BEST PRACTICES FROM ENERGY EFFICIENCY ORGANIZATIONS AND PROGRAMS

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DRAFT SUMMARY

In April 2002, the Energy Trust of Oregon (Energy Trust) contracted with Research Into Action, Inc. and our subcontractors Feldman Management Consulting, Nexus Market Research, Inc. and Quantec, LLC to conduct a survey of best practices for organizational practices and programs in the energy efficiency industry. To conduct the study, the Research Into Action team contacted energy efficiency experts throughout the nation and internationally to obtain nominations of organizations with best practices in organizational management and program design and delivery.

Our key informants nominated over 70 programs. Through discussions with Trust staff we subsequently reduced these to 62 programs or practices to target in the survey. The Research Into Action team proceeded to contact representatives for each of the 62 programs and to conduct structured interviews in order to compile the information requested by the Energy Trust. At the conclusion of this process we had completed summaries on 43 programs or administrative practices that provided valuable lessons learned or were clearly transferable to the Energy Trust.

The reader will find that many of the best practice programs are conducted by organizations that also were nominated for their organizational practices. Additionally, the reader will note that three areas dominate the best practice inventory: the Northeast United States including New England, New York and New Jersey (with 26 nominations), Wisconsin (8 nominations) and California (9 nominations). Six nominations were received for international organizations or programs and three summaries were identified as being potentially transferable to the Energy Trust. The Northwest has three nominations included in the study. A few additional nominations were received for Northwest organizations; Pacific Corporation's Energy Financer program and many of the programs offered by the Northwest Energy Efficiency Alliance, these were not pursued because the Alliance programs are all market transformation programs and the Pacific Corp program is fully familiar to the Energy Trust.

Another overwhelming feature of the programs, in particular, is that so many of them have been implemented for so many years. Several of the programs have histories of close to or over 10 years. These programs show the effect of years of effort to revise and improve the programs, as well as the influence of changes in regulatory requirements or corporate direction. Some of the best practices in programs we looked at are no longer being implemented due to changes in regulatory or corporate environments.

The Energy Trust provides a different environment than most of these programs operate in. Only the programs offered in Wisconsin, Vermont and New York face a

similar environment, and while the lessons learned from these programs and organizations should be the most fruitful, they are also are the least tried.

The only caveat that must be mentioned about these best practices is that there is no way to ascertain whether these are the best practices that are possible in each of these program and organizational areas. None of these programs started out as best practice programs; all took time to evolve to their current states and most are still evolving. Ultimately, a program must be designed to respond to the current conditions and, as some of the interviewees noted; having good staff or contractors is what really makes the difference.

The following tables provide a checklist of our recommendations for which of the 41 summaries provides applicable information either as a lesson learned or as a directly transferable practice for the Energy Trust to consider.

Table ES-1

ORGANIZATION PRACTICES

SUMMARY TITLE	STAFFING/ CIRCUIT RIDERS	SCREENING	CONTRACTING	ORGANIZATION STRUCTURE
Wisconsin Energy Conservation Corporation: Organization, Staffing Ratio, and Program Screening	√			√
Efficiency Vermont (EVT): Organization Structure, Performance Metrics, Communications, Subcontracting				√
New South Wales Sustainable Energy Development Authority: Organizational Structure				√
Northwest Energy Efficiency Alliance: Project Contracting, Project Screening	√		√	
Efficiency Vermont: Measure Screening		√		
Southern California Edison: Contracting Procedures			√	
National Grid: Program Delivery				√
Northwest Energy Efficiency Alliance: Circuit Riders	√			
Pew Charitable Trusts: Non-Profit Staffing	√			

Table ES- 2

RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

SUMMARY TITLE	TRADE ALLIES & CAPS	FINANCING INCENTIVES	EDUCATION	MARKETING OUTREACH	QUALITY CONTROL
Benton County PUD: Dipstick Weatherization Program	√			√	√
Tacoma Utilities: Residential Weatherization Program		√		√	
National Grid: EnergyWise Program	√	√		√	
Efficiency Vermont: Residential High Use Program	√				
National Grid: Appliance Management Program	√		√	√	
Sacramento Municipal Utility District: Residential Loan Services	√	√			
Efficiency Vermont: Lighting and Appliance Rebates		√		√	
Northeast Utilities: Lighting Catalog		√		√	
New Jersey Utilities: Residential HVAC Program	√	√			√
Wisconsin: High Efficiency Furnace Program	√	√			
Energy Efficiency Homes Midwest: ENERGY STAR® Homes Program	√			√	

