Progress Report on the Expenditure of American Recovery and Reinvestment Act Energy-Related Funds

Report to the Minnesota State Legislature

Pursuant to Minn. Laws 2009, Chapter 138, Article 5, Section 2

September 2010

Office of Energy Security Minnesota Department of Commerce

I. INTRODUCTION

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act (ARRA). In May 2009 the Minnesota Legislature passed and Governor Pawlenty signed S.F. 657 (codified as Laws of Minnesota 2009, Chapter 138), appropriating energy-related ARRA formula grant funds to the Department of Commerce and allocating those funds to various programs.

This report is required by the Laws of Minnesota 2009, Chapter 138. Article 5, Sec. 2., Accountability and Transparency Reporting:

The commissioner, after compiling information supplied by the commissioners of administration, education, and employment and economic development, and the Office of Higher Education, shall report on the progress of the programs funded by this act to the house of representatives and senate committees with jurisdiction over energy finance and workforce development policy by September 1, 2009, January 15, 2010, April 1, 2010, and September 1, 2010. The report must include a complete accounting of all federal stimulus money spent on the programs funded to the extent allowable by federal law, including, but not limited to:

(1) the specific projects funded, including the building owner and project manager, and, for nonresidential projects only, the project location;

(2) for weatherization projects, the number of units weatherized, including number of rental units weatherized, energy usage information, income data, and type, cost, and funding source of the weatherization measure installed;

(3) the number of jobs retained or created by each project, including data on hiring from communities experiencing disproportionately high rates of unemployment, including, but not limited to, low-income, rural, tribal communities, and communities of color;

(4) the total calculated and actual energy savings for each project;

(5) the remaining balances in each stimulus account;

(6) the non-stimulus money leveraged by stimulus money for each project;

(7) the training courses provided, including the location and provider of courses offered, the funding source for each training course, and the total number of trainees; and

(8) compliance with state prevailing wage, veterans, and disadvantaged business enterprise requirements.

The reports must be made available to the public on the Office of Energy Security Web site.

This report summarizes the work that has been done to date and provides data required by Chapter 138. Because reporting frequency differs for various data elements, this report notes the date through which data is provided.

II. REPORTING

The Office of Energy Security (OES) has submitted all of the required ARRA-related reports on time to the appropriate entities (U.S. Office of Management and Budget (OMB) and Minnesota Management and Budget (MMB)) for the federal July reporting. OES is required to submit a copy of its ARRA Section 1512 report to MMB, along with a project level detail report, no later than the seventh business day after the end of each quarter. Once MMB has reviewed and approved the documents, OES submits the ARRA Section 1512 reports to FederalReporting.gov. The information submitted to FederalReporting.gov is then used to update Recovery.gov on all ARRA related activities across the country. This reporting is in addition to our required U.S. Department of Energy (USDOE) quarterly reports, which are due 30 days after the end of each quarter. In addition, USDOE requires monthly reporting as well as weekly phone updates. OES staff works in close cooperation to ensure that information provided in all the various reports, including this report, are consistent with each other. We recently began receiving Dashboards from USDOE, highlighting where we as a state stood with other states on the progress of spending for the Weatherization Assistance Program as well as the State Energy Program. Copies of the latest dashboards are attached as Attachment A.

III. FUNDING

Since February 2009, OES has applied for and received funding for the Weatherization Assistance Program (both annual formula and ARRA), the State Energy Program (both annual formula and ARRA), the Energy Efficiency and Conservation Block Grant Program, the Energy Efficiency Appliance Rebate Program, Energy Assurance Planning, and the Save Energy Now grant. All of these awards, with the exception of the Save Energy Now competitive grant, are formula grants from USDOE.

ARRA Funding

State Energy Program – \$54,172,000

Funds support public buildings retrofits, residential energy financing, renewable energy programs, energy education, training and workforce development, data collection, emerging technologies, and more.

- Submitted initial application: March 23, 2009.
- Submitted comprehensive application: May 12, 2009.
- Received initial NFAA: April 20, 2009 (authorized \$5,417,200 10% of award.)

- Received second NFAA: June 24, 2009 (authorized \$21,668,800 40% of award; changed Terms and Conditions.)
- Received third NFAA: September 19, 2009 (authorized \$27,086,000 remaining 50% of award; changed Terms and Conditions.)
- Received fourth NFAA: December 10, 2009 (revised National Environmental Policy Act (NEPA) Requirements provision and SEP Narrative Worksheets.)

	SEP ARRA funds	SEP ARRA jobs
Reporting Period	expended	created/retained
	(amounts are cumulative)	(FTEs are not additive over quarters)
04/20/2009 - 09/30/2009	\$113,507	4.30
10/01/2009 - 12/31/2009	\$1,162,979	36.58
01/01/2010 - 03/31/2010	\$3,642,907	50.85
04/01/2010 - 06/30/2010	\$8,001,066	74.73

Weatherization Assistance Program – \$131,937,411

Funds support the installation of energy conservation measures in eligible low-income homes through thirty-two local service providers. Under federal law, average expenditure per home cannot exceed \$6,500.

- Submitted initial application: March 20, 2009
- Held public hearing: April 27, 2009
- Submitted comprehensive application: May 12, 2009
- Received first NFAA: March 26, 2009 (authorized \$13,193,741 10% of award)
- Received second NFAA: April 10, 2009 (changed Terms and Conditions, corrected USDOE clerical errors)
- Received third NFAA: July 2, 2009 (authorized \$52,774,964 40% of award)
- Received fourth NFAA: September 19, 2009 (authorized \$65,968,706 remaining 50% of award, changed Terms & Conditions)
- Received fifth NFAA: January 25, 2010 (Monthly reporting requirement, revised Wage Determinations, Project Officer changed)

	WAP ARRA funds	WAP ARRA jobs
Reporting Period	expended	created/retained
	(amounts are cumulative)	(FTEs are not additive over quarters)
04/20/2009 - 09/30/2009	\$5,044,059	169.50
10/01/2009 - 12/31/2009	\$13,502,882	346.48
01/01/2010 – 03/31/2010	\$27,561,338	454.66
04/01/2010 - 06/30/2010	\$44,280,447	494.20

Energy Efficiency and Conservation Block Grant (EECBG) – \$10,644,100

Funds support three activities: mandatory EECBG sub-grants, energy efficiency improvement sub-grants, and public outreach/program administration.

- Submitted application: June 25, 2009
- Received NFAA: September 14, 2009 (authorized \$10,644,100 100% of award)

	EECBG ARRA funds	EECBG ARRA jobs
Reporting Period	expended	created/retained
	(amounts are cumulative)	(FTEs are not additive over quarters)
04/20/2009 - 09/30/2009	\$0	0
10/01/2009 - 12/31/2009	\$18,523	1.20
01/01/2010 - 03/31/2010	\$44,112	1.51
04/01/2010 - 06/30/2010	\$85,963	2.48

Save Energy Now – Competitive Grant Request for \$875,568

partial (\$349,985 or 40%) ARRA FUNDING

Funds will support a full package of industrial energy efficiency resources to assist MN business and industry to implement energy efficient technologies and practices in order to realize energy savings.

- Submitted application: October 16, 2008
- Notice application was not among those initially selected: February 25, 2009
- Notice application would be funded with ARRA funds: June 11, 2009
- Revised budget forms submitted: July 30, 2009
- Revised budget forms submitted: August 18, 2009
- Received NFAA: November 16, 2009 (authorized \$349,985 40% of award)

	SEN ARRA funds	SEN ARRA jobs
Reporting Period	expended	created/retained
	(amounts are cumulative)	(FTEs are not additive over quarters)
10/01/2009 - 12/31/2009	\$0	0
01/01/2010 - 03/31/2010	\$561	.02
04/01/2010 - 06/30/2010	\$4,819	0

Energy Assurance Planning – \$678,986

Funds will support development of greater capacity within OES and other agencies to 1) strengthen and expand State and local government energy assurance planning and resiliency efforts, 2) create jobs and 3) build in-house State and local government energy assurance expertise.

- Submitted application: July 30, 2009
- Received NFAA: August 17, 2009 (authorized \$678,986 100% of award)

Reporting Period	Energy Assurance ARRA funds expended (amounts are cumulative)	Energy Assurance ARRA jobs created/retained (FTEs are not additive over quarters)
04/20/2009 - 09/30/2009	\$0	0
10/01/2009 - 12/31/2009	\$0	0
01/01/2010 - 03/31/2010	\$121	0
04/01/2010 - 06/30/2010	\$1,454	0.04

State Energy Efficient Appliance Rebate Program

Funds will establish and/or supplement established Energy Star appliance rebate programs.

