independent, third-party entity with SCC or DMME oversight. The SCC should establish a Citizen Advisory Panel.

We provide an illustrative budget to emphasize critical cost considerations for a new consumer education program. We also recognize the compelling need for a dedicated, reliable funding source to ensure long-term success of the program, and we feel strongly that a Public Benefit Fund (PBF) should be given full consideration as a funding option.

Our subgroup has discussed several potential legislative proposals that could be recommended to the Virginia General Assembly. New legislation would probably be required both to establish the Commonwealth-wide consumer education program and also to fund the program. New legislation would also be needed to create a K-12 energy education curriculum for all public schools in the Commonwealth. Our recommendations supporting these legislative proposals reflect consensus reached within the subgroup.

There is also consensus within our subgroup not only that a 10% reduction in electricity consumption by the year 2022 is highly achievable but also that a reduction in consumption through conservation, energy efficiency, demand-side management, and demand response programs is absolutely imperative. The availability and reliability of affordable electric energy, reducing the negative impact of energy use on the environment, and the challenges of meeting peak demand are issues that should concern all consumers in the Commonwealth. Conservation, energy efficiency, and related programs should be promoted now, within the parameters of our current framework, as we move forward.

We are hopeful that the general ideas and specific input reflected in this report will help SCC staff make recommendations to the General Assembly that will inspire, inform, and enable all citizens of the Commonwealth to embrace better energy solutions.

Barbara Kessinger, Co-Chair (Citizen)
Billy Weitzenfeld, Co-Chair (AECP)

Subgroup 5 Report: Information/Consumer Education

I. Introduction

In April of 2007, the Virginia General Assembly directed the State Corporation Commission (SCC) to determine whether reducing electricity consumption by retail customers by 10% by the year 2022 is achievable. The SCC formed a working group comprised of a wide variety of stakeholders, including state and local government agencies, utilities, consumers, environmental groups, and others, with the assigned task of providing input and ideas to the SCC on the feasibility of statewide reduction in electricity use. The group met on July 19 in Richmond, and at that time it was suggested that the only way substantive information could be obtained so that recommendations could be formulated was to break into smaller groups/ committees.

Five subgroups were then formed with co-chairs assigned to each group. Subgroup 1 evaluated general considerations; Subgroup 2 identified conservation and energy efficiency programs; Subgroup 3 considered demand-side management (DSM) and demand response (DR) programs; Subgroup 4 evaluated financial considerations; and Subgroup 5 focused on information and consumer education. Subgroup 5 co-chairs Barbara Kessinger and Billy Weitzenfeld agreed on a process to gather input and developed a framework of categories and questions based on SCC-suggested focus topics for the subgroup.

SCC-suggested focus topics for subgroup 5 were as follows: (i) how information and consumer education fit within the overall goal of reducing consumption; (ii) what justification exists for a new program; (iii) what are the impediments to implementation; (iv) what market research is needed; (v) what are effective ways to design and deliver information in a consumer education campaign; (vi) how we can enable consumers to make changes in behavior and decision-making; (vii) what are some immediate, short-term, mid-term, and long-term consumer education components; (viii) what entity or entities should oversee and implement the program; (ix) how much it might cost and how it could be funded; (x) what legislative action is necessary; and (xi) what further consumer education recommendations, if any, could be made, given the conservation, energy efficiency, demand-side management, and demand response programs recommended by subgroups 2 and 3.

On August 8, the co-chairs emailed a framework to the full subgroup with a request for response within a week. About half of the subgroup members submitted input, which the co-chairs then compiled into an outline format that constituted a summary of ideas presented and a working document that could be used moving forward. The co-chairs emailed the summary outline to the full subgroup in time for review before our first face-to-face meeting on August 23. We discussed and modified the outline, incorporating additional ideas into its content, resulting in a more streamlined outline that could lead to a written report. Several subgroup members then provided written drafts of sections, which the co-chairs converted into a draft report dated September 10. The co-chairs emailed this draft report to the full subgroup in time for review before our next meeting on September 14. We discussed the entire draft during morning and afternoon breakout sessions. After this discussion, several subgroup members provided additional verbiage, which the co-chairs incorporated into a revised document dated September 24, which again was reviewed by the entire subgroup. The co-chairs then finalized this report for submission to the SCC on October 1.

This report is divided into eight main sections: Justification, Impediments, Market Research, Consumer Education Campaign, Management, Cost, Funding, and Legislation. Our Consumer Education Campaign does address the needs of residential, commercial/industrial, and institutional sectors but does not include a specific messaging package. We do agree that messaging is a critical component of a consumer education campaign and that great care and oversight is necessary to produce educational content that is accurate and balanced. However, there was insufficient time to develop a consumer education messaging package, and our subgroup also feels that this is not our task at this point in the proceeding. In the event the SCC decides to continue this Workgroup, recommendations for more specific messaging could be provided at a later time.

Our subgroup reached consensus that Virginia needs a centralized, innovative, and comprehensive electric energy consumer education program to transform the overall energy efficiency awareness that existing programs already have generated into widespread changes in consumer behavior that can be tracked, measured, and evaluated.

II. Justification

Many consumer education programs currently offered in the Commonwealth provide important conservation and energy efficiency messages, but a new Commonwealth-wide program is urgently needed. Multiple low-level programs (one-time offerings, utility bill inserts/website information, initiatives that cost as little as several thousand dollars, etc.) have helped to raise overall awareness of energy efficiency activity in Virginia, but a high-level program (multiple-year offerings costing \$6 million or more annually) is imperative for widespread changes in the ways we use electricity.

Several years ago, the Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME) submitted a study entitled *Consumer Education for Energy Efficiency*.¹ The Department had contracted with Primen to research then-existing conservation and energy efficiency programs, survey Virginian consumers to establish baselines for acceptance of and attitudes toward energy efficiency, and evaluate the effectiveness of then-existing programs. The DMME submitted its study to the Virginia Consumer Advisory Board, a subcommittee of the Legislative Transition Task Force studying electric utility restructuring in Virginia.

Primen researched over 30 consumer education programs offered in Virginia by government agencies, utility companies and electric cooperatives, colleges and universities, and non-profits. It found that most of the offerings in the Commonwealth were low-level programs, budgets were small, media components were limited, and most of the efforts achieved minimal consumer action.

As part of the same study, Primen conducted a survey that established some useful baseline data for 2001. Sixty-one percent of Virginians surveyed were aware of energy efficiency advertising, and only 25% of the total number of respondents admitted that they were not well informed about energy efficiency. However, only 18% of Virginians surveyed had purchased a compact

¹ *Consumer Education for Energy Efficiency*. The Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME), December 4, 2001.

fluorescent light (CFL) in the prior two years, and less than 10% of the respondents who had purchased a new appliance within the same time frame had done so with the specific purpose of selecting a more energy-efficient model. In other words, survey results suggested that the important link between consumer awareness and actual behavior modification had not been achieved in Virginia on a widespread basis.

