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Co-Sponsored by: Energy Star®, NYSERDA

Planning and Implementation Track Session:

Wednesday, February 8th, 8:30 am.

***BEST PRACTICES IN NATURAL GAS ENERGY EFFICIENCY
PROGRAMS***

Moderator:

Meg Matt, The Matt Group

Panelists:

Paul DeCotis, Director, Energy Analysis
The New York State Energy Research and Development Authority

Dave Zabetakis, Managing Partner,
David B. Zabetakis, LLC

Mike Sommer, Manager of Energy Services, Berkshire Gas, and
Chairman, GasNetworks® (a Regional Collaborative)

PANEL DISCUSSION MANUSCRIPT

The paper that follows is a report commissioned by The New York State Energy Research and Development Authority (NYSERDA) and prepared by David B. Zabetakis, LLC. As an example of a Best In Class program, a white paper is included on GasNetworks[®] Contractor and Trade Ally Education and Training Program.

The objectives of the report:

NYSERDA commissioned an evaluation of North American natural gas efficiency programs in March 2005. The objectives of the evaluation were:

- To determine which North American natural gas efficiency programs (for all customer segments) are considered best in class.
- To determine what common characteristics and program attributes contribute to a program's success.
- To develop recommendations on how NYSERDA and the State of New York can adopt similar natural gas efficiency programs.

The anticipated results of the report:

The findings of the evaluation provide specific information (based on the evaluation of 19 different efficiency programs) as to how natural gas efficiency programs should be developed, implemented and evaluated to achieve their respective program goals. The conference attendees will learn:

- Why it's vital to have an effective infrastructure in place to support the program
- Tips on developing an integrated marketing and communications effort
- How to establish market-specific incentives.
- The importance of developing and maintaining strong relationships with trade allies

The Panel discussion will include:

- Erin Hogan, NYSERDA
 - Will provide a summary of the current state of the natural gas industry in New York State, the objectives report, and how NYSEERDA hopes to use the information.
- Dave Zabetakis, David B. Zabetakis, LLC
 - Will provide a summary of his approach and findings detailed in the report
- Mike Sommer, Berkshire Gas & GasNetworks[®]
 - Will provide an evaluation of their Best in Class Contractor and Trade Ally Education and Training program.
- Dave Zabetakis will summarize and close the session in preparation for Q&A

THE PANELISTS

Erin Hogan

Project Manager, The New York State Energy Research and Development Authority

[Bio to follow]

Dave Zabetakis

Managing Director, David B. Zabetakis, LLC

David was President and Chief Operating Officer of Pepco Energy Services, Inc. In this capacity, he oversaw Pepco Energy Services Inc.'s retail business, primarily focusing on the sale of electricity, natural gas and a variety of energy-related products. Since leaving Pepco Energy, David has been engaged as an independent consultant providing executive level consulting services focused on corporate and market strategy development.

David Zabetakis is a former active member of the Board of Directors for AESP and served as a member and Chair of the Association's Marketing Committee. He has been involved in the energy business for over 17 years serving distribution companies such as Washington Gas and Unifil Corporation, and private industry where he was instrumental in the start up and growth of WeatherWise USA and Planalytics, Inc..

David earned his MBA from Loyola College in Maryland, and served in the Tactical Air Command of the US Air Force.

Michael Sommer

Chairman, GasNetworks® & Manager of Energy Services, Berkshire Gas Company

Michael Sommer is a founding member and current chairman of GasNetworks®, a nationally-recognized collaborative of eight New England natural gas companies promoting energy efficiency and the use of high efficiency natural gas technologies since 1997. He is also Manager of Energy Services for the Berkshire Gas Company located in Pittsfield, Massachusetts. At Berkshire since 1993, he is responsible for the Company's Energy Efficiency and Market Transformation Programs as well as the Company's rental division.

He is a member of the Association of Energy Engineers, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the Association of Energy Service Professionals and the Massachusetts Division of Energy Resources Public Advisory Committee, and has served as editor of GasNetworks® News since 2001. He serves on the Rebuild MASS Executive Committee and holds certifications in both residential and commercial energy auditing and is a Certified Energy Manager (CEM).

Mike has a BS Degree in Business Administration from the Massachusetts College of Liberal Arts.

An Evaluation of Natural Gas Efficiency Programs

Final Report

Prepared for
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I. Executive Summary

NYSERDA engaged David B. Zabetakis, LLC, an independent consultant, to research best practices in natural gas efficiency program design and implementation strategies. In particular, NYSERDA was interested in identifying the types of programs and program characteristics or a combination of programs as part of a broader portfolio that could improve end-use natural gas efficiency in New York.

The research began with a review of readily available data and research on gas efficiency programs in North America. The common characteristics and attributes that contribute to a program's success were then examined. There are several sources of research on such programs, with the American Council for an Energy-Efficient Environment (ACEEE) having the most comprehensive data known to date. The existing North American programs were identified and screened, and 19 programs within 11 organizations were selected for additional research and evaluation as to their applicability for New York.