Table ES- 3

COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY PROGRAMS

SUMMARY TITLE	TRADE ALLIES	FINANCING INCENTIVES	APPLICATION PROCESS	MARKETING OUTREACH	QUALITY CONTROL
Northeast Utilities: Small Business Program	√	√		√	
Ameren: Commercial End-Use Audit Program	√				√
New York State Energy Research and Development Authority: FlexTech Program	√	√		√	
California: Efficiency Express Program	√	√	√		
Northeast Energy Efficiency Partnership: Cool Choice – Commercial HVAC		√		√	
Southern California Edison: HVAC Modeling Tools					√
Sacramento Municipal Utility District: Compressed Air Services	√	√			
National Grid: Chiller Program		√		√	
Southern California Edison: Quotas for Motors		√	√		
Xcel Energy: Minnesota Custom Efficiency Program	√				√
Xcel Energy: Colorado Custom Efficiency Program		√	√	√	√
Northeast Utilities: Commercial Retrofit RFP Program		√	√	√	√
Oakland: Energy Efficiency Design Assistance				√	
Energy Center of Wisconsin: Daylighting		√		√	
Northeast Utilities: Energy Conscious Construction				√	
					Continued
National Grid: Design 2000		√		√	√

SUMMARY TITLE	TRADE ALLIES	FINANCING INCENTIVES	APPLICATION PROCESS	MARKETING OUTREACH	QUALITY CONTROL
National Grid: Commissioning		√		√	
Northeast Utilities: Industrial Consulting Services		√		√	
National Grid: Industrial Technical Assistance		√		√	
Netherlands: Long-Term Agreements with Industrial Firms				√	
United Kingdom: Energy Efficiency Best Practice Programme				√	

Table ES- 4

MISCELLANEOUS ENERGY EFFICIENCY PROGRAMS

SUMMARY TITLE	TRADE ALLIES & CAPS	FINANCING INCENTIVES	EDUCATION	MARKETING OUTREACH	QUALITY CONTROL
California: Flex Your Power Campaign			√	√	
Energy Center of Wisconsin: Education and Training			√	√	

1. INTRODUCTION

The Energy Trust of Oregon (Energy Trust) contracted with Research Into Action, Inc. and its subcontractors Feldman Management Consulting, Nexus Market Research, Inc. and Quantec, LLC to conduct an inventory of best practices for energy efficiency organizations and energy efficiency programs.

Key to this study is the idea of best practice. The purpose of the best practices research, according to the Energy Trust, was "to identify innovative program and administrative approaches that merit further investigation, adaptation or emulation by the Energy Trust."

Our approach to this project was to draw directly on our own extensive experience with a variety of energy organizations and the energy efficiency community to identify key informants who can in turn identify exemplary organizations and programs and to identify additional organizations that have developed excellent programs or administrative procedures.

In conducting the inventory, we considered two factors to be of utmost importance in selecting organizations from which to draw best practice examples. These are:

1. That the programs and administrative procedures we select had been nominated by key informants as worthy of consideration as best practices, and

2. That the examples are potentially transferable to the Energy Trust.

These two factors led us to use a methodology based on nominations by key informants. This introduction discusses our methodology for conducting the inventory and provides an outline of the report.

METHODOLOGY

We initiated the project in late May 2002. The first step was to work with the Energy Trust staff to identify a list of key informants in the energy efficiency industry. The Research Into Action team contacted each of the key informants and asked them a series of questions to identify best practices in organizations and energy efficiency programs. (See Appendix A for list of key informants and list of questions.)

Following the completion of interviews with key informants, we compiled a list of programs and organizational practices. We reviewed this list with staff

at the Energy Trust and identified the programs that should be pursued with a detailed interview and preparation of a summary of the program or practice. A copy of the questions used for programs and for organizations is provided in Appendix B.