Primen concluded that the effectiveness of programs offered in the Commonwealth was rarely tracked and that many regional and national efforts did not seem to reach Virginia consumers. It suggested that low-level programs were more likely to promote awareness only, whereas high-level programs were more likely to spur actual consumer action.

Given that six years have elapsed since the publication of the DMME study, SCC Staff should consider whether another survey of consumers is warranted to establish current baseline information for energy efficiency activity. It should be noted that during the Workgroup's second meeting, a brief, informal "survey" of participants was conducted toward the end of this subgroup's presentation. When asked, "Do you currently participate in a time-of-use/other metering program or a load management program?" only 12% (eight of sixty-seven) of the individuals then-present raised their hands to indicate, "Yes." The Workgroup's "survey" response certainly suggests that even its own participants are not receiving an appropriate demand-side resources message and/or are non-responsive. If Staff determines that updated baseline information would help provide further justification for a new consumer electric energy education program, a non-costly survey, conducted on-line by the SCC over the next few months, would be warranted.

Although existing studies do not conclusively establish a causal relationship between statewide consumer education programs and highly energy-efficient economies, there is undoubtedly a strong correlative link between the implementation of these programs and high levels of energy efficiency. Most notably, all of the states that have earned the highest scores in the ACEEE's most recent comprehensive nationwide energy efficiency ranking², have launched statewide consumer education campaigns, e.g., *Efficiency Vermont* www.encyvermont.com/pages/ and California's *Flex Your Power* www.fypower.org/. The Flex Alerts provided by the latter are credited with reducing peak demand at critical times and avoiding electrical emergencies, another economic benefit linked to consumer education.

The Virginia Energy Plan recognizes the importance of education in overcoming a *consumer knowledge market barrier* to conservation and energy efficiency efforts. It states that "recent market research has shown that lack of information about energy-efficient equipment and building practices is a major barrier that prevents consumers from practicing energy efficiency."³ The Virginia Energy Plan also recommends the development of an expanded energy education program to overcome this *consumer knowledge market barrier*; however, as the next section of this subgroup report indicates, there are also market barriers to a statewide consumer education program.

² M. Eldridge, B. Prindle, D. York, and S. Nadel, *The State Energy Efficiency Scorecard for 2006*, Report#U054 [Washington, D.C.: American Council for an Energy-Efficient Economy (ACEEE), 2007], iv-v. (Reference Attachment 1.)

³ *The Virginia Energy Plan*. The Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME), 2007, 74.

III. Impediments

Our subgroup identified several impediments to the development and implementation of a successful Commonwealth-wide electric energy consumer education program, as follows:

- Very limited availability of market research that tracks and measures results from statewide programs. As noted in the previous section, there is little if any empirical data that conclusively proves that information provided via statewide consumer education programs (as opposed to other sources) causes consumers to take energy-efficient actions.
- Apathy (perceived or real) of consumers toward consumer education in general. Many consumers might feel they are already experiencing information overload. Some might not want to take the time to get educated. Several members of our subgroup felt that it is more a case of consumers wanting to do the right thing but not knowing where to start.
- Lack of immediate positive feedback from their energy-efficient actions, making it difficult for consumers to connect their actions with cost savings, much less energy savings or assisting the electric grid. Everyone agreed that this is a disconnect that must be resolved.
- Cost of a consumer education program. This impediment is specifically addressed in section 7 of this report.
- No funding for a consumer education program. This impediment is specifically addressed in section 8 of this report.
- Lack of standardization of structures (not rates) for currently-existing DSM and DR programs in Virginia, making it more difficult to educate consumers about them. (The resolution of this market barrier falls outside the scope of this subgroup's tasking.)
- Resistance (perceived or real) of utility companies toward a statewide consumer education program. Electric service provider representatives within our subgroup felt strongly that this is an inaccurate perception and that, to the contrary, they will support such a program as long as it does not preclude, control, or supersede their own consumer education efforts.
- Absence of a current crisis situation in Virginia to serve as a catalyst for statewide consumer education efforts, much as the rolling blackouts did in California. Regardless, our subgroup recognizes the need to educate consumers now to help avoid any such crisis situation in the future.

We address these impediments throughout this report, beginning with the need for market research discussed in the next section.

IV. Market Research

Market research is a systematic, objective collection and analysis of data about a target market, in this case, the residents of the Commonwealth. The initial goal would be to obtain an increased understanding of residents and their behavior, which could assist in the design of a comprehensive consumer education program. Professional market researchers can merge existing **demographic data** (age, education/income levels, family size/no. of children, age of home, etc.) with a wide array of collected **attitudinal information** (energy, home repairs/upgrades, environmental, etc.). Subsequent goals would be to track, measure, evaluate, and adjust the consumer education program. Market research is not an activity that should be conducted only once; rather, it should be an ongoing activity that accounts for shifts and trends within the target market. See, for example, the impact evaluations for the EPA ENERGY STAR appliance program.⁴

Market research can help create benchmarks. What do residents already know? What channels of information are most useful? What types of messages are likely to prompt actions? What are residents already doing?

Market research will minimize risk. For example, the energy marketplace already might be saturated with certain information, thereby frustrating residents. This sort of market information would be useful in designing a program that takes all learning, negative and positive, into account.

Market research will identify opportunities in the marketplace. With demographic data merged with attitudinal information, program managers would be able to identify clusters or patterns within the Commonwealth and tailor information as well as increase touch points. For example, Tidewater area residents might be less inclined to adopt certain energy-efficient behaviors than residents who live in the Piedmont area.

Market research will guide communication with residents. With data merged with information, program managers also would be able to formulate more effective and targeted educational programs that speak directly to the residents they are trying to reach in ways that interest and motivate them to take action. In addition, they would be better able to understand the needs of categories of future consumers, i.e., those recently joining new age or income brackets, new homeowners or renters, and those recently domiciled in Virginia.

Market research will prevent potential problems. For example, most residential customers might be willing to spend only a certain amount on energy efficiency in any given calendar year. This sort of market information would influence the delivery of messaging.

Market research must involve an effective quantitative tracking protocol to measure outcomes. This is necessary to see if the program is really working and to guide the design of adjustments to the program as needed. Are residents receiving the message? Are residents taking action? Tracking results to measure outcomes not only enables program modification and improvement; it also hopefully provides data that supports the ongoing merit of the program.

⁴ *National Awareness of Energy Star® for 2006: Analysis of 2006 CEE Household Survey.* United States Environmental Protection Agency (EPA), 2007.