- Submitted initial application: August 14, 2009
- Comprehensive application due: October 15, 2009
- Received initial NFAA: August 25, 2009 (authorized \$500,900 10% of award
- Received second NFAA: December 11, 2009 (authorized \$4,508,100 balance of award; changed Terms and Conditions)

	Appliance Rebate ARRA	Appliance Rebate ARRA
Reporting Period	funds expended	jobs created/retained
	(amounts are cumulative)	(FTEs are not additive over quarters)
04/20/2009 - 09/30/2009	\$0	0
10/01/2009 - 12/31/2009	\$0	0
01/01/2010 - 03/31/2010	\$508,924	3.46
04/01/2010 - 06/30/2010	\$3,781,897	1.76

IV. BARRIERS TO IMPLEMENTATION

Davis Bacon Act (DBRA)

Prevailing wage requirements of the Davis-Bacon Act and Davis-Bacon Related Acts (DBRA) are applicable to construction contracts for work in excess of \$2,000 funded in whole or in part with ARRA funds. As noted in our September 2009 report, DBRA compliance presented significant barriers to early implementation of WAP and SEP residential programs. USDOE and U.S. Department of Labor (USDOL) have since provided determinations and guidance that largely address those barriers.

USDOL issued initial WAP-related wage determinations for Minnesota on September 3, 2009. Amendments to those wages were released on December 14, 2009 and went into

effect mid January 2010. While corrections to some determinations have been necessary, weatherization activities have moved forward quickly.

On November 19, 2009 USDOL issued an opinion that prevailing wage requirements under ARRA do not apply to financial assistance provided directly to individuals. In addition, USDOE issued guidance on this issue for SEP, EECBG and Appliance Rebate projects on December 30, 2009.

National Environmental Policy Act (NEPA)

NEPA requires USDOE to assess the potential environmental impact of activities financed in whole or in part with federal funds. Under 10CFR Part 1021, USDOE may determine that some broad categories of activities, by their nature, will likely not have an adverse environmental impact and do not require review (a categorical exclusion.) An activity that is not categorically excluded cannot proceed without further review by USDOE to determine whether an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is warranted. USDOE has cautioned the states that activities that require an EA or EIS could be significantly delayed.

In its initial approval of Minnesota's SEP plan, USDOE categorically excluded program administration, residential energy efficiency programs, utility coordination and training and workforce development activities. USDOE prohibited implementation of renewable energy programs, commercial/industrial programs, and public building retrofit programs pending submission of additional information it deemed necessary to make NEPA determinations.

Based on USDOE guidance and negotiations with USDOE NEPA compliance staff, OES requested and received categorical exclusions for the following additional activities:

- Commercial/industrial energy-efficiency grants and shared savings agreements
- Small-scale solar, wind and ground-source heat pump grants and rebates
- Biomass facility feasibility study grant
- Government building energy-efficiency grants

Categorical exclusions for renewable energy activities are limited to:

- Installation of small renewable energy sources located on or contiguous to existing buildings or existing facilities.
- Photovoltaics appropriately sized units on existing rooftops and parking shade structures; or 60kW systems or smaller installed on the ground within the boundaries of an existing facility;

- Solar thermal hot water --- appropriately sized units for residences or small commercial buildings;
- Wind turbines 35 kW or smaller;
- Ground-source heat pumps closed loop, 5.5 tons of capacity or smaller.

For the Energy Efficiency and Conservation Block Grant Program, USDOE followed a similar path for NEPA review by granting categorical exclusions for certain activities. The process was slightly different than the one used for the SEP program, but resulted in the same list of categorical exclusions. OES submitted its NEPA filing on January 25, 2010 which provides assurance that it will only award sub-grants for projects that fall within the categorical exclusions. Furthermore, OES is required to immediately contact USDOE if it identifies a project that may involve an "extraordinary circumstance." The result of this effort was that the Request For Proposal (RFP) issued by OES for the EECBG program was solely for activities that are categorically excluded from NEPA review. OES received notice from USDOE on April 7, 2010 that its January 25, 2010 filing was approved.

Activities of a type or scale not categorically excluded require USDOE review and approval. However, given the potential of review requests from more than 2,000 SEP and EECBG grantees nationwide, and the limited capacity of USDOE NEPA compliance staff, it may not be feasible to undertake any other activities not categorically excluded.

National Historic Preservation Act (NHPA)

Section 106 of the National Historic Preservation Act (36CFR 800) requires Federal agencies to take into account the effects of their undertakings on cultural resources that are listed on or eligible for the National Register of Historic Places. The Act allows the Federal agency to delegate responsibility for ensuring compliance with Section 106 to State officials, and also allows the Federal agency or its delegate to negotiate a programmatic agreement to streamline review of undertakings that are repeated multiple times and/or that have little potential to cause adverse effects to historic properties.

In the case of the ARRA-funded energy projects, USDOE elected to employ both delegation of responsibility for compliance and programmatic agreements as mechanisms for meeting the requirements of Section 106. In both instances, however, the authority for utilizing these alternate procedures was late in coming, delaying implementation of Section 106 review for Minnesota's ARRA-funded energy programs.

USDOE issued a letter delegating responsibility for compliance with Section 106 to State Energy Offices on August 28, 2009. Little guidance on negotiating a Programmatic Agreement (PA) was forthcoming until February 5, 2010, however, when USDOE finalized a prototype Programmatic Agreement that had been negotiated in consultation with the Advisory Council for Historic Preservation. OES received the prototype on February 12, 2010. With this document in place, OES has proceeded quickly to fulfill its Section 106 responsibilities:

- OES hired a qualified Historic Preservation Planner to oversee the Section 106 process in early January. The planner began work on a part time basis at the end of January, and began full time work in mid February.
- Immediately upon receipt of the prototype Programmatic Agreement from USDOE on February 12, 2010, OES's preservation planner met with compliance staff at the Minnesota State Historic Preservation Office(MnSHPO) to tailor the prototype PA to the specific requirements of Minnesota's historic preservation program. A revised version of the PA was sent to USDOE and the ACHP for review on March 4, 2010. Final revisions were completed on March 17, 2010. The programmatic was signed by MnSHPO and OES on March 25, 2010 and the final document was sent to USDOE for signature on March 26, 2010. The fully executed agreement was received by the OES on Tuesday, March 30, 2010.
- The PA determined that a number of program activities typically completed as part of WAP, SEP, and EECBG programs have no potential to adversely affect historic properties, and that they are therefore exempt from review under section 106. Activities not included on the list are still subject to review by the State Historic Preservation Office.
- While negotiations for the PA were under way, OES began to develop and implement systems for tracking projects to ensure that those requiring review were identified, that applicants submitted necessary documentation, that the projects received appropriate review, and that a record of decision for each project was retained in OES files. Mechanisms for record keeping include a webbased electronic form for use by WAP sub-grantees and a paper form/checklist that will be used to review SEP and EECBG projects.
- Staff also developed materials intended to provide background on the Section 106 process, to familiarize service providers and program managers with categories of exempt and non-exempt work, and to provide instructions for preparing documentation required for reviews. Staff met with WAP sub-grantees on March 18, 2010 to explain the review process, describe the intake and

monitoring procedures, and describe the types of work that are exempt from review.

 As these procedures were developed, OES's preservation planner began Section 106 reviews for SEP funded residential solar energy and ground source heat pump projects, and has reviewed project proposals submitted for the first round of EECBG funding.

ARRA Buy American Requirement

Recipients using federal grant funds for construction, alteration, maintenance or repair projects of public buildings or public works must comply with the Buy American provision of ARRA, which requires that all iron, steel and manufactured goods used in such projects must be produced in the United States. OES requires Buy American compliance under grant agreements with public sector recipients of SEP or EECBG funding.

V. PROGRAM UPDATES

Article 2 – Energy Efficiency

Weatherization Assistance Program (WAP)

OES continues to work with 32 Weatherization Assistance Program service providers to increase the number of multi-family and rental units weatherized using ARRA funds. OES contracted with a New York company for access to software that will provide 60 electronic multi-family audits. All service providers have equal opportunity to use these audits. Two webinars were held to train auditors on the use of the multi-family audit, known as EA-Quip. Multi-family audit trainings were held in mid-December 2009 and in mid-May 2010. Webinars have also been offered at the federal level for all Weatherization personnel.

As directed by State legislation, OES raised the income eligibility for WAP to 200% of Federal Poverty Income Guidelines (FPIG). eHEAT, the software shared with the Low Income Energy Assistance Program that is used to identify eligibility, has been adjusted to recognize these households. All eligible households are prioritized using USDOE guidelines, including: disability, elderly, households with children under the age of 19, high energy use, and high energy burden.