Following the interview, we prepared a summary of each practice or program and submitted that to the interviewee to ensure accuracy. We then submitted the summary to Energy Trust staff, who provided comments and questions. The final versions were then prepared.

Table 1 displays the programs that were nominated and the subsequent status of that program. In some cases, programs were dropped as a result of the interview with the program or organization contact. A brief explanation for why they were dropped is provided in the comment column.

Table 1

NOMINATED ORGANIZATIONAL PRACTICES AND ENERGY EFFICIENCY PROGRAMS

TOPIC	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
Org	*Efficiency Vermont:* Organization Structure, Performance Metrics, Communications, Subcontracting, Measure Screening	X	Separate write up on Measure Screening
Org	*New South Wales Sustainable Energy Development Authority:* Organization Structure	X	
Org	*Northwest Energy Efficiency Alliance:* Project Contracting, Project Screening, Circuit Riders	X	Separate write up on Circuit riders
Org	*Northeast Energy Efficiency Partnership:* Organization Structure	Dropped	Energy Trust staff has high familiarity with NEEP
Org	*National Grid:* Program Delivery	X	
Org	*Pew Charitable Trusts:* Non-Profit Staffing	X	
Org	*New York State Research and Development Authority:* Organization Structure	NC	
Org	*Southern California Edison:* Contracting Procedures	X	
Org	*Wisconsin Energy Conservation Corporation:* Organization, Staffing ratio, and Program screening	X	
Res	*Benton County PUD:* Dipstick Weatherization Program	X	

Continued

Res	*California Power Authority:* loans	Dropped	No deal with Fannie Mae has been made
Res	*Energy Efficiency Homes Midwest:* ENERGY STAR® Homes Program	X	
Res	*Efficiency Vermont:* Residential High Use Program	X	
Res	*Efficiency Vermont:* Lighting and Appliance Rebates	X	
Res	*National Grid:* EnergyWise Program	X	
Res	*National Grid:* Appliance Management Program	X	
Res	*New Jersey Utilities:* Residential HVAC Program	X	
Res	*Northeast Utilities:* Lighting Catalog	X	
Res	*New York State Research and Development Authority:* Home Performance	NC	
Res	*Southern California Edison:* Refrigerator Recycling	NC	
Res	*Sacramento Municipal Utility District:* Residential Loan Services	X	
Res	*Tacoma Utilities:* Residential Weatherization	X	
Res	*Wisconsin Energy Conservation Corporation:* ENERGY STAR® homes	NC	
Res	*Wisconsin Energy Conservation Corporation:* Lighting and Appliance	NC	
Res	*Wisconsin:* High Efficiency Furnace Program	X	
Res	*Northwest Energy Efficiency Alliance:* Clothes Washer & Appliances, Manufactured Housing, Residential Lighting, Windows	Dropped	Market transformation programs, Trust staff plans to coordinate with Alliance as appropriate
C&I	*Efficiency Vermont:* Small commercial	Dropped	No targeted small commercial program
C&I	*Xcel Energy:* Minnesota Custom Efficiency Program	X	
C&I	*Xcel Energy:* Colorado Custom Efficiency Program	X	
C&I	*Netherlands:* Long Term Agreements with Industrial Firms	X	

Continued

C&I	*United Kingdom:* Energy Efficiency Best Practice Programme	X	
C&I	*United Kingdom:* Making a Corporate Commitment Campaign	Dropped	Primarily a government policy
C&I	Loan guarantees to private lenders--European models	Dropped	Primarily a government policy
C&I	European Revolving Loan	Dropped	Primarily a government policy
C&I	*Pacific Corporation:* Energy Financier	Dropped	Energy Trust had prior knowledge of program
C&I	*Northeast Energy Efficiency Partnership:* Cool Choice – Commercial HVAC	X	
C&I	*National Grid:* Chiller Program	X	
C&I	*National Grid:* Commissioning	X	
C&I	*National Grid:* Compressed Air Challenge	Dropped	Similar to Sacramento Municipal Utility District Compressed Air Challenge
C&I	*National Grid:* Design 2000	X	
C&I	*National Grid:* Industrial Technical Assistance	X	
C&I	*NSTAR:* Commissioning	Dropped	National Grid Commissioning viewed as better
C&I	*Northeast Utilities:* Commercial Retrofit RFP Program	X	
C&I	*Northeast Utilities:* Energy Conscious Construction	X	
C&I	*Northeast Utilities:* Small Business Program	X	
C&I	*Northeast Utilities:* Industrial Consulting Services	X	
C&I	*New York State Research and Development Authority:* Motors Frequent Purchaser	NC	
C&I	*New York State Research and Development Authority:* Flex Tech Program	X	
C&I	*Oakland:* Energy Efficiency Design Assistance	X	
C&I	*California:* California Efficiency Express Program	X	