The findings support a strategy to structure a gas Service Benefit Charge (SBC) similar to the process and procedures already established through NYSERDA's long-standing efforts with the **New York Energy Smart**SM public benefits program should such a program be desired. The key attributes contributing to the success of the evaluated programs are: 1) a commitment to developing and/or maintaining a strong program and market infrastructure; 2) conducting an integrated and consistent marketing and communications effort; and 3) establishing market-specific incentives. NYSERDA's electric SBC program currently possesses these attributes.

An effective natural gas efficiency program needs to be kept simple for consumers. It should be effectively promoted and differentiated so when consumer are faced with a choice to pursue natural gas efficiency, the natural gas efficiency choice stands apart from other competing choices. Most importantly, an effective natural gas efficiency program should have an established group of trained contractors in place.

Since NYSERDA already has an effective energy efficiency program infrastructure, it can expedite natural gas efficiency gains for New York and provide a clear, manageable "energy" efficiency model for all stakeholders. NYSERDA is well positioned to promote and defend fuel neutral efficiency programs that can take advantage of the existing **New York Energy Smart**SM brand.

II. Approach

The goal of this evaluation was to provide an executive overview of best practices in North American natural gas efficiency programs. Programs were reviewed in order to identify which design and implementation strategies can provide opportunities for improving end-use natural gas efficiency in New York. To accomplish this objective a five-step approach was created to:

- Evaluate all available data and research focused on past and present gas efficiency programs.
- Identify a list of best-in-class programs to be screen based on their applicability to the market conditions in New York.

- Conduct in-depth interviews with program stakeholders to update the status, results and key attributes of each program.
- Conduct a final screening and evaluation to determine if the selected programs could succeed in New York given its current natural gas market and its ability to introduce new programs.
- Summarize and identify considerations for the best strategy a state strategy to move forward with its own gas efficiency program should it decide to implement one.

A. Evaluation of Available Data and Research

Our first step was to access and review the best available research in the marketplace. Several sources were reviewed, with the most comprehensive information coming from the American Council for an Energy-Efficient Economy (ACEEE).

ACEEE Report Number U035 titled Responding to the Natural Gas Crises: America's Best Natural Gas Efficiency Programs¹ provides the best benchmark for gas efficiency programs in the industry.

Reports and conversations with the following organizations were also considered to discern any additional significant data:

- Consortium for Energy Efficiency
- Association of Energy Services Professionals
- Department of Energy and the U.S. Environmental Protection Agency's ENERGY STAR[®] program
- Northeast Energy Efficiency Partnerships
- New York State Energy Research and Development Authority
- Individual utilities and energy service providers
- Other research and consulting firms involved in efficiency programs

While the bulk of available data is primarily focused on electric efficiency programs driven by demand-side management and peak load reduction initiatives, there exists ample data to identify effective gas efficiency programs.

Using the ACEEE report as a benchmark, we conducted additional research to update and confirm which programs could provide guidance in the development of a New York strategy.

¹ Martin Kushler, Ph.D., Dan York, Ph.D., Patti Witte, M.A. 2003. *Responding to the Natural Gas Crises; America's Best Natural Gas Efficiency Programs*. Washington, D.C. American Council for an Energy-Efficient Economy.

B. Identify and Research Best-in-Class Programs

We conducted interviews with the stakeholders involved in programs identified as best in class. The majority of these interviews were with the managers who have, or have had, responsibility for the success of the identified program. The primary questions used in these interviews are shown in Appendix 1. A complete listing of programs and contact information is provided in Appendix 2.

Best-in-Class Natural Gas Efficiency Programs

Company	Program Name	Segment	Manager
Vermont Gas Systems	WorkPlace New Construction	C&I	Jim Grevatt
Vermont Gas Systems	WorkPlace Equipment Replacement/Retrofit	C&I	Jim Grevatt
Vermont Gas Systems	Homebase Retrofit	Residential	Jim Grevatt
Vermont Gas Systems	Homebase Equipment Replacement	Residential	Jim Grevatt
Vermont Gas Systems Burlington Electric	Multifamily Low Income	Residential	Jim Grevatt
Northwest Energy Efficiency Alliance	ENERGY STAR® Windows	Residential	John Jennings
Wisconsin Energy Conservation Corp	Apartment and Condo Efficiency Services	Residential	Jack Jenkins
Wisconsin Energy Conservation Corp	ENERGY STAR® Products	Residential	Sara Van de Grift
Northwest Natural	High-efficiency Furnace	Residential	Carolyn Farrar
Gaz Metro	High-efficiency Furnace	Residential	Isabelle Gendron
Xcel Energy	Boiler Efficiency	C&I	Shawn White
Xcel Energy	Energy Design Assistance	C&I	Julia Gauthier
Center Point Energy	Custom Process Rebate	C&I	Angie Kline
Center Point Energy	Residential Home Audit	Residential	Angie Kline
National Fuel	Low Income Usage Reduction	Residential	Zeke Nowicki
New Jersey Clean Energy	SmartStart Buildings®	Residential	Bruce Grossman
New Jersey Clean Energy	ENERGY STAR® Homes	Residential	Bruce Grossman
GasNetworks®	Joint Gas & Electric Residential High Efficiency	Residential	Mike Sommer
GasNetworks®	ENERGY STAR® Homes	Residential	Mike Sommer

The purpose of the interviews was to:

- Confirm program performance
- Update current program information
- Identify key elements that drove program success

- Evaluate if the program is applicable and replicable in New York

Once all of the research was evaluated and the interviews were conducted with the managers of the screened programs, we evaluated which aspects of the programs could be applied to New York. This analysis was based on several factors including the end-use customer segments, technology, delivery channels, and market infrastructure.