With grant guidance effective March 2, 2010, USDOE and United States Housing and Urban Development (HUD) released guidelines for a Memorandum of Understanding

between the two federal agencies. Although this guidance was originally intended to recognize existing HUD household eligibility for Weatherization Assistance Program purposes, the guidance instead provided two lists of buildings where at least 66% of residents were purported to meet WAP eligibility. Service Providers must still canvas all residents and confirm they have applied for the WAP program through the joint LIHEAP/WAP application or ask them to apply. All other eligibility priorities also apply. The Minnesota Housing and Finance Agency (MHFA) and OES worked together to promote rental multi-family weatherization. MHFA worked with owners of multi-family properties to provide data for the properties in Minnesota on the HUD list. This list reduces the time and effort needed to determine eligibility for weatherization of these properties.

On Thursday, January 13, 2010, the Minnesota Weatherization Assistance Program was recognized by USDOE for outstanding performance in the number of low-income homes it has weatherized using ARRA funds. Gil Sperling, currently a senior advisor to DOE Assistant Secretary Cathy Zoi, and former manager of the Weatherization and Intergovernmental Program in the Office of Energy Efficiency and Renewable Energy (EERE), presented the award. Sperling recognized Minnesota as a national leader in weatherization and a role model for other states. Weatherization workers, managers and executive directors from many community action agencies from across the state attended the award ceremony.

On April 22, 2010, any home built before 1978 where a particular area of lead paint may be disturbed must have onsite a person certified by EPA as a Lead Renovator. This new designation requires a day long training and successful passing of a test. In addition, any organization engaging in such work must be registered with EPA as a Lead Firm. Firm status requires no testing, but a fee is required. Anyone or any firm engaging in lead work after April 22, 2010 will face steep fines if found not to comply. All state WAP monitors will be Lead Renovators as of April 24, 2010. Service Providers have been informed of these requirements and of the penalties for non-compliance. There is currently a three week backlog to receive Firm status. DOE is working with EPA to allow any provider or weatherization contractor who has submitted an application for Firm status to continue working after April 22, 2010. All Minnesota state monitoring staff completed the Lead Renovators training and certification. All subgrantees have successfully met this requirement.

In May, 2010, Minnesota completed 30% of the total units required under the ARRA grant. At that time, DOE released the final 50% of the ARRA grant funding. This milestone triggered the release of \$9.75 million of ARRA funds reserved for high performing service providers. Nine service providers qualified to receive a portion of

these funds based on the amount of money expended and the number of units completed. Determination of the amount of funds each of the nine providers received was based on the ability of the service provider to expend these funds in a timely manner.

Minnesota Weatherization Assistance Program received a letter of recognition from acting director Tobias Russell on July 28, 2010. Mr. Russell recognized Minnesota for reaching our pro-rata share of the 30,000 units completed goal. Nationally, the program met the 30,000 units completed goal in June of 2010.

Minnesota continues to meet or exceed it monthly goal for production. If this trend continues, Minnesota is poised to complete the ARRA grant mid-2011, fulfilling the expectations of spending the ARRA funding and creating jobs.

Residential Energy Efficiency Programs

Energy Saver Rebates

Chapter 138 directs the Office of Energy Security to coordinate with the Minnesota Housing Finance Agency to use stimulus funds in conjunction with existing MHFA financing programs. It also allows other entities to develop additional programs that may include loans, grants and rebates.

OES and MHFA developed a residential rebate program for energy efficiency improvements in conjunction with MHFA's existing Fix-up Fund home improvement loan. Homeowners with a household income up to \$96,600 can receive up to a \$10,000 Energy Saver Rebate for 35 percent of the cost of eligible improvements financed with a Fix-up Fund loan.

Eligible improvements include the installation of high-efficiency furnaces, boilers, central air conditioners, water heaters, lighting fixtures, exterior doors and windows, attic air sealing and wall and attic insulation. The program is structured so that most rebate-eligible improvements will also qualify for the Federal Tax Credit for energy efficiency improvements.

The Energy Saver Rebate program was launched on December 7, 2009. Through August 23, 2010, the program has served 1,256 homes, providing rebates totaling \$4.2 million in conjunction with more than \$14 million in home improvement loans. The average rebate is approximately \$3,340; the average loan amount is \$11,500.

Improvement Type	Homes Improved	Items Purchased	Value of Eligible Improvements
Heating Systems	535	539	\$2,669,069
Central A/C	307	309	\$1,069,461
Light Fixtures	7	23	\$7,384
Window Replacement	734	7,821	\$7,092,180
Exterior Doors	250	439	\$807,660
Attic Air Sealing	88	88	\$41,629
Insulation-Attic	81	81	\$140,492
Insulation-Wall	53	53	\$138,846
Water heater	69	69	\$131,358
		TOTAL	\$12,098,079

Summary of Energy Saver Rebate Improvements through August 23, 2010:

All available rebate funds (approximately \$5.0 million) were committed by March 30, 2010. Lenders continue to receive inquires about rebate availability from prospective borrowers.

Project ReEnergize

OES worked with the Builders Association of Minnesota (BAM) to provide rebates to homeowners who make energy efficiency improvements, including air sealing, insulation, and window replacements in their homes. In addition, the program was designed to boost job creation by encouraging additional remodeling and home improvement work. More than 400 rebate recipients had contractors make unrelated home improvements.

Training programs for contractors were developed and held throughout the state, providing training on program eligibility, rebate process along with general energy education. The separate performance testing training provided for contractors and insulation sub-contractors focused on best practices for air sealing attics, recording energy savings, and improving occupant safety. Fourteen (14), 2-hour contractor training programs and twelve (12), 8-hour performance testing training programs were held throughout the State providing the opportunity for 996 licensed contractors and insulation/air sealing experts to expand their scope of services to market energy efficiency projects.

Project ReEnergize was available to homeowners beginning October 1, 2009. As of mid August 2010, all eligible rebates have been paid. A total of \$2,622,400 in rebates have been issued for 1,186 homes. For every rebate dollar given to homeowners for energy efficient upgrades, an additional \$6.90 was leveraged for additional window installations, high efficiency furnaces and Energy Star appliances, energy efficient doors, and other non-rebated energy efficiency improvements that included upgrades such as roofing and siding replacements, and other home maintenance tasks. The \$3 million budgeted for this program added \$18 million into the residential home improvement sector in Minnesota.

Rebated Energy Efficiency Measures				
	Number of Homes	Number of Retrofit/Upgrade Measures	Rebate amount	
Attic air sealing	203	203	\$162,400	
Attic insulation	187	187	\$149,600	
Wall insulation	44	44	\$35,200	
Windows in combination with air sealing	160	1,056	\$311,450	
Windows without air sealing	985	7,756	\$1,939,000	
Water heater replacements	33	33	\$24,750	
Additional windows installed (exceeded rebate amounts or otherwise ineligible for rebate)	1150	1,511	_	
TOTAL EE Measures	1186	15,734	\$2,622,400	
Remodeling and home maintenance work ⁶	439	-	_	

ummary of Project ReEnergize Improvements through August 23, 2010:
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In addition to homeowner rebates, Project ReEnergize included the creation of an interactive incentive finder website to provide a comprehensive single source for homeowners and contractors to identify assistance available for energy efficiency improvements. Minnesotans can use this tool to get a detailed list of energy efficiency incentives available in their geographic location. The website remains available to the public at <u>www.homeincentivefinder.org</u>.

Innovative Energy Residential Efficiency Program/ Small City Energy Efficiency Grant

Duluth Energy Efficiency Program

Chapter 138 appropriates \$1.5 million for a grant to a city of the first class located in the service area of Minnesota Power for an innovative residential energy efficiency program.

OES granted \$30,000 to the City of Duluth to develop an implementation plan for its proposed Duluth Energy Efficiency Program (DEEP.) OES and Duluth recently agreed on a scope of work for this project to provide diagnostic audits, technical support, contractor training and rebates for residential building improvements. A grant agreement will be executed by September 30, 2010.

Green Park Rapids

Chapter 138 appropriates \$100,000 for a grant for an innovative residential energy efficiency program in a small rural city with a population under 4,000 located in the service area of Minnesota Power that is currently working with that utility, the county housing and redevelopment authority, and other state and local housing organizations to enhance energy efficiency for residents and businesses. The City of Park Rapids is the only entity that qualifies for this funding.

OES and Park Rapids have executed a \$50,000 grant agreement for a residential program providing audits, technical support/education and rebates as part of the ongoing Green Park Rapids initiative. For the remaining funds, the city and its project partners have proposed a small commercial energy efficiency program. A grant agreement for that program should be executed by September 30, 2010.