In addition to providing valuable insight about residents and their behavior, comprehensive market research and effective quantitative tracking can generate positive feelings about the consumer education program itself. The act of participating in a customer satisfaction survey or study can actually increase loyalty to the program, particularly if energy-efficiency activities already have resulted in cost savings to the customer. Also, when qualitative research is conducted and shared, a common side effect is positive word-of-mouth advertising. Finally, participating in activities that are proven to reduce overall consumption and/or peak demand can also give customers the satisfaction of having assisted the electric grid. Tracking, measuring, evaluating, and adjusting the consumer education program over a period of time will promote a more successful, long-term outcome.

V. Consumer Education Campaign

To implement a successful electric energy consumer education campaign in the Commonwealth, our subgroup recognizes the need to develop a clear and concise message that will resonate with Virginia consumers in residential, commercial/industrial, and institutional sectors.

The goal of the campaign would be to increase energy efficiency awareness and generate behavioral change. For education to create change three things must occur: (i) Education must inspire; people need to feel excitement about the benefit that will result from a change in behavior; (ii) Education must inform; simple, accurate, user-friendly information and messaging that is easily understood by all consumers is necessary; and (iii) Education – most importantly – must enable; people must be given the tools, the capability, and the instruction they need to allow them to change behavior and to make better decisions in the home and in the marketplace.

Just as the SCC’s Consumer Education Plan for restructuring was branded “Virginia Energy Choice,” this new effort should be branded. There should be trademark control over the use of the brand name for the new effort to ensure that reliable vendors are using it and for uses consistent with the program’s plan. There should also be rules and a fee to use the brand name, which would ultimately cover the cost of administering the trademark. The entire process could be outsourced, with SCC contractual oversight and control.

Branding is a critically important feature that allows consistent advertising in in-store display, printed materials, and on-air media to create the repetition that is necessary to get consumers to take notice.

The Virginia Energy Plan recommends that Virginia support a national program to extend the ENERGY STAR brand name label beyond appliances, office equipment, and buildings. If this cannot be accomplished, the Commonwealth should help establish and support an independently administered, multi-state branding effort that verifies efficiency and should participate in an extensive advertising campaign to build brand name recognition.

The overall message needs to have some life/longevity so it will still resonate with consumers in five to ten years. Possible messaging could include: “*Working Toward an Energy-Efficient Virginia*” or “*Leading the Way to a More Energy-Efficient Virginia.*” A simple message can draw curiosity and spur a call-to-action movement for consumers to work actively together to change their behavior as energy users. The sub-message is just as important as a key motivator. A sub-message could be “*Save Money, Save Energy, Preserve Virginia’s Environment.*”

Web-based Approach. While there will always be a need to have print and other media distribution of the message, web-based communication is paramount to getting the message out and should include:

- Text “how-to” content on multiple topics, with self-paced material with different levels of detail
- Links:
 - incentives and rebates
 - institutional energy education websites for federal and state agencies, universities, etc.
 - utility company and electric coop websites, DR and DSM programs
 - non-profit environmental and community action group websites
 - Virginia Weatherization assistance programs
 - small wind and solar websites
 - third-party provider websites, including Curtailment Service Provider (CSP) websites
 - electric energy-related web pages for county public works departments/school districts
 - advertising (products and services) that would make the website largely self-funded
- Video “how-to” segments on multiple topics, from energy savings tips to the implementation of new technologies

Messaging should be focused on driving people to the website, as it was in the previous Virginia Energy Choice campaign. One way to help bring people back to the website regularly would be to allow users to register for periodic news on energy issues that affect them. Registrants could be given the option of allowing their email addresses to be provided to vendors on topics of interest to them. Messages containing links back to information that has changed or been added to the website would be sent monthly to those who register.

The website may be able to offer paid advertising by third-party providers. This could provide easy access for consumers to vendors that would bypass the step of making them look elsewhere, which they frequently will not do. This could also subsidize the cost of the website itself. It is unclear, however, whether current state procurement rules allow paid advertising on a state-funded website.

The following are links to some statewide consumer education websites:

- Efficiency Vermont (EVT) – www.encyvermont.com/pages/
- Connecticut’s “Saving without Sacrifices” campaign – www.ctsavesenergy.org
- Connecticut’s other “Watts New” website – www.wattsnewct.com
- California’s “Flex Your Power” campaign – www.fypower.org/ (includes demand response info with answers to frequently asked questions and also includes an overview of “Flex Alerts,” which are urgent calls for consumption reduction via email notifications typically sent 24 hours in advance)

Although the website would be a critical component of Virginia’s new consumer education campaign, information would flow from a number of other sources, including utility companies and electric coops; traditional media (newspapers, TV); interactive venues (energy fairs, etc.); and private companies (contractors/builders, energy supply/service companies, energy auditors/home energy raters, retail sales people). The new campaign should be designed to leverage other efforts and to promote those programs in the Commonwealth and elsewhere that provide effective electric energy information.

Residential Sector

The residential sector accounts for about 40% of the electric energy consumed in Virginia. The consumer education campaign should focus on helping homeowners identify what they can do, the efficiency savings available, and where they can start. The subgroup recognizes that most people do want to do something to save money and energy but do not know where to start. This campaign should focus on simple behavioral changes in the home and at the office, such as a “top 10 things you can do” list, which could also be tiered based on no-cost, low-cost, and high-cost efforts. To be successful, a consumer education campaign must address individuals at home, in schools, and at work.

Recognizing various income levels and segments within the residential sector, messaging should be consistent yet fair when addressing opportunities to save money and energy. For example, middle and upper income individuals have the resources to buy more efficient equipment if they perceive an attractive rate of return; however, for lower income individuals there is a constrained capital issue. The design of a comprehensive program should be assigned to marketing professionals who have experience in reaching the different market segments within Virginia.

What will motivate the homeowner? This is definitely an area where market research could serve as a useful tool. What will it take for the homeowner to reach into his or her wallet and spend \$150 to \$300 to change standard light bulbs to CFLs? What will it take for the homeowner to go to the next level and spend \$500 to \$1,000 on ENERGY STAR appliances or windows? How long is the homeowner willing to wait to see a return? 30 days? 180 days? 2 years? Having this sort of knowledge would allow a determination of how much would need to go back into the homeowner's wallet for a program to work on a mass level and would also assist in the design and delivery of the messaging.

There are many groups that have experience with the delivery of programs (e.g., ENERGY STAR, the Alliance to Save Energy, NEED), and these groups should be asked to assist in delivering the message to residential consumers. “ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping (citizens) save money and protect the environment through energy efficient products and practices.”⁵ The Alliance to Save Energy has partnered with others in its Energy Hog Campaign.⁶ The National Energy Education Development (NEED) Project’s mission “is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs.”⁷

Virginia residents should understand that their most immediate and cost-effective action is to reduce electric energy consumption in the home. This is the one place in residents’ lives where they have the most control and the arena where simple activities and applications can have the greatest impact.