III. Results of the Evaluation

The results outlined below are derived from the feedback we received from our interviews, research, and firsthand experience. Our analysis indicates that successful programs feature the following key elements, each which is discussed in greater detail below:

- Strong relationships among contractors, retailers and trade allies
- Strong training program
- Well designed and executed program management and monitoring
- Results-based marketing and promotion
- Consistent delivery of marketing and promotion messages
- Stability of regulatory treatment over time
- Responsiveness to customers and quality service
- Appropriate incentive levels for both service providers and consumers

A. Strong Contractor, Retailer and Trade Ally Partnerships

One of the most critical components of a successful program, whether it is residential or large C&I, is the development of a solid relationship with implementation service contractors, retailers, and trade allies. Program managers emphasized the importance of treating all partners in a fair and equitable manner. They also noted that when a portfolio approach to program offerings is applied there are efficiencies to be gained as the same partner can often promote an assortment of services such as installing and servicing both electric and gas appliances and systems.

A.1. Incentive or No Incentive?

If it is decided that no incentives will be offered, the training should stress how promoting the benefits of high-efficiency systems will strengthen the partner's brand (*i.e.*, a company that cares about energy savings and the environment), aid in up-selling, and generating referrals from satisfied customers.

Conversely, if incentives are deemed necessary to gain partner participation, it is recommended that input be obtained from contractors, retailers and other trade allies as to what level of incentive is most appropriate. It's also recommended that an incentive be offered during the early years of the program until the market matures. Once the partners have been trained and are proficient in selling, and consumer awareness has been increased, there may not be a need for incentives.

A.2 Building the Relationship

The program managers also shared ways they build ongoing relationships with their contractors and trade allies:

- Encourage contractors to be flexible in meeting consumer demands.
- Try to stay away from largely prescriptive services especially on commercial and industrial (C&I) work. Prescriptive services have more of an application in the mass market segment.
- Where possible, use the same contractors, designers, installers, *etc.* on retrofit, equipment replacement, and new construction programs. This builds relationships that are critical to the long-term success of the program. It also ensures consistency of delivery.
- Use a limited number of contractors who provide the best quality work and customer satisfaction. While this can be problematic during peak demand periods, it will help build consumer confidence and loyalty, as well as strong partnerships.

B. The Importance of Training Programs

Training the program partners is also essential to program success:

- Use manufacturers and other trade allies to assist in the development and delivery of training.
- Use the considerable resources of American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), ENERGY STAR[®] and other applicable organizations and/or programs to aid in the development of the training.
- Provide technology updates and associated training, when needed.
- Conduct annual centralized training sessions followed by smaller, geographically dispersed sessions.
- Cross-train residential contractors, who typically focus on small residential projects, with commercial engineers, who typically focus on large C&I projects. This ensures coverage in the small commercial and multi-dwelling segments which is typically an underserved market segment due to the lack of expertise.

C. Program Management and Monitoring Progress

Program managers should strike a balance with documentation and assessments of their programs. Management and monitoring systems should allow the data to be collected, but not be so cumbersome that they discourage proper use. Some guidelines include:

- Design and implement a system of communication that allows frequency and accessibility:
 - Consider creating a Dealer Advisory Council.
 - Develop electronic reporting methods.
- When possible, use utility company key account representatives to help manage the partner channels. For example, the same key account representative who handles new gas service for construction projects should also be the one selling the efficiency programs to the builder. Since certain market segments require different technical expertise, it's advantageous to match the key account representatives accordingly. The representatives should make quarterly visits to

- retailers, manufacturers and distributors. Monthly visits to contractors and installers are encouraged.
- Establish clear rules for quality control, customer service and reporting. Be flexible enough to allow for gaps in partner capabilities; *i.e.*, some may need electronic reporting capabilities training.
 - Partners should invest in sufficient staffing, tools, testing equipment and other necessary program elements in order to successfully deliver the program.
 - Design an efficient sales program that includes tracking sale opportunities and rewarding quality and timely customer service.
 - Standardize program management and monitoring as much as possible to avoid partner and/or consumer confusion.
 - One administrator will ensure that management and monitoring are handled efficiently and with a minimum number of problems. This person should be responsible for:
 - Rebate application review/approval/processing.
 - Customer inquiry and issue resolution.
 - Verification processes and procedures.
 - Management reports/data monitoring.
 - Invoicing and accounting management.
 - Design the tools to be as turn-key as possible.