Outreach Activities to Increase Residential Participation in Energy Efficiency Activities

Article 2, Section 5 requires OES to award grants for residential energy conservation outreach services to maximize new households participating in stimulus-funded programs. OES selected three applicants for grant awards – Common Ground, Neighborhood Energy Connection and the Northwest Community Action agency.

Common Ground of Duluth received a contract award of \$128,853 to create awareness about weatherization, home energy efficiency and conservation programs that are available to lower income households in Duluth and nine northeastern counties. Initial workshops were scheduled to begin August 17, 2010. Presentation materials have been developed, a toll free phone number established and the Common Ground website revamped to include new program materials as well as a database management tool. A subcontract with Community Action Duluth was finalized to provide the door-to-door canvassers utilizing low income, ethnically diverse crews. Common Grounds identified partnerships with schools, tribes, civic and faith based organizations and has registered for regional fairs and events as a mechanism to reach out. They also met with utilities and other organizations to identify all appropriate programs that serve these residents. Since the execution of the outreach grant agreement in April 2010, the Saint Paul *Neighborhood Energy Connection* (NEC) has performed a number of activities to reach a wide audience in the metro area. NEC hired and trained two Hmong speakers and one Spanish speaker to conduct outreach work in communities where English is not the first language. All three were trained in home energy topics oriented to energy efficiency and ARRA-funded programs.

NEC has been in communication with 14 Hmong-related housing and community organizations to promote energy efficiency and conservation programs to their constituents. NEC provided interpretation for Hmong speakers at the St. Paul City-wide Home Energy Workshop. Additionally, NEC has tabled at a number of events in the Hmong community, appeared on Hmong Minnesota Radio, and has provided translation for Hmong speaking residents participating in Home Energy Squad visits.

NEC has translated flyers and marketing materials into Spanish for outreach in several Minneapolis neighborhoods. NEC has also met with the Corcoran Neighborhood Organization to discuss outreach to Latino residents in the Corcoran neighborhood.

NEC has door knocked on more than 700 doors in St. Paul neighborhoods, distributed hundreds of fliers throughout Minneapolis and St. Paul (in English, Hmong, and Spanish), and has attended numerous events around the Twin Cities providing residents with information regarding energy efficiency programs and materials that will help households to take simple energy saving actions in their homes.

More events and outreach are scheduled to continue into the fall. NEC is also working with Community Action Partnerships of Ramsey and Washington Counties to discuss federally funded weatherization programs for Hmong communities outside of St. Paul.

Northwest Community Action, Inc. and its three grant partners (Inter-County Community Council, Mahube Community Council and Tri-Valley Opportunity Council) continue work on the energy outreach grant's three goals -- providing energy education, distributing conservation information and producing case studies.

Mahube Community Council has developed an energy savings brochure and tip sheet and has been distributing it throughout their service area. Both Inter-County and Tri-Valley Service Providers are in the process of developing their brochures and fact sheets and will be distributing them in their service areas to eligible households during the next three months. This will target businesses, utilities, banks, lenders and energy contractors. Northwest Community Action staff has designed information for all of their service area utilities which promotes the energy outreach program. Both Northwest Community Action and Inter-County have attended a meeting sponsored by the Northwest Clean Energy Resource Team (CERTS) and Clear Water Life Center. Staff will be writing up this project as one of the case studies documenting a series of successful local energy projects. Staff will also be attending other meetings in the service areas and using these as additional case studies related to the outreach project.

Education workshops are currently being scheduled by all four of the service provider partners and a follow up evaluation tool is being designed and tested which will be used with referred client households. This will also be an evaluation and feedback tool regarding low income clients accessing and understanding weatherization and other energy conservation services.

Public Buildings Energy Efficiency

Energy Efficiency and Conservation Block Grants to Local Governments/ Local Government and School District Renovations

Federal law requires that 60% of Energy Efficiency and Conservation Block Grant (EECBG) funds awarded to the state must be granted to eligible local governments. Chapter 138 appropriates funds for this purpose under Article 2, Section 6. The remaining EECBG funds and \$8.75 million in SEP funds are appropriated for local government and school district renovations under Section 7.

Mandatory EECBG Grants

An RFP for the mandatory grants was issued on December 14, 2009 and closed March 3. 127 applications were evaluated and 92 applicants were selected for \$5,644,388 in funding; 85 for energy efficiency projects in facilities owned by the applicant and 7 for activities such as energy efficiency planning, revolving loan funds and renewable energy studies. Remaining mandatory grant funds were offered under an RFP for Local Government and School District Renovations; information on awards of these funds is included in data reported under that program.

To date, 70 grants have been executed; 9 grant agreements have been sent to the grantee for signature; 5 draft agreements have been sent to grantees for review; and 1 grantee has declined funding. The remaining 7 are on hold due to compliance issues regarding historic preservation and baseline energy use data requirements. Annual energy savings is estimated to be 78,000 MMBtus and 560 tons of greenhouse gas reductions annually.

Local Government and School District Renovations (Facilities Cost-share Grants) An RFP for the Facility Cost-share Grant Program was issued on April 19, 2010 with proposals due on May 24, 2010. 114 applications were evaluated and 83 successful applicants were notified on June 7, 2010. Two applicants have declined funding

The total dollar amount to be awarded under this grant program is \$5,219,697. To date, 12 grant has been executed; 8 grant agreements have been sent to the grantees for signature; 14 draft agreements have been sent to grantees for review; the remaining are awaiting completion of documentation and review required for waste management plans, historic preservation and NEPA compliance.

EECBG Coordination, Outreach and Administration

Communication between DOE and OES continues on a bi-weekly basis. DOE set a target of having 20% of the EECBG funds spent by September 30, 2010. OES is working diligently to assist in this effort, but still faces enormous hurdles with processing the number of invoices that are involved without compromising accountability.

State Government Building Renovations

Article 2, Section 8 appropriates SEP funds to support work in state-owned building under the Public Buildings Enhanced Energy Efficiency Program (PBEEEP.) OES and the Department of Administration have executed an inter-agency agreement to provide funding for site selection (screening) and engineering analyses (investigation.)

Work continues on the screening, investigation and enrolling new buildings in the program. As of July 31, 2010 there are 32 sites with a total of 571 buildings comprising 17.7 million square feet enrolled in the program.

Project Number	Facility	Agency	Buildings	Square feet	Status
10000	St Cloud	Corrections	50	575,876	Complete
10100	Southwestern MN State	MnSCU	27	1,140,000	Investigation
10200	Rochester CTC	MnSCU	32	827,878	Investigation
10300	Several	DNR	9	226,762	6 complete 3 in Investigation
11000	Minneapolis	MVH	6	231,850	Investigation
10400	Oak Park Heights	Corrections	12	398,342	Investigation in 2011
10500	Red Wing	Corrections	32	305,579	Investigation
10600	Rush City	Corrections	6	415,953	Investigation
10700	Century College	MnSCU	25	722,000	Investigation
10800	Minnesota History Center	PMD	1	431,235	Investigation
10900	Faribault	Mn Academies	17	340,013	Investigation
11100	Shakopee	Corrections	14	242,068	Investigation
11200	Willow River	Corrections	13	57,806	Complete
11300	Faribault	Corrections	38	1,147,454	Investigation
11400	Moose Lake	Corrections	26	538,858	Screening
11500	MSU Moorhead	MnSCU	33	1,704,438	Investigation
11600	St Cloud State U	MnSCU	63	3,130,898	Screening
11700	Lino Lakes	Corrections	33	543,428	Investigation
11800	Elmer Andersen Office Bldg	PMD	1	395,752	Investigation
11900	BCA Maryland Ave	PMD	1	235,414	Investigation
12000	Stassen Building	PMD	1	454,392	Screening
12100	State Office Building	PMD	1	272,085	Investigation
12200	M State Detroit Lakes	MnSCU	7	191,824	Complete
12300	M State Fergus Falls	MnSCU	12	165,862	Complete
12400	M State Moorhead	MnSCU	12	190,328	Complete
12500	M State Wadena	MnSCU	10	136,836	Screening
12600	Riverland Albert Lea	MnSCU	8	142,000	Screening
12700	Riverland Austin	MnSCU	19	168,000	Screening
12800	Riverland Owatonna	MnSCU	1	24,500	Screening
12900	Normandale CC	MnSCU	18	476,110	Screening
13000	State Parking Garages	PMD	6	1,300,000	Screening
13100	Anoka Ramsey CC	MnSCU	26	380,446	Screening

Summary of PBEEEP Screening & Investigation Activities through July 31, 2010:

Article 3 – Renewable Energy

Renewable Electric Generation and Geothermal Facility Rebates

Residential Ground-Source Heat Pump and Small Wind Rebates

OES launched a Residential Ground-Source Heat Pump (GSHP) Rebate program on February 16, 2010, allocating \$1.0 million for 35% rebates up to \$10,000 for GSHP installations at existing residences. Due to the very strong response to this program, OES has allocated an addition \$500,000 for these rebates; even so, more than 25% of rebate applicants have been notified that funding is not available for their application.