⁵ www.energystar.gov

⁶ www.energyhog.org

⁷ www.need.org

Commercial and Industrial (C&I) Sector

The commercial and industrial consumer segments account for about 30% and 20% respectively of the electric energy consumed in the Commonwealth or about half of the state's consumption of electric energy. Information about conservation measures and energy efficiency and other programs that leads to consumer action within this sector could result in substantial electric energy savings for the Commonwealth.

Commercial operations may be as small as a barber shop or as large as an office complex or a metropolitan area shopping mall. What they typically have in common is that they do not have the staff or the time to wade through general information to determine how it may apply to their business. However, much like the larger industrial user, they need to know the payback period before making investments in energy conservation or load curtailment. Therefore, information for this segment should outline specific simple steps that can be taken or programs that can be used to save energy, as well as the expected return or payback time.

Industrial operations include some of the largest single users of energy in Virginia. The industrial segment uses a wide range of energy sources to run their operations. The issues in this segment go beyond the standard heating and lighting issues, but unlike the commercial segment, many industrial operations have staff available to address energy issues and who are familiar with process improvements. However, they could benefit from specific information related to compressed air, heating applications in chemical processes, and electric motor efficiency information. Such information could be maintained through a central information agency. Also, many utility companies have assigned account managers to work closely with these larger customers to help address energy concerns; newsletters provide the latest news on energy issues and energy calculators for specific application comparisons.

A coordinated central office could help leverage existing communication avenues by:

- Maintaining a library of information and best practices specific to categories of commercial and industrial customers.
- Linking to existing utility company communication programs to deliver energy conservation information.
- Developing and maintaining a list of certified providers of energy audits and other services.

Institutional Sector

The institutional consumer sector accounts for about 10% of the electric energy consumed in the Commonwealth. Institutional facilities include educational facilities (schools, colleges, and universities), correctional institutions, health care facilities (medical offices, hospitals, and nursing homes), and buildings used for religious worship. Historically, government facilities are also included in this particular sector. These types of facilities, especially state government facilities, include some of the largest single users of electric energy in Virginia.

Information for the institutional sector should be specific and should include programs that can be used to save energy, such as an effective energy management (EEM) program. Many utility companies have assigned account managers to work closely with this particular customer sector to help address energy concerns. There are many other well-known programs, such as ENERGY STAR, that lend support to implementing best management practices.

A number of Virginia's agencies and institutions have aggressively pursued energy best practices. However, because facility operation and maintenance (O&M) functions are handled by individual agencies, there is little coordination between agencies. Also, since there are no established state-wide guidelines for O&M of state facilities (e.g., training, budget development, standard maintenance schedules, etc.), each agency develops and implements guidelines for its own facilities, with limited opportunity to share lessons learned among agencies.

A coordinated central office could help leverage existing communication avenues by:

- Maintaining a library of information and best practices specific to categories of institutional customers.
- Providing support, outreach, and training to agency facility staff, including energy managers, facility operators, O&M personnel, procurement managers, and other administrators.
- Leveraging tools and resources from the ENERGY STAR's *Guidelines for Energy Management* program.
- Providing specialized technical expertise to agencies to improve their knowledge of O&M procedures, energy conservation fundamentals, new technologies, and other skills to improve building performance.
- Developing and maintaining a list of certified providers of energy audits and other services.

Local Governments and Schools. Virginia's local governments and schools should play a significant role in changing electric energy consumers' behavior. **Energy education that targets young adults and school-aged children represents the best long-term opportunity for successful consumer education.** NEED has established an excellent K-12 energy education curriculum that is used as a resource in many states and that could serve as a model for the development and implementation of an energy education curriculum in Virginia. The following are links to some other impressive state energy education curriculum websites:

- California's energy curriculum resource – www.energyquest.ca.gov/about.html
- Colorado's Energy Science Center Program – www.energyscience.org/education/index.html
- Connecticut's curriculum for high school educators – www.ctenergyeducation.com
- Maine Energy Education Program (MEEP) – www.home.psouth.net/~meep/
- Texas' energy education curriculum – www.seco.cpa.state.tx.us/energy-ed_curriculum.htm
- Wisconsin's K-12 Energy Education Program (KEEP) – www.uwsp.edu/cnr/wcee/keep/index.htm

Special Aspects

Electricity Education. Education should explain conceptually why electricity costs more to all consumers at certain times, even if the effect of that is masked by the average rates most customers pay. Summaries of and links to the following should be provided on the website: SB1416, Governor Kaine’s Executive Order 48, the Virginia Energy Plan. Education should also include a glossary of terms that the average consumer does not understand (e.g., decoupling, demand response, demand-side management, etc.).

Demand-Side Management(DSM) and Demand Response (DR). A combination of utility-administered programs and programs offered by Curtailment Service Providers (CSPs) provide a wide potential for reducing load during peak periods. Overall, there has never been much information disseminated about these programs in Virginia; hence, consumers must be educated about the various demand-side resources that are currently available, including time-based pricing structures/rate programs and load curtailment programs and technologies. In addition, there are opportunities emerging this year for large end users of electricity to become part of an aggregation group to participate in demand response; thus, consumers should be educated about this also. CSPs are only now entering the marketplace in Virginia, and many consumers in all classes still have no idea who they are and what they do; this is a related aspect of this area of education.

Renewables. Education should include information about the use and availability of both small wind and solar/photovoltaics. Efficiency is inherent in materials, equipment, and systems, including technologies that lower electric bills, avoid loss of power during an outage, and, for some consumers, help them become energy independent. The use of new equipment such as small wind (rural and suburban) and solar (all areas) is both a short-term and long-term energy efficiency strategy because once efficient equipment and systems are in place, they continue to pay back year after year. Educated consumers can choose these technologies if they are suitable solutions for their circumstances.

* * * * *

Because no formal statewide conservation, energy efficiency, and demand-side resource programs have been implemented to date in Virginia, significant transition will be needed for the consumer education campaign to be fully understood by residents. Effecting change in consumer behavior will require a considerable shift in attitudes, awareness, and appreciation for the future welfare of the Commonwealth. Developing and implementing an effective consumer education campaign that educates residents about conservation, energy efficiency, and other related topics will make good business sense for Virginia, as it has in other states.

Our subgroup recommends for Virginia the approach that highly energy-efficient states have already taken – a high-level consumer education program with a clear and concise message that is complemented and/or supplemented by corollary messages offered by other independent lower-level programs. We recommend the sequenced timeframe for design and delivery of the Consumer Education Campaign set forth in Attachment 2 to ensure a successful program in Virginia.