D. Marketing and Promotion

An effective marketing and communications program is simple to understand, concisely worded and consistent over the length of the program. The old adage of “keeping it simple” still applies to marketing communications. In fact with the bombardment of commercial messages occurring every day, ads that are simple and easy to understand often stand apart.

Some suggestions from the program managers include:

- Invest in marketing and communications throughout the life of the program. It assures the consumer that the program is here to stay and not a short-term offer.
- Consistency is the key for both consumers and program partners.
 - Design and market the program to include both prescriptive and customized customer demands.
 - Whenever possible ensure that the partners are getting consistent messages from all participating partners vs. different messages based on utility or program service territories.
- Market the program under a single brand.
 - Marketing under a known brand will make it easier for partners to sell.
 - Consider co-branding to meet the needs of the partners and trade allies.
 - Consider co-branding to take advantage of national brands; *e.g.*, ENERGY STAR[®].
- Leverage the resources of the entire market channel to reduce costs.
 - Use your partners to help market the program.
 - Encourage manufacturers to create marketing incentives for their dealers and contractors, and consider negotiating with the manufacturer to match any program incentive to the consumer.

- Co-operative advertising builds stronger partnerships and is a cost-effective marketing channel. Often a large retailer can penetrate the market more effectively due to its scale and advertising budget.
- Create excitement and a sense of urgency around promotions.
- Remember that cost savings may not be the only reason a consumer buys. Other factors include comfort and convenience.
- Marketing channels the program managers typically use include:
 - Web sites (co-operative promotions and links to both the brand and utility sites)
 - Brochures
 - Bill inserts
 - Bill messaging
 - Call centers
 - Newsletters
 - Broadcast e-mails
 - Events; *i.e.*, home shows, trade shows, trade ally events, *etc.*
 - Training seminars
 - Trade publications
 - Broadcast and print media are appropriate for mass market and/or national campaigns
 - Web/bill insert checklists and other tools can be effective, interactive tools to inform customers on how they can be helped by the program.

E. Regulatory Environment

While program managers did not share a lot of specifics regarding regulatory issues, most managers mentioned it as an important element in their success. They stressed the need to communicate and reassure regulators that the program(s) will be in place for long periods of time to facilitate change, such as market transformation. Specifically, program managers mentioned:

- Work to ensure the utility or program administrator and the regulators are on the same page.
- Regulators will want to see verified results. When multiple utilities or administrators are reporting on the same program, develop a template for reporting results. This tool was identified as being very useful in program evaluation.
- Assure regulators that rebates and incentives will slowly be reduced as the market transforms and high-efficiency technologies are accepted. The lower rebate can be offset by an increase in channel partner incentives as the market matures.
- Establish consumer or related program or policy advisory boards and keep them involved.

F. Customer Responsiveness and Service

To say that customer satisfaction is critical throughout the life of an energy efficiency program is certainly an understatement. Without customer satisfaction, the program is doomed for failure. Program managers stressed the following:

- Place quality controls on the partners, as well as on marketing and communications.

- Set guidelines for acceptable program response times to consumers and reinforce them.
- Review number of service calls required. Fewer service calls help drive repeat business, particularly with property owners and managers.
- Remember that the marketing partners are also customers; ensure their needs are also being met.
- Establish a single point of contact for the customer and ensure the contact is accessible.

G. Incentive Levels

Incentives are typically offered with new programs to mitigate the cost differential between conventional and high-efficiency appliances and systems. The program managers interviewed offered the following advice on managing incentives:

- Try to gain incentives from the market partners. This often offsets the need to set higher, state and/or federally funded public benefits incentives.
- As efficiency measures gain market acceptance, begin to taper off the incentives.
- The size of the customer segment often drives the type of incentive:
 - The smaller the customer segment, the more prescriptive the incentive. These usually are in the form of fixed upfront cost savings.
 - The larger the customer segment, the more flexible the incentive. Larger customized incentives vary from costs savings per unit to \$/therm savings.
- Incentives typically take the form of rebates or financing assistance.
- Non-financial incentives include education, training, marketing, technical assistance, verification and reporting.
- Obtain input from contractors, retailers, wholesalers and manufacturers to determine the incentive levels for consumers.

IV. Common Market Segment End-Use Technologies and Program Attributes

Of the programs evaluated for this study, this section identifies the most common Market Segment End-Use Technologies targeted in order to gain the greatest value for efficiency programs. Also identified in this section are the most common Program Attributes among these best-in-class programs that contributed to their overall success.

A. Residential

Residential programs, as expected, target two primary end-use technologies: space heating and water heating. Efficiency can be gained by either installing equipment with a higher efficiency or by tightening up the equipment and building envelope. The types of programs that most commonly focused on the building envelope include installation of attic/wall/duct insulation; duct leak testing and sealing; air infiltration measures; energy-efficient windows, and improved controls (thermostats).

The most successful program incentives are designed to offset the difference in cost between conventional equipment and higher-rated energy-efficient equipment, provide discounts for weatherization implementation, and provide low-cost financing. The following represent major program attributes by building type. Where applicable,

specific programs, that exemplify an attribute, are identified in parentheses. Otherwise attributes are common among multiple programs.