To date, OES has confirmed rebate reservations for 160 applicants totaling \$1.3 million; 53 of these rebates are contingent on satisfactory completion of SHPO review. An additional 32 application are under review.

OES has allocated \$500,000 for small wind rebates. Rebate demand has been slow; to date, 17 applications totaling \$170,000 have been submitted. If program response remains limited, OES may reallocate funds to program areas where demand has exceeded available funding.

Solar Rebate Program/Solar Cities Program

Solar Electric and Solar Thermal Rebate Programs

Funds allocated for the Solar Electric Rebate Program are fully reserved. Approximately 250 installations will result from this funding with a combined nameplate capacity of approximately 1.6 Mw, providing more than a 70% increase in installed capacity in the state.

Solar Electric Rebate Program as of August 23, 2010		
Number of applications received 329		
Number approved 247		
Dollar amount reserved	\$2,470,343	
Dollar amount pending approval	\$29,657	

Demand for solar thermal rebates has been limited to date. In an effort to address a program barrier, OES contracted with the Minnesota Renewable Energy Society (MRES) assist potential program participants in conducting required solar hot water site assessments.

Solar Hot Water and Solar Air Heat Rebate Programs as of August 23, 2010		
Number of applications received 39		
Number approved	31	
Dollar amount approved \$92,612		

Solar Cities

OES has executed a grant agreement with the City of Saint Paul for \$1.5 million to complete solar installations along the central corridor. St. Paul and its partners will provide \$500,000 of matching funds. Installations will demonstrate a variety of technologies including solar electric, solar thermal, solar electric vehicle charging stations, and energy storage. The city is currently completing site assessments and conducting engineering studies for potential installation sites.

OES has also contracted with the City of Minneapolis for \$1.35 million to complete solar thermal and solar electric installations along the central corridor. Minneapolis sites include two fires stations, a maintenance facility and a major parking ramp. The city is working with Hennepin County to select county owned sites, including the Central Library. Requests for bids are being developed for the selected sites.

School District and Local Government Renewable Energy Grant Programs

An RFP for School District and Local Government Renewable Energy Grants was issued on June 21, 2010. Proposals were due by August 4, 2010. OES received 14 eligible and complete applications for \$755,550 and is currently working with the applicants to complete compliance documentation and draft grant agreements. OES has requested additional technical information from 2 additional applicants.

Emerging Renewable Energy Industries Grant Program

Chapter 138, Article 3, Section 6, establishes the Emerging Renewable Energy Industrial Grant to provide funding for to enable an applicant to enter into the manufacture of an eligible technology, to improve or expand an existing Minnesota manufacturing activity, or to modify a manufacturing facility or activity in Minnesota to enable greater utilization of Minnesota suppliers. By providing funding for this purpose, the State intends to promote improved economic performance of both the direct recipient and its Minnesota suppliers and customers.

OES has contracted with 5 applicants for partial funding of their proposed projects, and is working with a sixth to complete the grant process.

Manufacturer	Location	Renewable Industry
Veeco Instruments, Inc.	White Bear Township	Solar PV
Silent Power, Inc.	Baxter	Solar PV / Storage
Precision Coatings Inc.	St. Paul	Wind
Rural Renewable Energy Alliance	Pine River	Solar Thermal
tenKsolar, Inc.	Bloomington	Solar PV

Article 4 – Commercial and Industrial Sector Energy Projects

Grants to Commercial and Industrial Facilities

Trillion Btu Program - St. Paul Port Authority

OES has executed a grant agreement with the Saint Paul Port Authority (SPPA) to provide \$5 million for the Trillion Btu Program, a revolving loan fund for energy efficiency improvements in commercial and industrial buildings. SPPA will leverage ARRA funding with additional funding through Xcel Energy's Conservation Improvement Programs and with support from local economic development agencies (EDA) and municipalities in Xcel Energy's electric and gas service territories to provide technical assistance and financing to prospective businesses.

SPPA administers the program in partnership with the Xcel, the Center for Energy and Environment, the Minnesota Technical Assistance Program (MNTAP), which will provide technical expertise in facility benchmarking, and energy analysis, and Enterprise Minnesota, which will coordinate development of a Lean Manufacturing 2.0 pilot program.

While initial demand for loans has been slower than anticipate, three loan agreements have been executed, totaling \$1.88 million in energy-efficiency improvements. These projects are estimated to yield 10,100 MMBtus in annual energy savings. An additional five projects have been approved by SPPA, and loan agreements totaling \$2.3 million are in development. These five projects are anticipated to provide annual energy savings of 18.600 MMBtu.

Energy Programs in Commercial and Industrial Buildings

On December 24, 2009, an RFP was issued for grants to owners of commercial and industrial facilities, nonprofit organizations and economic development authorities for energy efficiency improvements in commercial, industrial and nonprofit facilities. Proposals were accepted through February 12, 2010, for direct energy saving projects in eligible facilities and for revolving loan programs to finance energy-efficiency improvements in eligible facilities.

OES received 150 proposals. Eligible and complete applications were evaluated and scored on estimated energy savings, labor hours and GHG emission reductions per grant dollar requested. 44 proposals totaling \$6.21 million were selected for funding: 41 direct projects (\$5.14 million) and 3 revolving loan programs (\$1.07 million.)

To date, 33 grant agreements have been executed, 1 agreement has been sent for grantee signature and 4 draft agreements have been sent for grantee review. The 6 remaining agreements are in negotiation or awaiting federal determinations of prevailing wage compliance issues.

Chisago County Biomass Energy Facility Study

A grant agreement was fully executed on April 1, 2010 between OES and Chisago County HRA-EDA for a 2-phase assessment of the development of a biomass energy facility. In Phase 1 the county is collecting and analyzing information to determine requirements, costs, and feasibility of a biomass fuel pellet facility including feedstock, facility requirements, markets, and financial requirements to be met to ensure a sustainable facility. Phase 1 will be completed by September 30, 2010. If Phase 1 determines that a facility is feasible, Phase 2 will proceed, focusing on development of a plant conceptual plan, process refinement, construction cost components, and operational costs and revenues. If Phase 2 work proceeds, it is scheduled for completion by May 31, 2011.

Article 5 – Miscellaneous

Training and Workforce Development

OES has worked closely with other state agencies, industry, and training organizations to increase workforce development opportunities through analysis of energy-related employment trends and projections; development of tools and resources for job-seekers; assessment of existing training and certification capacity; funding of additional training and certification capacity; and financial assistance to offset training costs for low-income individuals.

Network Development; Assesment and Planning

OES has partnered with the Department of Employment and Economic Development, MN State Colleges and Universities, the Office of Higher Education, the Department of Education, the Governor's Workforce Development Council, industry representatives and other stakeholders to assess current and projected workforce demand, existing training resources and gaps, and to develop a coordinated statewide plan for energy sector training.

Funding of additional training and certification capacity

OES has awarded a grant to Fond du Lac Tribal and Community College to offer the Building Performance Institute (BPI) Train the Trainer program and certification to up to 30 instructors from 10 Minnesota training providers. Instructors will then be able to offer training preparatory to nationally recognized residential auditor and contractor certifications.

OES also offers rebates to assist existing training providers secure national accreditation or credentialing for training programs and instructors.

In addition, a competitive solicitation for the delivery of additional training opportunities will be released in October 2010.

Low-income training

OES has awarded grants to three weatherization assistance providers, each teamed with a training provider and a job placement service, to provide high quality weatherization training at no cost to more than 350 low-income individuals.

Accountability & Transparency Reporting

(1) The specific projects funded, including the building owner and project manager, and, for nonresidential projects only, the project location:

• Refer to Attachment C.