VI. Management

Our subgroup recognizes that the Commonwealth must be actively engaged in the management⁸ of a new electric energy consumer education program for several reasons. First, governmental involvement would ensure that all end users would have access to the same information, regardless of customer class, geographic location, or service provider. Commonwealth participation in management would also leverage already-existing county efforts as well as federally-funded initiatives. Finally, governmental involvement would ensure consistent tracking, measurement, and evaluation of impacts of consumer education. Some of the subgroup participants also raised concerns that some stakeholders have agendas that could conflict with the goals of consumer education.

The subgroup recommends that the SCC consider several alternatives for the management of the new consumer education program:

1. The new program could be outsourced to an already-existing, non-utility, independent third party.
2. Another approach would be to identify individuals representing several agencies, groups, etc. to collaborate and assist in the management.
3. The program could be managed by a newly-created state program office (for example, the Virginia Energy Education Office) located within an independent agency or the executive branch.

An analysis of the management of electric energy consumer education programs in states deemed to have the most energy-efficient economies (reference Attachment 1) highlights the different ways such a program could be effectively managed.

Efficiency Vermont (EVT) manages Vermont's statewide consumer education program. Created by the state legislature in 2000, EVT is the nation's first statewide provider of such a program. An independent, non-profit organization under contract with the Vermont Public Service Board (PSB) operates EVT. It should be noted that Vermont's electric energy efficiency services replaced the services previously provided by the utility companies (except in the case of Burlington Electric, which continues to provide those services).

Connecticut's statewide consumer education program is managed by the utilities, with oversight (advice and assistance) provided by the Energy Conservation Management Board (ECMB). The ECMB is an all-volunteer board that is comprised of representatives of the regulated electric utilities; various state offices/departments; an environmental group; statewide business, manufacturing, and retail associations; a chamber of commerce, and consumers. The Department of Public Utility Commission (DPUC) appoints members to the ECMB, which (aided by consultants) reviews a utility-generated plan and then presents that plan (and budget) to the DPUC for approval. It should be noted that Connecticut's electric market, unlike Virginia's, gives most state customers the ability to choose their electric service provider.

⁸ Management, as used here, refers to development, management, and delivery of the consumer education campaign.

California's statewide consumer education program is managed by the California Energy Commission, which develops and maintains the Consumer Energy Center (CEC), a comprehensive resource for energy efficiency information, including incentives and rebates, equipment and technology, etc. The California Energy Commission also has a Media and Public Communications Office that provides program information to the media and the general public.

Our sister states, Maryland and North Carolina, have initiated consumer electric energy education programs. The Maryland Public Service Commission developed a three-year Consumer Education Program (CEP) on electric choice (www.psc.state.md.us/psc/electric/ConsumerEdPlanYr3), and the Maryland Energy Administration continues to partner with the Alliance to Save Energy, ENERGY STAR, NEED, and Green Schools Focus to disseminate information to consumers. North Carolina operates a statewide consumer education program through its Cooperative Extension offices, and North Carolina State University provides oversight in its role as administrator. The program provides seminars/workshops for the general public as well as a variety of other conservation and energy efficiency activities (www.energync.net/efficiency/residential.html).

In some states management and oversight of an electric energy consumer education program are handled by the same entity, while in other states management and oversight are performed by two distinct entities. Based on the successful implementation of statewide programs in other states, the SCC should evaluate these initiatives closely to determine which program(s) it wants to emulate or which components from various programs it wants to apply. The state programs referenced above illustrate a broad array of effective management options.

Our subgroup suggests that a third-party⁹ administrative approach is preferable in Virginia. Initially, the SCC could manage the consumer education program regarding electric utility re-regulation just as it managed consumer education regarding restructuring. A third-party private marketing consultant could be engaged to raise consumer awareness of other segments of the program that follow. Other third-party organizations could design and/or deliver the consumer education campaign. Ultimately, the program would be most efficiently managed either within the SCC or within the DMME Division of Energy; or by an independent, third-party entity with SCC or DMME oversight. The SCC should establish a Citizen Advisory Panel.

Regardless of the management approach that is assumed, multiple entities would have important, ongoing roles in the consumer education process. These would include other state departments (Housing and Community Development, Education, and Environmental Quality); utility companies, electric cooperatives, and municipal power companies; the Virginia Association of Counties (VACO); the Virginia Energy Purchasing Governmental Association (VEPGA); non-profit environmental organizations and various citizens groups; and local governmental energy departments and school district energy departments. All of these entities should continue developing and disseminating consumer education messages to complement and/or supplement the primary Commonwealth-wide message.

⁹ Third-party, in this context, could refer to state agencies, non-profit organizations, or private companies.

VII. Cost

It is very important to discuss projected costs of a new Commonwealth-wide consumer education program and to acknowledge that effective efforts will require a reliable, dedicated funding source to ensure the long-term success of the campaign. A successful program will require an adequate budget. An underfunded program will result in a significantly greater cost to all Virginians. Education is the foundation from which all efforts to reduce consumption will emanate; we must adequately fund these efforts.

Costs will vary as the consumer education campaign develops. These costs may change from year to year, transitioning from initial start-up expenses to mid- and long-term expenditures as the program changes and expands due to modifications and improved approach. A budget for the consumer education program must have the flexibility to respond to actual program results but also the dedication to provide enough funding to ensure success.

Unfortunately, clear data representing what other states are spending on consumer education programs is not readily available, so we rely on budget information presented in the Consumer Education Plan that was developed for the Virginia Energy Choice Customer Education Program in 1999 as a framework for a simple cost projection for a consumer education campaign in Virginia.¹⁰ Although this report is eight years old it still represents a valid and illustrative resource by which a comparative budget/cost projection can be based. The total estimated cost of the five-year Virginia Energy Choice education plan for Virginia was \$30.1 million. The average estimated annual cost for a five-year plan was approximately \$6 million. This amount compares favorably with energy choice education programs being implemented in other states. Listed below are categories to be considered as potential and, at this point, flexible line items in a budget projection for a statewide consumer education program in Virginia:

Marketing Research and Tracking. Marketing research will be the first step in the process in order to establish baseline consumer information and may involve statewide consumer focus groups, a consumer survey, and other marketing tools useful in obtaining information that will help develop effective educational messaging and effective delivery systems. Tracking involves measuring results and outcomes in the areas of market penetration, information awareness, and consumer action. Research and tracking will be ongoing during the education campaign. It is probable a professional marketing firm will conduct these efforts. This information is critical for continuation of the consumer education program and is necessary to maintain support among funding sources, legislators, utilities, oversight agencies, and consumers.