A.1 New Construction Market

- Offer financial incentives to the builder to offset the additional costs of high efficiency equipment and installation.
- Provide technical and planning assistance to the builder (GasNetworks®).
- Provide marketing materials and sales training: (NJ Clean Energy)
 - Highlight builder differentiation.
 - Provide consumer education on operational savings from high efficient systems.
- Provide active account management to monitor and support builder accounts (Vermont Gas Systems).
 - Support and attend builder home shows.
 - Schedule meetings on a regular basis.
- Establish building standards for energy-efficient homes (NJ Clean Energy).
- Work with manufacturers and ENERGY STAR® to leverage incentives.

A.2 Existing/Replacement and Retrofit Market

- Offer financial incentives, including low-cost financing, to consumers to offset additional costs of high efficiency equipment and installation.
- Provide technical assistance and training to installation contractors (GasNetworks®).
- Partner with retailers to private-label and promote energy efficient systems and/or appliances (Northwest Energy Efficiency Alliance).
- Provide consumer education and promotion materials to market partners.
- Depending on current market saturation, offer graduated incentives for various efficiency levels of systems (Vermont Gas Systems & Center Point Energy).
- Provide packaged programs and products for building envelope:
 - Focus should be on safety, comfort and savings.
 - Incorporate a whole-house approach.
- Provide energy audits.
- Use ENERGY STAR® and other nationally recognized brands.

A.3 Low-income Market

The low-income market shares similar attributes with the existing/replacement and retrofit market (see above). Programs serving this market also have the following unique attributes:

- Combine sponsored program with weatherization assistance program.
- Be prepared to work with owners and/or renters.
- Invest in consumer education; it is a key to success.
- Provide savings feedback to consumers and contractors for 12 months pre-installation and 12 months post-installation reports by address.
- Partner with low-income advocates to increase participation (National Fuel).

A.4 Multifamily Market

- Must have strong coordination and cooperation of all market partners:

- Manufacturers should team with architect and engineering firms to develop packages to retrofit and update systems in a cost-effective manner.
- Develop a team of contractors and installers who understand the market and can be recommended.
- Provide technical training, planning and audit expertise to partners.
- Create innovative and flexible design packages that combine gas and electric.
- Generate repeat business from satisfied building owners and property managers (Wisconsin Energy Conservation).

B. Commercial and Industrial

As is the case with the residential market, commercial and industrial programs also target space and water heating, as well as the building envelope. Process heat use in certain situations is also targeted. These programs are usually designed to target the business owner with building planning, technical assistance, training and financial incentives. The most common building measures evaluated are insulation, air sealing, occupancy sensors for demand control, heat recovery and ventilation.

Major attributes for this segment include:

- Develop a comprehensive/integrated portfolio approach that addresses both gas and electric energy efficiency opportunities.
- Review and analyze building plans (Xcel Energy & NJ SmartStart).
- Provide design support and technical assistance (Xcel Energy & NJ SmartStart).
- Offer financial incentives to help mitigate first cost barriers (NJ SmartStart):
 - Prescriptive rebates are appropriate for smaller installations, but flexibility and customization are required for larger projects.
 - When possible, incentives should be tied to standards that exceed building codes. As market transformation advances, the building code may be revised to meet the higher energy efficiency standards.
 - A custom “process” rebate allows for unique energy-efficient applications (Center Point Energy).
- Work with designers to identify cost-effective design choices that are specific for the building type.
- Using key account managers, who know the varying market segments and particular building and process needs, is critical to success.
- Design programs around a “life cycle” approach, which includes annual tune-ups and other services, helps keep customers involved and opens the door for customers to contact the sponsor for future needs (Xcel Energy).

V. Future Considerations

The State of New York and NYSERDA should consider that the goal of most of these best-in-class programs is to transform the market to higher level of efficiency over time. This goal is most effectively accomplished by working with the manufacturers, specifiers, retailers and installers to push the programs through the market while pulling the programs with consumer education and promotions.

There are three structures that could be considered to accomplish the implementation and management of a comprehensive statewide program designed to transform the market.

- The first structure would be to have the individual utilities in the state administer their own programs. This is a common practice throughout North America. However, if not closely coordinated, it will create a fragmented marketplace.
- The second structure would provide for a single structure, collaborative utility model where the individual utilities work together to offer a consistent and mutually branded program to the state. The GasNetworks[®] program in New England is one of the best examples of a successful collaborative model.
- The third and final structure is a single structure, third party administrator model. NYSERDA is an example of a successful third party administrator model. Specifically, the NYSERDA **New York Energy SmartSM** program has accomplished or made considerable progress toward transformation goals. The State of New Jersey is now considering moving its New Jersey Clean Energy Program to this model.

Overall our work has concluded that the most efficient, cost-effective and manageable natural gas efficiency program for New York to consider would be a program that runs in parallel with NYSERDA's current electric efficiency efforts. Although some aspects of the NYSERDA programs are fuel neutral, the focus remains on electricity use and demand reduction. Adding natural gas as a focus within existing and expanded NYSERDA programs would expedite market penetration and positively affect efficiency results.