(2) For weatherization projects:

- The number of units weatherized, including number of rental units weatherized: A total of 6,519 units were weatherized using ARRA funds through the quarter ending June 30, 2010, including 959 rental units. Refer to Attachment D for additional detail regarding the number of completions and demographic information for those weatherized units. Including the month of July 2010, a total of 7,201 units were weatherized.
- Energy usage information: Please see discussion under (4), Energy Savings
- Income data: An updated analysis of the household income distribution for dwellings weatherized using ARRA funds is provided in Attachment E. This analysis covers the households weatherized through June 2010. There is very little difference in the distribution of household incomes from the initial analysis provided in the January 2010 legislative report.
- Type, cost and funding source of the weatherization measure installed:

MeasureType	Cumulative Costs	Number of Dwellings	Average Cost Per Dwelling
Electric Baseloads	\$396,905	2988	\$133
Building Insulation	\$11,323,161	5711	\$1,983
Doors and Windows	\$557,530	762	\$732
General Heat Waste and Air Infiltration (Air Sealing)	\$3,015,649	5506	\$548
HVAC Systems	\$6,453,500	3663	\$1,762
Health and Safety	\$5,505,338	6881	\$800
General Repairs	\$556,690	1559	\$357

Weatherization Measures Installed through June 2010

(3) The number of jobs retained or created by each project

OES has been instructed to report jobs as having been "created/retained/not lost". Each quarter's FTEs are calculated separately and, in accordance with OMB/MMB instructions, are not additive over the quarters.

The jobs reported for this September report cover the quarter from April 2010 through June 2010, to remain consistent with the Federal 1512 reports submitted to USDOE on a quarterly basis. The next quarterly report due to USDOE will cover the time period from July 2010 through September 2010.

	Jul-Sept 09	Oct-Dec 09	Jan-Mar 10	Apr-Jun 10
WAP	169.5	346.48	454.66	495.08
SEP	4.3	36.58	50.85	74.73
EECBG	0	1.2	1.51	2.48
Appliance Rebate	0	0	3.46	1.76
Energy Assurance	0	0	0	0.04
Save Energy Now	-	-	0.02	0
Total	173.8	384.26	513.50	574.09

Jobs created or retained or retained by each program:

Including data on hiring from communities experiencing disproportionately high rates of unemployment, including, but not limited to, low income, rural, tribal communities, and communities of color:

Information on Weatherization Assistance Program hiring from communities of color, women, disabled, and veterans is provided in **Attachment F.** Information from the service providers includes data from their own crews as well as from

subcontractors. Not all agencies provided all contractor data so the percentages are based only on service providers that submitted complete data. That said, the outcomes still compare favorably with the hiring goals that are provided by the Minnesota Department of Human Rights.

No data was collected for BAM, MHFA, or OES rebate programs as contractors are selected by individual homeowners.

Attachment G provides hiring information from SEP and EECBG grants. An adaptation of the Monthly Utilization Report from the Minnesota Department of Human Rights was used.

(4) The total calculated and actual energy savings for each project:

A. Weatherization Assistance Program:

Oakridge National Laboratory develops a formula for USDOE so that energy savings may be calculated by states. The formula, set forth in our grant contract with USDOE when the average amount per household was approximately \$3000, is appropriate for this quarter because agencies are spending, on average, \$3000-3500 per household. Using this formula, savings per household for the ARRA grant are determined to be 30.4 MMBtu per household.

Based on the number of ARRA-funded weatherization completions through the end of June:

6,519 dwellings X 30.4 million Btu/dwelling = 198,178 million Btu saved

1 Therm = 0.1 million Btu Savings in Therms is 1,981,780, which is \$1,981,780 at \$1.00 per Therm Average annual savings per weatherized household is estimated to be \$304.

Actual energy savings can be calculated only after a sufficient amount of time (at least one year) has passed so that energy use can be compared for time periods before and after weatherization measures have been implemented, and so that yearly variation in weather conditions can be taken into account.

Improvement Type	Annual Calculated MMBtu Saved	
Insulation & air sealing	5,082	
Window Replacement	25,190	
Water heater Replacement	124	
Total	30,396	

B. Project ReEnergize – Builders Association of Minnesota

C. Energy Savers - MHFA

This program started in early December 2009 and committed to serving greater than 1,100 homes. Through August 2010 the program has served 1350 homes and has provided nearly \$5 million in rebates. Based on rebates processed through August 2010 the energy saver program is currently anticipated to save in excess of 36,000 MMBtus of energy consumption annually. This equates to about \$395,000 annual energy savings or about \$290 annual energy savings per home.

D. St. Paul Port Authority

The St. Paul Port Authority has projected 10.1 billion BTu's in annual energy savings for its 3 Revolving Loan Fund projects.

E. Commercial, Industrial, and Non-Profit Energy-Efficiency Grants Calculated annual energy savings = 463,000 MMBtu

F. EECBG/School District and Public Buildings Renovations

Calculated annual energy savings = 147,000 MMBtu

(5) The remaining balances in each stimulus account (as of June 30, 2010):

	Grant Award	Expenditures to date	Balance
WAP	\$131,937,411	\$44,280,447	\$87,656,964
SEP	\$54,172,000	\$8,001,066	\$46,170,934
EECBG	\$10,644,100	\$85,963	\$10,558,137
Appliance Rebate	\$5,009,000	\$3,781,897	\$1,227,103
Save Energy Now	\$349,985	\$4,819	\$349,424
Energy Assurance Planning	\$678,986	\$1,454	\$677,532
TOTAL	\$202,791,482	\$56,155,646	\$146,635,836

(6) The non-stimulus money leveraged by stimulus money for each project:

Weatherization Assistance Program

- \$ 1,831,837 in CIP dollars has been leveraged to date.
- \$ 1,771,261 in other federal funds (Low Income Heating Assistance Program (LIHEAP), Community Development Block Grant (CDBG) have been leveraged to date.

Project ReEnergize – Builders Association of Minnesota

- Total project cost = \$17.80 million
- Total rebate amount = \$2.62 million
- Leveraged funds = \$15.18 million

Energy Savers - MHFA

- Total Loan amount = \$14.03 million
- Total rebate amount = \$4.19 million
- Leveraged funds = \$9.84 million

Commercial/Industrial/Nonprofit Energy-Efficiency Grants

(Based on estimated costs of funded improvements)

- Total project cost = \$18.37 million
- Total grant amount = \$5.10 million
- Leveraged funds = \$13.27 million

Trillion Btu Program - St. Paul Port Authority

- Total project cost = \$1.583 million
- Total grant amount = \$0.441 million
- Leveraged funds = \$1.141 million

Solar, Wind & Ground-source Heat Pump Rebates

- Total project cost = \$13.27 million
- Total rebate amount = \$3.98 million
- Leveraged funds = \$9.19 million

(7) The training courses provided, including the location and provider of courses offered, the funding source for each training course, and the total number of trainees:

Refer to **Attachment H, Training Courses**, for more detailed information about training courses to date. There were 1,275 trainees (including service provider staff and contractors) in the Weatherization Assistance Program through early August,

which included training at the State Energy Conference. There were 163 trainees who worked in the Energy Saver Rebate program.

(8) Compliance with state prevailing wage, veterans, and disadvantaged business enterprise requirements:

State Prevailing Wage

Article 3, Section 8 requires, to the extent practicable, payment at the prevailing wage rates as defined in Minnesota Statutes, section 177.42 for solar electric installations. The following activities are affected by this requirement:

- Solar Rebate Program
- Solar Cities Program
- School District and Local Government Renewable Energy Grant Program

OES and the Minnesota Dept of Labor and Industry (DLI) co-hosted a webinar on prevailing wage compliance and reporting for solar installation businesses on April 7, 2010. OES offers on-going assistance to solar electric contractors as needed to comply with prevailing wage requirements.

At present, DLI is developing residential wage determinations for labor classes engaged in solar electric work. When determinations are completed, OES will require compliance with state prevailing wage rates for any work contracted on or after the date of DLI issues its determinations. For current residential solar electric work, OES requires contractors to pay at federal prevailing wage rates.

Installation work has not begun under the Solar Cites or School District and Local Government programs.

Veterans and Disadvantaged Business

Compliance summaries for veterans and disadvantaged businesses from the Weatherization Assistance Program service providers were detailed in the January 15, 2010 report. There has been no change in agencies' efforts to market employment opportunities to veterans and disadvantaged businesses.

Builders Association of Minnesota/MHFA

No data was received from MHFA or BAM because those projects consist of homeowner rebates.

Commercial/Industrial/Local Governments

Contracts for these programs define requirements for compliance with veterans and disadvantaged business requirements. As monitoring proceeds with these projects, compliance will be verified.

Competitive Energy Activities

OES Assistance to Clients in Competitive Energy Funding Opportunities, Training and Other Inquiries from April through July 2010

OES staff assisted 101 individual clients in understanding and identifying funding opportunities, financing and incentives for energy projects in the American Recover and Reinvestment Act (ARRA) and with development and delivery of energy related educational and training opportunities during the April 2010 through July 2010 period. This report reflects data from OES client logs that include records of clients who required more assistance than a simple referral could satisfy. The following chart shows that portion of clients who contacted OES during this time period for financial, grant or training assistance by sector:



OES's training and educational outreach was the largest category of client assistance provided during this time frame, comprising over half (55%) of the client contacts. Clients seeking grants and incentives for renewable energy and efficiency projects were the next largest segment of inquiries during this period, comprising just over 19% of the total clients who received in-depth assistance. Many of the inquires for information on funding opportunities came from engineering and/or architectural firms that were seeking funding for their clients to implement energy efficiency projects as a way to reduce their operating costs. The following chart provides a breakdown of clients who contacted OES for financial, grant or training program assistance by primary area of interest.