Information Materials. There is a wealth of good information already available in the form of brochures, pamphlets, and handbooks, but brochures, bill stuffers and other handout material will be necessary for a new statewide program. Costs may include design, printing, and distribution of informational materials.

¹⁰ *Consumer Education Plan: Report to the General Assembly in Response to §56-592 of the Code of Virginia.* Commonwealth of Virginia State Corporation Commission, December 1, 1999.

Media Kits/Public Relations. Cost for creating and distributing packaged materials containing press releases, consumer information, etc. and for costs related to participation and information delivery at events (energy fairs, community events, state fairs).

Grants. Grants ranging in size from \$1000 to \$15,000 to help grassroots organizations, local governments, schools, and Cooperative Extension offices to develop and implement community-based workshops and seminars.

Website. Cost for developing and managing a centralized website.

Hotline. Cost for developing, maintaining, and staffing a statewide consumer hotline. This is a difficult area in which to provide a cost estimate due to a variety of variables including long distance calls, duration of calls, etc.

Advertising. In the Virginia Energy Choice program, advertising represented the largest percentage of total budget (about 70%). TV, radio, and newspaper advertising is very expensive but also necessary in an effective consumer education campaign.

Budget Detail – Consumer Education Campaign

(Proposed Spending in Thousands of Dollars)

<u>Category</u>	2008	2009	2010	2011	2012	<u>Total</u>
Research	200	100	100	100	50	550
Information	300	300	200	200	150	1150
Media Kits	350	200	200	150	100	1000
Grants	200	150	150	100	100	700
Website	350	200	200	200	150	1100
Hotline	1500	1000	1000	500	500	4500
Advertising	6000	4000	4000	4000	3000	21000
<u>Total</u>	8900	5950	5850	5250	4050	30000

This illustrative budget projects a five-year program, with an average spending per year of \$6 million, for discussion purposes only. Ideally, as the budget detail indicates, the first year of the program should entail above-average spending; however, the reality is that a less than average amount may have to be utilized to jumpstart the program. Based on Virginia's estimated population of 7.5 million, the annual per capita cost would average \$.80 under this framework. Since the budget total is based on mostly 1999 figures, increasing the budget detail by 20% should be considered to allow for inflation. Also, since the consumer education program will continue through 2022, budgeting projected cost for a significantly longer duration would be necessary.

This budget is purely illustrative and as stated is somewhat based on figures and information reflected in the Consumer Education Plan developed for Virginia Energy Choice in 1999. An attempt has been made to tailor this information to reflect the ideas and recommendations made in the Consumer Education Campaign section of this subgroup report. The above budget detail should provide a useful framework for discussion by SCC staff.

The 2007 Virginia Energy Plan states: “**Virginia should implement an expanded energy education program.** This program should be developed by July 2008 based on input from energy and education stakeholders.”¹¹ There is a sense of urgency in this statement, and if the Commonwealth is to move forward in an expeditious manner then the cost of a successful program must be at the forefront of the discussion. Otherwise, a real and greater cost will come in the form of an under-educated general population that continues to expend our energy resources in a wasteful and inefficient manner.

VIII. Funding

There was general consensus within our subgroup that identifying a dedicated, reliable funding source is absolutely necessary to ensure the long-term success of any consumer education program that is developed and implemented. A reliable, long-term funding source allows for effective planning and the flexibility to create new programming as demands and needs may change. States that operate successful consumer education and energy efficiency programs typically use a Public Benefit Fund (PBF), also known as a Systems Benefit Charge (SBC). To date over twenty states have adopted a PBF to help fund a wide range of energy programs.

Normally a PBF is funded either through a mills charge per kWh or a flat rate charged per electric ratepayer. It is understood that a PBF may be politically difficult, particularly in tax-averse states, because it is perceived as a new tax. Framing the PBF as a user fee for energy may help in terms of perception, but the reality is that it is a tax. Virginia has a history of unsuccessful efforts to introduce PBF proposals for legislation.¹² At least four different proposals were introduced during the Virginia utility restructuring process. Only one of the PBF proposals actually entered the legislative arena; the others never made it that far. This was most likely due to a legislative concern about new tax increases and opposition from the C&I sector related to a mills per kWh charge that would raise their electric rates significantly. Nevertheless, a PBF, which has been successfully legislated and administered in many other states, remains a very reliable and effective funding mechanism. Our subgroup feels that it should be given full consideration as a funding option for a consumer education program as well as for conservation and energy efficiency initiatives.

¹¹ *The Virginia Energy Plan*. The Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME), 2007, 10.

¹² This summary was provided by Billy Weitzenfeld:

1998 – Virginia Council Against Poverty (now the Virginia Community Action Partnership) presented a legislative proposal to the legislation drafting committee of the SJR91 subcommittee studying electric utility restructuring. This proposal used a mills charge per kWh as the funding mechanism.

1999 – The Southern Environmental Law Center offered a legislative proposal to the Consumer Advisory Board, a subcommittee of the Legislative Transition Task Force studying electric utility restructuring. This proposal used a mills charge per kWh as the funding mechanism.

2000 – AECOP offered the Low-Income Usage Reduction Program as a legislative proposal to the Consumer Advisory Board. This proposal used a flat rate per ratepayer as the funding mechanism.

2003 – House Bill 2317 was introduced in the General Assembly but was defeated in Committee. A flat rate per ratepayer was the funding mechanism.

Listed below are the three general PBF options we discussed:

1. A public benefit fund that uses a mills charge per kWh. The charge shall be a non-bypassable element of the local distribution service and collected on the basis of usage. Currently these charges range in other states from \$0.00003/kWh to \$0.003/kWh. Some PBFs using the mills charge per kWh model allow non-payment from low income consumers and cap the kWh at a certain level in fairness to large C&I users.
2. A public benefit fund that uses a flat rate that every residential ratepayer is charged. For example if every ratepayer were charged \$0.15 per month the yield would be approximately \$5,000,000 annually.
3. A public benefit fund that uses either a mills charge per kWh or a flat rate, and the amount generated is matched either equally or at a percentage by the utility companies. The rationale is that electric customers may be less resistant to paying a higher monthly bill for consumer education programs if they understand that their local utility is also contributing.

In recognition of the potential legislative difficulty posed by a PBF and the urgent need for immediate funds to jumpstart a consumer education program, some other options were also discussed. A question asked and considered by our subgroup was: Are there existing sources of revenue that could be used to fund the program in lieu of the creation of new funds? A potential solution is set forth in the two options below, both of which target the Virginia Electric Consumption Tax:

Background: The Virginia Energy Choice Customer Education Plan created by legislative action within the Restructuring Act and administered by the SCC was funded via the Special Regulatory Tax, a component of the VA Electric Consumption Tax. This did not involve a new tax increase but rather utilized uncollected tax revenue under the Special Regulatory Tax. The full amount allowed under the Code of Virginia had not been fully collected prior to 2000, and additional revenue was generated for the Virginia Energy Choice program through the subsequent collection of the maximum amount. When the Virginia Energy Choice program was phased out, the Special Regulatory Tax rate reverted to its previous level.