Continued

C&I	*Southern California Edison:* HVAC Modeling Tools	X	
C&I	*Southern California Edison:* Quotas for Motors	X	
C&I	*Sacramento Municipal Utility District:* Compressed Air Services	X	
C&I	*Ameren:* Commercial End-Use Audit Program	X	
C&I	*Energy Center of Wisconsin:* Daylighting	X	
C&I	*Northwest Energy Efficiency Alliance:* Commissioning, Microelectronics	Dropped	Market transformation programs, Trust staff plans to coordinate with Alliance as appropriate
Misc	*Northern States Power:* Dairy Programs	Dropped	No current program
Misc	*Southern California Edison:* Hydraulic Services	Dropped	Program 50 years old
Misc	*Energy Center of Wisconsin:* Education and Training	X	
Misc	*Wisconsin Focus on Energy:* Dairy	NC	
Misc	*California:* Flex Your Power Campaign	X	
Misc	*Efficiency Vermont:* Dairy	Dropped	Herd size not comparable to Oregon

* *NC= pending review by interviewee; X=completed and included in report*

The programs and practices with an "NC" listing in Table 1 were nominated, but due to limited resources or difficulty in reaching the contact and completing the interviews, these summaries were not completed. Each of these might still provide valuable information to the Energy Trust, but would require additional resources to complete.

Our key informants nominated over 70 programs. Through discussions with Trust staff we subsequently reduced these to the 62 programs or practices to target that are included in this table.[1]

The Research Into Action team proceeded to contact representatives for each of the 62 programs and to conduct structured interviews in order to compile the information requested by the Energy Trust. At the conclusion of this

[1] In some cases, single organizations were nominated for multiple best organizational practices so that a single summary was prepared with multiple practices. Where organizations had multiple programs, we prepared a summary on each program and did not combine these.

process we were able to complete summaries on 43 programs or administrative practices.

Three areas dominate the best practice inventory: the Northeast United States including New England, New York and New Jersey (with 26 nominations), Wisconsin (8 nominations) and California (9 nominations). We also received six nominations for international organizations or programs, but only three were completed as the other three turned out to be driven largely by government policy and were not transferable to the Energy Trust. The Northwest had three nominations included in the study. We received several additional nominations, especially about the Northwest Energy Efficiency Alliance; however, due to the close working relationship between the Energy Trust and the Alliance, these additional nominations were viewed as unnecessary to pursue.

Perhaps the only real caveat that must be mentioned about these best practices is that there is no way to ascertain whether these are the best practices that are possible in each of these program and organizational areas. Certainly the respect that energy efficiency experts hold for these programs and organizations suggests that they are best practices, but it was clear from our discussions with program and organization staff that opportunities still exist to improve and enhance programs and practices. At the same time it is also possible for a simple change in management or regulatory policy to eliminate the aspects the nominators consider to be best practice, as we found in at least four cases.[2]

None of these programs started out as best practice programs; all took time to evolve to their current state. Our research showed that many of these programs have been operated for many years, and have been changed multiple times in the pursuit of improvement. Process evaluations, market research and impact evaluation results have shaped many of the programs. At the same time, efforts by program staff to work with contractors and trade allies have also tended to change the programs to be more effective. Ultimately, a program must be designed to respond to the current conditions, and, as some of the interviewees noted, having good staff or contractors is what really makes the difference.

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[2] California Efficiency Express; Benton County PUD Dipstick Weatherization; Ameren Commercial End-Use Audit; and Xcel Energy Minnesota Custom Efficiency Program.