In addition to providing individual assistance, OES coordinated and participated in eight group client meetings/tours. The following list identifies the group, subject matter and number of people involved in these meetings:

- 1. Department of Employment and Economic Development representatives: Green entrepreneurial (4)
- Minnesota Renewable Energy Society reps: Midwest Solar Training Network (2)
- 3. Department of Employment and Economic Development representatives: Greens Grants Database (6)
- 4. Department of Labor Green Grantees: Green Grants Coordination (10)
- 5. Advisory Team: Minnesota Building Performance Network (6)
- Communities for Responsible Energy Environmental Demonstrations (CREED), Minnesota Department of Education, Hamline University: K-12 Energy Strategy (9)
- 7. Central Lakes College, Hunt Utilities Group, WERC, Staples Energy Center Tours (11)
- 8. OES representatives: Developing a Weatherization Training Procedure (3)

In a targeted effort to assist Minnesota's rural businesses and farmers with obtaining US Department of Agriculture Rural Energy for America Program (REAP) funding for energy efficiency and renewable energy project applications, OES drafted and submitted 245 letters of support for Minnesota REAP applications over the last year.

OES staff also conducted a number of pro-active outreach activities around the state to let targeted organizations know about ARRA funds so they could, in turn, let their client know about the programs. Many of these activities included presentations on the various national level funding ARRA programs as well as the state's specific competitive programs that were being set up for energy conservation and renewable energy projects. The following is a list of the ARRA related presentations that OES staff gave since April, 2010.

Presentations on ARRA and Related Energy Programs:

March 30, 2010 National Governor's Association Webinar on Renewable Energy Location: Webinar. 67 attendees. Focus was on the Renewable Energy financing and training.

June 4, 2010 MN Renewable Energy Roundtable-Talent Development Committee Location: Fergus Falls. 28 attendees Presentation focused on training for new installers.

June 8, 2010 Minnesota Family Investment Program and Diversionary Work Program Annual Conference Location: St. Cloud. 50 attendees Presentation focused on labor force needs and energy related training opportunities.

June 9, 2010 Iron Range Economic Alliance Location: Mountain Iron via phone. 36 attendees Presentation focused on funding opportunities for energy and environmental projects and how to access information and submit proposals for federal competitive grants.

June 11, 2010 Minnesota Electrical Association Summer Conference Location: Monticello. Presentation provided an overview of ARRA-funded projects in Minnesota.

June 17, 2010 American Groundwater Trust Association Conference Location: St. Paul. Presentation provided an overview and update of policies and opportunities for the ground source heat pump industry. July 13, 2010 Schools for Energy Efficiency Annual Conference Location: St Paul. Est. 65 attendees Presentation focused on funding opportunities for efficiency projects in schools and public buildings and energy related education grants.

OES continues to send out grant and other funding opportunities listings every three weeks to over 700 participants on its Listserve. Many of these participants also forward on these grant listings to their clientele Listserves.

The OES website received 46,075 web hits and 145,225 page views from individual visitors from April 1 through June 30, 2010. Of these web visits:

- 7,168 page views: "Appliance Rebate Program" page
- 4,590 page views: "Funding" section main page
- 3,069 page views: "Economic Stimulus" main page
- 5,704 page views: "Rebates & Credits" main page
- 2,873 page views: "Grants and Loans" main page
- Energy Stimulus Funding-Homeowners: updates and information on efficiency and renewables incentives and rebate programs, with a residential focus. Subscribers as of August 30, 2010: 1,902
- Energy Stimulus Funding-Businesses and Non-profits: updates and information on efficiency and renewables incentives and grant programs, rebate programs, plus related reports and data specific to businesses. Subscribers as of August 30, 2010: 1,065
- Energy Stimulus Funding-Local Government: updates and information on efficiency and renewables incentives and grant programs, efficiency financing, plus related reports and data specific to local governments. Subscribers as of August 30, 2010: 631

Success Stories Capture ARRA's Impact

OES has documented the impact of ARRA funding in Minnesota with a variety of "success stories." To date, OES has published several stories that highlight the Weatherization Assistance Program and two that feature the State Energy Program's energy efficient residential rebate programs (Project ReEnergize and Energy Saver). Project ReEnergize was featured recently on the DOE's Energy Empowers website. Other stories soon to be published include features on the State Solar Electric Rebate Program and the Energy Efficiency and Conservation Block Grant Program. The success stories include comments from the citizens who benefit from the programs, local service provider staff, contractors, agencies that administer the programs, OES staff, and more. Copies of current success stories can be found on the OES website as well as in **Attachment I**.

Article 6 – Appropriations

State Energy Program Reallocations

Article 6, Section 3, Subdivision 2(a) authorizes OES to reallocate SEP funds among the activities for which those funds were appropriated if:

- the United States Department of Energy does not approve a program for which funds are allocated; or
- the commissioner determines that:
 - (1) there is insufficient demand to effectively expend all funds allocated to a program;
 - (2) the funds as allocated are unlikely to result in achievement of the goals of the funding; or
 - (3) the funds as allocated are unlikely to attain results that exceed the minimum performance requirements established by the federal Department of Energy.

Having determined that funds as allocated would not likely achieve the goals of the funding, OES published a Notice of Intent to Reallocate SEP Funds on April 6, 2010 in the State Register, and posted notice on the OES website.

After fulfilling the comment period and legislative report requirements of Subd. 2(b), OES reallocated the following funds:

Program Activity	Modification	Chapter 138
Residential Energy Efficiency Programs	\$1,300,000	article 2, section 2
Local Government And School District Renovations	(\$3,585,000)	article 2, section 7
School District And Local Government Renewable Energy Grant Program	(\$2,000,000)	article 3, section 5
Emerging Renewable Energy Industries Grant Program	\$2,185,042	article 3, section 6
Energy Programs In Commercial And Industrial Buildings	\$2,099,958	article 4, section 2

On September 7, 2010, OES published a Notice of Intent to reallocate additional SEP funds to Residential Energy Efficiency Programs. Public comment will be accepted until September 28th.

VI. OTHER INFORMATION

Following are descriptions of two ARRA-funded formula grants appropriated to OES through the Legislative Advisory Commission process:

Enhancing Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency

The Office of Energy Security (OES) is the primary entity within the state of Minnesota responsible for the development of a State Energy Emergency or Energy Assurance Plan. The OES is leading the execution of the Enhanced Energy Assurance project funded under the ARRA that seeks to enhance the state's overall capabilities with respect to energy assurance and energy system resiliency, and will engage a number of state agencies in the refinement of the state's existing plans and procedures. The goals of the State Enhanced Energy Assurance Capabilities Project are to develop greater capacity within the OES and other agencies to 1) strengthen and expand state and local government energy portfolios and Smart Grid applications; 2) create jobs, and 3) build in-house state and local government energy assurance expertise.

These goals will be achieved by hiring new personnel to lead project activities and coordinate the involvement of other state agencies and entities; hosting workgroups and conducting individual state agency and energy stakeholder interviews to engage, inform and train project partners; revising the state's existing Energy Assurance plan to incorporate feedback from participating state agencies and stakeholders; establishing an ongoing state agency workgroup focused on energy assurance efforts; incorporating cyber security measures and procedures for protecting state utility smart grid investments; enhancing the energy emergency response procedures that are currently in place in Minnesota Rules; providing multiple energy emergency training sessions for both state agencies and local emergency response professionals; and conducting a minimum of two energy emergency exercises that fully test the state Energy Assurance plan within the state and regionally.

The OES continues to be involved in several regional coordination initiatives with FEMA Region V states and the National Association of State Energy Officials. Within the state the OES has been participating in Smart Grid Workgroup meeting convened by the OES and the University of Minnesota to discuss Smart Grid implementation challenges, including cyber security components. The OES continues to work on resolving staffing challenges related to the Energy Assurance planning grant.

State Energy Efficient Appliance Rebate Program

The Minnesota Appliance Rebate program launched on March 1, 2010. The rebate program provides rebates ranging from \$50-\$200 for replacing an old refrigerator, freezer, dishwasher or clothes washer with a qualifying ENERGY STAR model. As of August 19, the program has provided 20,501 residents with rebates totaling \$3,682,000. The OES staff and the rebate vendor engaged with residents and retailers to clear up rejected claims which, at 4.15% of the total applications received, is well below the 8-10% rejected claims reported by other states.