Option 1: If the maximum allowable portion of the Special Regulatory Tax is still not being collected, then the same formula could be used to fund a new statewide electric energy consumer education campaign.

Option 2: If the maximum allowable portion of the Special Regulatory Tax is being collected, then the legislature could authorize raising the statutory limit within one of the VA Electricity Consumption Tax components, and this additional money could be used to fund consumer education programs.

Note: Creating a PBF would require an additional line item on customers' bills, and there most likely would be resistance to this from customers and local utilities. Even though it would represent an increase, using an existing line item may provide a more palatable approach.

Other potential sources of revenue that could help fund the consumer education program might include: (i) cooperative advertising on the website; or (ii) allowing taxpayers to donate a portion of their state tax refunds by checking a box on their tax returns.

The following links provide useful information on Public Benefit Funds.

- ACEEE fact sheet on Public Benefits Funds
www.aceee.org/energy/pbf.htm
- ACEEE review of 25 state Public Benefit Funds (an abstract)
www.aceee.org/pubs/u042.htm
- Alliance to Save Energy's index of states with Public Benefit Funds
www.ase.org/content/article/detail/2604
- Pew Center's map of states currently utilizing Public Benefit Funds
www.pewclimate.org/what_s_being_done/in_the_states/public_benefit_funds.cfm

IX. Legislative Proposals

Based on a suggestion by SCC staff, our subgroup discussed potential legislative proposals that could be recommended to the Virginia General Assembly. Listed below in very brief and general content are the proposals unanimously recommended by our subgroup:

- Legislation to establish a Commonwealth-wide electric energy consumer education program that will design and deliver informational materials related to conservation, energy efficiency, demand-side management, and demand response.
- Legislation to fund a Commonwealth-wide electric energy consumer education program, either by:
 - Creating a Public Benefit Fund and directing that such funding will support all necessary expenses related to the development and implementation of the program.
 - or
 - Authorizing a change in the statutory limit of the VA Electric Consumption Tax and directing that such funding will support all necessary expenses related to the development and implementation of the program.
- Legislation to establish a K-12 energy education curriculum, tied to SOLs, in all public schools in Virginia to consistently and comprehensively inform our students about conservation, energy efficiency, and demand-side resources.

X. Summary

Consumer education will be a critical component of any plan that is implemented to achieve the General Assembly's established goal of reducing electricity consumption by 10% by the year 2022.

Subgroup 5 believes that a sufficiently funded, carefully designed, well-managed, properly marketed, and legislatively bolstered consumer education program would prompt Virginians to move from general awareness to specific action. The campaign could build upon the foundation that has already been laid by environmental and other organizations. Oversight by the SCC, the DMME, or another governmental agency would ensure that every citizen in the Commonwealth has the same access to accurate electric energy information and would allow consistent tracking, measurement, and evaluation of program impacts. This could in turn encourage the networking and partnering of different groups striving collectively to make a difference as a result of the campaign. Ideally, a centralized, comprehensive consumer education program could serve as the cornerstone for separate but related conservation, energy efficiency, and possibly other programs.

The 10% consumption reduction goal can be achieved by 2022, and educated consumers will ensure that this initiative is successful.

This report reflects the ideas, recommendations, and input from 23 members of Subgroup 5:

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Billy Weitzenfeld, Co-Chair (AECP)

John Broughton (DMME)
Julie Crenshaw VanFleet (Citizen)
Liese Dart (Piedmont Environmental Council)
Bruce Edgerton (Citizen)
Scott DeBroff (Elster/Trilliant)
Jack Greenhalgh (Consumer Powerline; New Era Energy)
Ron Hartzheim (Town & Country Mechanical)
Richard Hirsh (Virginia Tech)
Ron Jefferson (APCO)
Tom Jewell (DVP)
Salud Layton (Assoc. of Electric Coops)

Robert Lazaro (Purcellville)
Irene Leech (Virginia Tech)
Joe Lenzi (Chesterfield/VEPGA)
Doug Pickford (NoVA Region)
Charles Price (Sierra Club)
Victoria Racine (Original Ink)
Mark Repsher (Dominion Retail)
Susan Rubin (Assoc. of Electric Coops)
John Sheppelwich (APCO)
Mike Town (Sierra Club)

Selected Reference Materials

Consumer Education Plan: Report to the General Assembly in Response to §56-592 of the Code of Virginia. Commonwealth of Virginia State Corporation Commission, December 1, 1999.

Consumer Education for Energy Efficiency. The Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME), December 4, 2001.

Eldridge, M., B. Prindle, D. York, and S. Nadel, *The State Energy Efficiency Scorecard for 2006*, Report#U054 [Washington, D.C.: American Council for an Energy-Efficient Economy (ACEEE), 2007].

National Awareness of Energy Star[®] for 2006: Analysis of 2006 CEE Household Survey. United States Environmental Protection Agency (EPA), 2007.

The Virginia Energy Plan. The Commonwealth of Virginia Department of Mines, Minerals and Energy (DMME), 2007.

ACEEE's fact sheet on Public Benefits Funds – www.aceee.org/energy/pbf.htm

ACEEE's review of 25 Public Benefit Funds (an abstract) – www.aceee.org/pubs/u042.htm

Alliance to Save Energy's index of states with PBFs – www.ase.org/content/article/detail/2604

California's energy education curriculum resource – www.energyquest.ca.gov/about.html

California's *Flex Your Power* – www.fypower.org/

Colorado's Energy Science Center Program – www.energyscience.org/education/index.html

Connecticut's energy education curriculum for high school educators – www.ctenergyeducation.com

Connecticut's *Saving without Sacrifices* – www.ctsavesenergy.org

Connecticut's *Watts New* – www.wattsnewct.com

Efficiency Vermont (EVT) – www.encyvermont.com/pages/

Energy Hog Campaign – www.energyhog.org

ENERGY STAR program – www.energystar.gov

Maine Energy Education Program (MEEP) – www.home.psouth.net/~meep/

Maryland PSC three-year Consumer Education Program (CEP) on electric choice
www.psc.state.md.us/psc/electric/ConsumerEdPlanYr3

National Energy Education Development (NEED) Project – www.need.org

North Carolina's statewide energy program – www.energync.net/efficiency/residential.html

Pew Center's map of states currently utilizing Public Benefit Funds
www.pewclimate.org/what_s_being_done/in_the_states/public_benefit_funds.cfm

Texas' energy education curriculum – www.seco.cpa.state.tx.us/energy-ed_curriculum.htm