At a minimum, consideration should be given to developing and/or enhancing the capabilities to:

- Create a collaborative effort with all market participants and utilities to design a comprehensive portfolio that includes gas and electric efficiency initiatives.
- Begin with a few gas programs that are easy to integrate into existing successful electric programs and build additional programs in future years.
- Begin with gas programs that will provide the greatest market penetration (traction).
- Use existing operating infrastructures.
- Use existing statewide and/or national brands.
- Identify which gas equipment manufacturers already have a strong presence in the State.
- Identify which market segment (residential, commercial, industrial) could provide the greatest savings in gas demand.
- Set up programs that can succeed in both urban and rural areas.
- Identify new and emerging technologies that will drive energy efficiency efforts in both gas and electricity.
- Develop a single template for statewide reporting and monitoring of results for consistency.
- Include technologies designed to provide efficiency measures for space, water heating and building envelopes.
- Develop a cohesive partnership among gas and electric utilities.

We believe a natural gas efficiency program can be integrated into the following NYSERDA initiatives:

- ENERGY STAR[®] products
- ENERGY STAR[®]-labeled Homes
- Home Performance with ENERGY STAR[®]
- Assisted Home Performance with ENERGY STAR[®]
- DG/CHP Program
- Smart Equipment Choices Program
- Commercial & Industrial Performance Program
- Technical Assistance Program
- Weatherization Network Initiative

VI. Conclusion

Natural gas customers are facing ever-increasing price volatility. Gas efficiency programs to serve these customers could support New York's overall energy efficiency goals. Although financial incentives can be established relatively quickly, other more diverse and management-intensive offerings such as contractor training, technical and design services, retail agreements, *etc.* can take significant time to implement.

NYSERDA already has the platform to offer all of these services in a more economical fashion than can be otherwise achieved. NYSERDA should evaluate and include in its future program planning a variety of natural gas efficiency programs designed to have an immediate impact in the marketplace balanced with programs designed to transform the market over the long term. Once these markets begin to transform, the level of financial support could be lowered as the market itself drives the demand.

VII. Resources

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Appendix 1: Primary Interview Questions

Note: Interviews were informal and open ended. Secondary questions were followed up as needed.

Question 1: Are you currently or formerly involved in the management of XXX program?

Question 2: We have data from previous research conducted in recent years by (ACEEE) and would like to update the data and discuss additional details. Are you still the best person to provide this information?

Question 3: Could you confirm your program's overview, objectives and performance?

Question 4: Could you confirm and update the results of the program?

Question 5: Could you list the top three or five reasons (lessons learned) why your program has been or is so successful?

Question 6: Would you mind elaborating on the key attributes of the program?

Question 7: What program changes have been made over the last X years/months that improved the program's success? Why were the changes made?

Question 8: Are there any aspects of the program you would like to change today?

Question 9: Were there any mistakes (lessons learned) made during the program that you would advise someone trying to duplicate your program not to make?

Question 10: Could you please elaborate on what makes the following attributes of your program successful; incentives, marketing communications, operational infrastructure, market segmentation, marketplace partnerships, consumer buying behaviors?

Question 11: Could you share with me how your program is managed, monitored and evaluated?

Question 12: Do you believe this program is easily replicated? How long do you think it would take to set up such a program where none currently exist?

Question 13: Do you believe this type of program could work in the Northeast and specifically in New York?

Question 14: Are there other programs you are aware of that you believe to be very successful and good examples to review?

Appendix 2: Program Listings and Contact Information

Company	Program Name/Last Available Annual Budget	Segment	Manager
Vermont Gas Systems	WorkPlace New Construction/ 2004 (projected) budget: \$173,582 (gas rates)	C&I	Jim Grevatt Manager, Energy Services 802.863.4511 ext 372
Vermont Gas Systems	WorkPlace Equipment Replacement & Retrofit/ 2004 (projected) budget: \$385,734 (gas rates)	C&I	Jim Grevatt Manager, Energy Services 802.863.4511 ext 372
Vermont Gas Systems	Homebase Retrofit/ 2004 (projected) budget: \$369,643 (gas rates)	Residential	Jim Grevatt Manager, Energy Services 802.863.4511 ext 372
Vermont Gas Systems	Homebase Equipment Replacement/ 2004 (projected) budget: \$134,565 (gas rates)	Residential	Jim Grevatt Manager, Energy Services 802.863.4511 ext 372
Efficiency Vermont/Vermont Gas Systems/ Burlington Electric	Multifamily Low Income/ 2004 (projected) budget: \$1,195,363 (gas & electric SBC)	Residential	Jim Grevatt Manager, Energy Services 802.863.4511 ext 372
Northwest Energy Efficiency Alliances	ENERGY STAR [®] Windows/ Funding is “non-specific” to this program (SBC)	Residential	John Jennings Project Coordinator 503.827.8416 ext 229
Wisconsin Energy Conservation Corp	Apartment and Condo Efficiency Services/ 2003-4 fiscal budget: \$2,610,500 (electric SBC)	Residential	Jack Jenkins Program Manager 888.509.3247 ext 450
Wisconsin Energy Conservation Corp	ENERGY STAR [®] Products/ 2003-4 fiscal budget: \$1,080,000 (SBC)	Residential	Sara Van de Grift Program Manager 608.249.9322 ext 160
NW Natural	High-efficiency Furnace/ 2003 budget: \$1,400,000 (gas SBC)	Residential	Carolyn Farrar Program Manager 503.721.2473
Gaz Metro	High-efficiency Furnace	Residential	Isabelle Gendron Recherché et Stratégies Marketing 514.598.3048
Xcel Energy	Boiler Efficiency/ 2004 (projected) budget: \$755,374 (gas SBC)	C&I	Shawn White Product Portfolio Manager 612.330.2806
Xcel Energy	Energy Design Assistance/ 2004 (projected) budget: \$150,000 (gas SBC)	C&I	Julia Gauthier Product Manager 612.337.2120

Center Point Energy	Custom Process Rebate/ 2004 (projected) budget: \$1,200,000 (gas rates)	C&I	Angie Kline Manager, Energy Programs 612.321.4572
Center Point Energy	Residential Home Audit/ 2004 (projected) budget: \$344,750 (gas rates)	Residential	Angie Kline Manager, Energy Programs 612.321.4572
National Fuel	Low Income Usage Reduction/ 2003 budget: \$992,280 (0.4% National Fuel's gross revenue)	Residential	Zeke Nowicki Program Manager 800.352.1020
New Jersey Clean Energy	New Jersey SmartStart Buildings [®] / 2004 budget: \$53,030,000 (gas & electric SBC)	Residential	Bruce Grossman Manager, Energy Programs South Jersey Gas Co 609.561.9000 ext 4271
New Jersey Clean Energy	ENERGY STAR [®] Homes/ 2004 budget: \$21,000,000 (gas & electric SBC)	Residential	Bruce Grossman Manager, Energy Programs South Jersey Gas Co 609.561.9000 ext 4271
GasNetworks [®]	Joint Gas & Electric Residential High Efficiency/ 2004 (projected) budget: \$400,000 (gas & electric SBC)	Residential	Mike Sommer Manager, Energy Services Berkshire Gas Company 413.445.0315
GasNetworks [®]	Comprehensive State Program Portfolio/ 2002 (combined) budget: \$5,500,000 (gas & electric SBC)	Residential	Mike Sommer Manager, Energy Services Berkshire Gas Company 413.445.0315