Wisconsin's K-12 Energy Education Program (KEEP)–www.uwsp.edu/cnr/wcee/keep/index.htm

**Attachment 1:
Summary of State Scoring on Energy Efficiency**

Rank	State	Utility Spending on EE	EERS	Combined Heat & Power	Building Codes	Transportation Policies	Appliance Standards	Tax Incentives	State Lead by Example	TOTAL SCORE
	<i>Maximum Points:</i>	15	5	5	5	5	3	3	3	44
1	Vermont	15	5	3	3	4	2	0	1	33
1	Connecticut	11	5	5	4	4	1	2	1	33
1	California	7	5	5	5	3	3	2	3	33
4	Massachusetts	13.5	0	4	2.5	4	2	1	2	29
5	Oregon	11.5	0	4	4	3	2	3	0.5	28
6	Washington	9.5	3	3	4	4	2	1	0.5	27
7	New York	5	0	5	3	5	2	2	3	25
8	New Jersey	7	1	5	2.5	4	1	0	1.5	22
9	Rhode Island	8.5	0	1	4	4	2	0	0.5	20
9	Minnesota	7	3	3	4	2	0	0	1	20
11	Texas	2	5	4	4	1	0	0	1.5	17.5
12	Wisconsin	6.5	0	3	3	2	0	0	2.5	17
13	Iowa	6.5	0	2	4	1	0	0	3	16.5
14	Pennsylvania	0	3	4	4	4	0	0	1	16
15	Colorado	1.5	5	3	3	0	0	1	2	15.5
15	Maine	6.5	0	2	2	4	0	0	1	15.5
15	Hawaii	4.5	3	3	2	1	0	0	2	15.5
18	New Hampshire	7.5	0	1	3	1	0	0	2	14.5
18	Nevada	2	5	2	4	0	0	1	0.5	14.5
20	Maryland	0	0	2	4	4	1	1	2	14
21	Montana	5.5	0	0	4	0	0	3	0.5	13
22	District of Columbia	2.5	0	0	4	1	0	3	2	12.5
23	Arizona	0.5	0	2	3	1	2	1	2	11.5
24	New Mexico	0.5	0	3	4	1	0	1	1.5	11
25	Idaho	3	0	2	4	0	0	1	0.5	10.5
26	Illinois	0	3	2	3	1	0	0	1	10
27	Utah	4.5	0	0	4	0	0	0	1	9.5
27	Ohio	0.5	0	3	4	1	0	0	1	9.5
29	Florida	2.5	0	0	4	1	0	0	1.5	9
30	Delaware	NA	0	3	3	2	0	0	0.5	8.5
30	North Carolina	0	0	2	3.5	1	0	0	2	8.5
30	South Carolina	0.5	0	2	4	0	0	1	1	8.5
33	Michigan	0.5	0	3	1	1	0	0	2	7.5
34	Kansas	0	0	2	4	0	0	0	1	7
35	Nebraska	1.5	0	1	4	0	0	0	0	6.5
35	West Virginia	0.5	0	2	4	0	0	0	0	6.5
35	Kentucky	0.5	0	0	3.5	1	0	0	1.5	6.5
38	Virginia	0	0	2	4	0	0	0	0	6
38	Georgia	0	0	0	4	2	0	0	0	6
40	Louisiana	0	0	0	3.5	0	0	2	0	5.5
41	Indiana	0	0	3	2	0	0	0	0	5

Rank	State	Utility Spending on EE	EERS	Combined Heat & Power	Building Codes	Transportation Policies	Appliance Standards	Tax Incentives	State Lead by Example	TOTAL SCORE
41	Alaska	0	0	2	2	1	0	0	0	5
43	Tennessee	1.0	0	1	1	1	0	0	0	4
44	Oklahoma	0	0	0	2.5	0	0	1	0	3.5
45	Arkansas	0	0	0	3	0	0	0	0	3
46	Missouri	0	0	0	1.5	0	0	0	0.5	2
46	Alabama	0	0	1	0	0	0	0	1	2
48	South Dakota	0.5	0	1	0	0	0	0	0	1.5
49	Mississippi	0	0	1	0	0	0	0	0	1
49	Wyoming	0	0	1	0	0	0	0	0	1
51	North Dakota	0.5	0	0	0	0	0	0	0	0.5

Source: Eldridge, M., B. Prindle, D. York and S. Nadel. *The State Energy Efficiency Scorecard for 2006*. www.aceee.org/pubs/e075.htm. Washington, DC: The American Council for an Energy-Efficient Economy.

Attachment 2: Consumer Education Campaign Timetable

Immediate

Announce the Consumer Education Campaign (possible launch: Earth Day 2008)

1. Issue press release to newspapers and radio stations (articles and radio PSAs).
2. Coordinate with utilities to develop bill inserts.
3. Post press release on various websites (state/utility/county) already in existence.
Other existing websites: DEQ, DMME, VACO, VEPGA, etc.

Short-term (within one year)

1. Publicize the Consumer Education Campaign
 - a. Television PSAs (local talk shows, FOX News' "Energy Team," NBC-12's "Go Green," etc.).
 - b. Continue to include inserts with utility/coop bills.
 - c. Develop a Commonwealth-wide EE brochure.
 - d. Promote central website on other already existing web sites.
2. Central Website (consumer-friendly, well-designed, consumer sector-oriented)
3. Consumer Energy Stewardship Hotline for Q&A
4. Expand Consumer Education Campaign Efforts – Take message to:
 - a. County Board of Supervisors and County School Boards
 - b. HOA communities and developers
 - c. Civic groups, religious institutions, sports leagues
 - d. Schools, community colleges, and universities

*Ongoing: Track, Measure, and Evaluate Results * Modify Message Design and Delivery as Needed*

Mid-term (one to five years)

1. Publicize the Consumer Education Campaign
 - a. Continue multimedia approach (add billboards, mass transit ads).
 - b. Continue to include inserts with utility/coop bills, to include Commonwealth-wide EE brochure.
 - c. Continue promoting central website.
2. Central Website (w/ interactive pages)
3. Utility-sponsored energy fairs and Other-sponsored local/regional energy workshops.
4. Consumer Energy Stewardship Hotline for Q&A
5. Expand Consumer Education Campaign Efforts – Integrate message with:
 - a. All county websites
 - b. Public School K-12 energy education curriculum tied to SOLs (with handouts for kids to take home to parents)
 - c. Colleges/Universities
 - d. All chambers of commerce monthly business meetings
6. Target Specific Audiences with Specific Messages
 - a. Those with high energy burdens – Weatherization program
 - b. High energy users – ENERGY STAR appliances
 - c. Small business users

Long-term (over five years)

Continue to expand the education efforts and to target specific audiences.