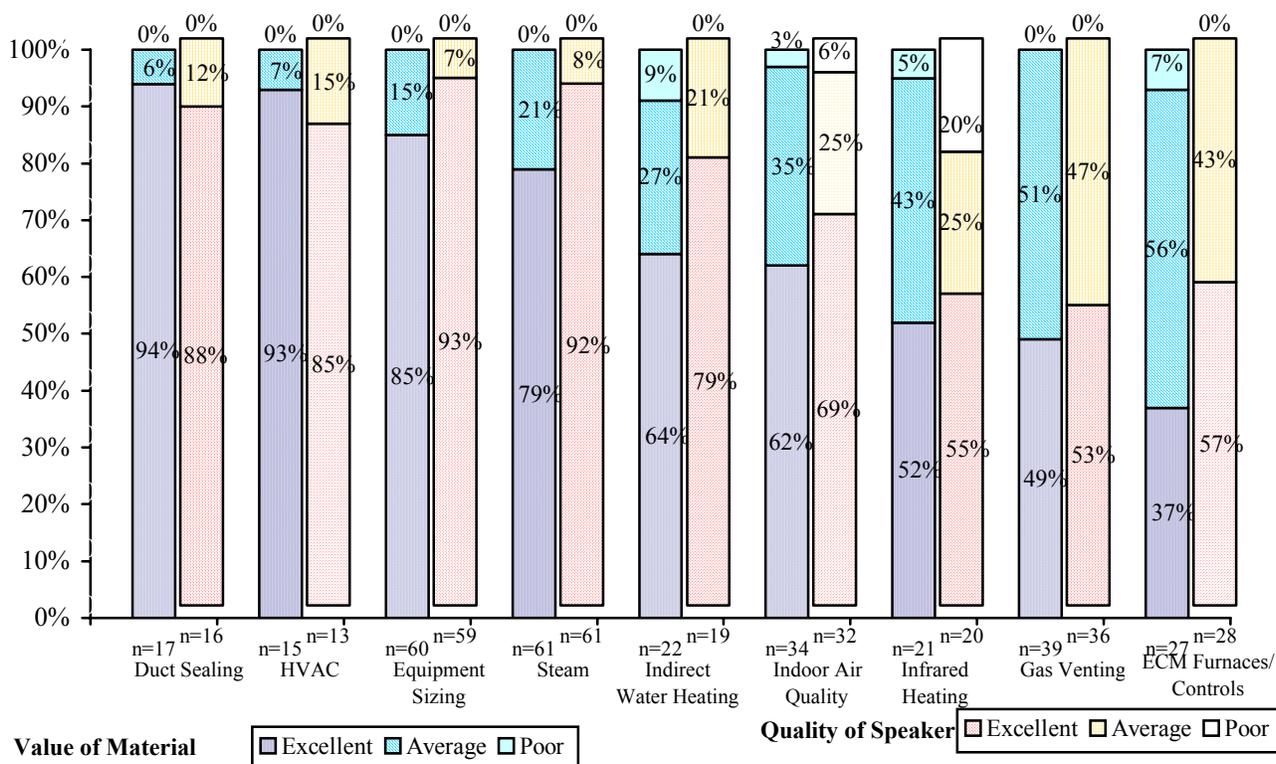


EVALUATION STUDY OF GASNETWORKS® CONTRACTOR AND TRADE ALLY EDUCATION AND TRAINING PROGRAMS

GasNetworks commissioned Opinion Dynamics Corporation to conduct research on the Contractor and Trade Ally Education and Training Programs, with particular emphasis on the Annual Conference held in September, 2004. This effort involved conducting a telephone survey with contractors who had participated in prior training events including past annual conferences as well contractors who had not participated in any GasNetworks event; collecting feedback from participants at the 2004 Annual Conference through a pre- and post-conference survey; and conducting a focus group with 11 contractors at the end of the 2004 Annual Conference.

The research reveals that the 2004 Annual Conference was an overwhelming success and provided something for everyone. Overall 97% of those attending the Conference felt it was worth attending—a truly staggering number. Specifically, the 2004 Annual Conference was a success in terms of the material presented, the speakers, and attendance (over 200 people attended). We asked attendees to rate the content of each technical area presented, and almost everyone gave the content of the various seminars offered in the conference an excellent or good rating. Speakers also received high ratings. Clearly the content and presentation of conference sessions are deemed to be valuable resources for industry professionals.

Value of Material and Quality of Speakers at 2004 Annual Conference
By Technical Area



GasNetworks is providing valuable information to professionals in the industry, thereby encouraging greater energy efficiency. While contractors believe that attending such training like that provided by GasNetworks allows them to keep abreast of new developments in the industry, even more in-depth information would help broaden their understanding of high efficiency equipment and possibly cause them to push the high efficiency equipment as the optimal solution to their customers.

The major market barriers to installing high-efficiency technologies cited by most trade allies are:

- Cost,
- Customer awareness, and the
- Complexity of high efficiency equipment.

While offering incentives to reduce the cost of high efficiency equipment helps in part to overcome these barriers, education and training is integral in helping to overcome awareness and complexity issues. The GasNetworks' trainings and events serve as an important conduit to educating trade allies (and helping trade allies to educate customers) and overcoming these barriers, which ultimately leads to the increased use of high efficiency technologies and practices.

The evaluation found that GasNetworks is doing an excellent job in providing a wide array of relevant topics for its trainings and offering them in different formats. There has been, and continues to be, a lot of interest in GasNetworks events and the types of topics that GasNetworks events cover.

Participants of the 2004 Annual Conference have overwhelmingly (97%) found the event they attended to be worth attending, and 70% believe they are likely to orient their practices more towards energy efficiency (promoting equipment and installing equipment with energy efficiency in mind) *as a result* of attending the GasNetworks event.

The primary reason trade allies attend GasNetworks events is to keep current with the industry (82%). Participants in the 2004 Conference say they usually learn about new developments in the industry through newsletters, trade journals, and publications (80%), or through training events such as the ones GasNetworks offers (63%).

Contractors and other trade allies are generally very aware of high efficiency equipment, but they often do not know how to promote it, or fear the post-installation servicing of this equipment. More than four out of five attendees of the 2004 Annual Conference who either promote/sell or install equipment stated they attended the Conference because they were looking for ways to incorporate energy efficiency more into their work. As the table below indicates, the information provided in the Conference will often be used in practice by those who attended.

Likelihood to Change Practices As a Result of GasNetworks Event

	2004 Conference Participants (n=128)
Likely to promote AND service/install energy efficient equipment	70%
Likely to promote energy efficient equipment more often	23%*
Likely to service/install equipment with energy efficiency in mind	5%
Practices likely UNCHANGED by training/conference	2%*

* Indicates statistically significant difference compared to the comparison group of Training Event Participants.

The value in GasNetworks providing these trainings is apparent to contractors. *Every* respondent who had participated in some GasNetworks training event in the past said they would consider attending another GasNetworks event in the future; furthermore, 80% of *non-participants* also said they would consider attending.

In the future, contractors want to learn how to upsell energy efficiency equipment and services to their customers. Specifically, contractors mention wanting more information on “strategies” or “techniques” for selling. Most contractors are not entirely comfortable doing this and would appreciate more information and support. Similarly two-thirds of contractors surveyed also want more information on energy efficient technologies, such as trouble shooting and diagnosing and servicing high efficiency equipment. Based on past successes providing industry professionals with valuable technical support and information, future Gas Networks conferences look to be ideal vehicles through which contractors can obtain the information they are seeking.