One goal of the program was to ensure that old refrigerators and freezers were permanently removed from the grid. Residents were incentivized by a recycling bonus if they submitted a "proof of demanufacturing" certificate on these two appliances. To date, 96% of residents provided the necessary documentation from their retailer, utility or county solid waste site to claim their full rebate. Retailers reported strong sales especially in the months of March and April and several utilities reported a higher number of rebates claimed on appliances in spring since this program could be combined with utility offerings.

Request for Proposal Chart Please refer to **Attachment J.**
SEP Weekly Dashboard: August 23	, 2010
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State	Allocation	Total	CX'd	Funds Ob	ligated	Cummulative	Payments		August Payments		Unemployment
State	Allocation	\$ CX'd	% CX'd	\$ Obligated	% Obligated	\$ Spent	% Spent	Month To Date	Monthly Target	FY10 Target	onemployment
Data	Current As Of:	Augus	st 20	Augus	t 20	Augus	it 20		August 20		May 2010
DE	\$24,231,000	\$24,231,000	100%	\$24,231,000	100%	\$10,918,011	45.1%	\$0	\$789,541	\$4,760,930	8.2%
СТ	\$38,542,000	\$24,194,000	63%	\$38,542,000	100%	\$12,667,733	32.9%	\$1,920,038	\$1,255,849	\$7,572,768	8.8%
AS	\$18,550,000	\$18,550,000	100%	\$18,350,000	99%	\$6,037,852	32.5%	\$4,490,072	\$604,431	\$3,644,721	N/A
ID	\$28,572,000	\$28,572,000	100%	\$28,322,000	99%	\$9,001,284	31.5%	\$540,611	\$930,987	\$5,613,853	8.4%
TN	\$62,482,000	\$29,276,682	47%	\$60,276,682	96%	\$17,268,568	27.6%	\$0	\$2,035,907	\$12,276,522	9.9%
PA	\$99,684,000	\$68,121,766	68%	\$75,771,000	76%	\$24,373,200	24.5%	\$372,722	\$3,248,094	\$19,586,006	9.2%
MA	\$54,911,000	\$54,911,000	100%	\$53,200,000	97%	\$12,792,880	23.3%	\$255,485	\$1,789,215	\$10,788,965	9.1%
VA	\$70,001,000	\$69,501,000	99%	\$54,761,000	78%	\$15,769,725	22.5%	\$654,335	\$2,280,906	\$13,753,862	6.9%
MN	\$54,172,000	\$50,867,599	94%	\$39,149,403	72%	\$10,392,111	19.2%	\$789,927	\$1,765,135	\$10,643,765	6.4%
MT	\$25,855,000	\$24,855,000	96%	\$24,398,985	94%	\$4,914,532	19.0%	\$123,649	\$842,457	\$5,080,015	6.8%
FL	\$126,089,000	\$67,380,740	53%	\$84,268,740	67%	\$23,053,289	18.3%	\$8,579,737	\$4,108,472	\$24,774,085	11.2%
AR	\$39,416,000	\$22,508,342	57%	\$30,302,697	77%	\$7,015,381	17.8%	\$44,260	\$1,284,327	\$7,744,493	7.5%
NM	\$31,821,000	\$31,821,000	100%	\$22,516,075	71%	\$5,349,211	16.8%	\$469,553	\$1,036,852	\$6,252,220	8.0%
со	\$49,222,000	\$48,649,000	99%	\$34,559,396	70%	\$7,739,946	15.7%	\$0	\$1,603,845	\$9,671,185	7.7%
CA	\$226,093,000	\$226,093,000	100%	\$157,100,160	69%	\$29,726,424	13.1%	\$1,341,660	\$7,366,993	\$44,422,965	11.9%
WI	\$55,488,000	\$41,038,946	74%	\$55,488,000	100%	\$6,606,166	11.9%	\$4,756,412	\$1,808,016	\$10,902,334	7.7%
IL	\$101,321,000	\$83,313,055	82%	\$79,353,842	78%	\$11,736,359	11.6%	\$3,922,896	\$3,301,434	\$19,907,645	10.0%
UT	\$35,362,000	\$35,362,000	100%	\$28,691,969	81%	\$4,040,391	11.4%	\$421,382	\$1,152,232	\$6,947,959	7.1%
SC	\$50,550,000	\$49,850,000	99%	\$47,100,107	93%	\$5,473,928	10.8%	\$0	\$1,647,116	\$9,932,111	10.5%
MS	\$40,418,000	\$35,218,000	87%	\$22,632,240	56%	\$4,246,523	10.5%	\$595,653	\$1,316,976	\$7,941,367	11.2%
MD	\$51,772,000	\$51,772,000	100%	\$32,676,471	63%	\$5,424,577	10.5%	\$1,349,835	\$1,686,934	\$10,172,211	7.0%
ME	\$27,305,000	\$27,305,000	100%	\$20,160,300	74%	\$2,800,000	10.3%	\$0	\$889,703	\$5,364,912	7.9%
wv	\$32,746,000	\$32,746,000	100%	\$32,424,897	99%	\$3,330,190	10.2%	\$710,367	\$1,066,993	\$6,433,965	8.6%
VI	\$20,678,000	\$20,678,000	100%	\$10,250,417	50%	\$2,060,035	10.0%	\$225,795	\$673,770	\$4,062,833	N/A
MI	\$82,035,000	\$81,035,000	99%	\$69,098,847	84%	\$8,084,232	9.9%	\$190,857	\$2,673,021	\$16,118,314	12.8%
NC	\$75,989,000	\$49,339,844	65%	\$37,032,942	49%	\$6,603,292	8.7%	\$0	\$2,476,018	\$14,930,390	9.9%
NV	\$34,714,000	\$34,714,000	100%	\$32,768,562	94%	\$2,972,143	8.6%	\$807,279	\$1,131,118	\$6,820,639	13.8%
OR	\$42,182,000	\$39,093,438	93%	\$34,367,918	81%	\$3,300,625	7.8%	\$2,797,794	\$1,374,454	\$8,287,959	10.4%
WA	\$60,944,000	\$45,238,514	74%	\$43,046,904	71%	\$4,565,217	7.5%	\$0	\$1,985,793	\$11,974,334	8.8%
КҮ	\$52,533,000	\$45,683,000	87%	\$51,885,018	99%	\$3,810,362	7.3%	\$358,600	\$1,711,730	\$10,321,733	10.1%
GU	\$19,098,000	\$19,098,000	100%	\$5,286,000	28%	\$1,208,164	6.3%	\$251,995	\$622,287	\$3,752,393	N/A
NE	\$30,910,000	\$30,740,000	99%	\$21,318,279	69%	\$1,749,252	5.7%	\$1,082,663	\$1,007,168	\$6,073,226	4.6%
Н	\$25,930,000	\$25,930,000	100%	\$22,820,000	88%	\$1,410,642	5.4%	\$97,481	\$844,901	\$5,094,751	6.3%
SD	\$23,709,000	\$23,709,000	100%	\$22,447,775	95%	\$1,270,793	5.4%	\$0	\$772,532	\$4,658,367	4.5%
NH	\$25,827,000	\$25,827,000	100%	\$23,076,998	89%	\$1,296,506	5.0%	\$0	\$841,544	\$5,074,513	5.9%
AZ	\$55,447,000	\$55,447,000	100%	\$51,885,198	94%	\$2,620,549	4.7%	\$338,327	\$1,806,680	\$10,894,279	9.4%
KS	\$38,284,000	\$38,284,000	100%	\$35,305,411	92%	\$1,790,856	4.7%	\$0	\$1,247,442	\$7,522,076	6.3%
NY	\$123,110,000	\$108,110,000	88%	\$46,111,104	37%	\$5,678,153	4.6%	\$1,003,281	\$4,011,404	\$24,188,768	8.1%
ОК	\$46,704,000	\$44,962,700	96%	\$34,415,022	74%	\$2,107,524	4.5%	\$964	\$1,521,799	\$9,176,446	6.9%
WY	\$24,941,000	\$24,941,000	100%	\$17,853,354	72%	\$1,099,988	4.4%	\$664,243	\$812,675	\$4,900,431	6.8%
VT	\$21,999,000	\$13,998,933	64%	\$17,622,743	80%	\$880,807	4.0%	\$588,486	\$716,813	\$4,322,384	5.9%
PR	\$37,086,000	\$37,086,000	100%	\$37,086,000	100%	\$1,181,662	3.2%	\$15,700	\$1,208,407	\$7,286,692	16.8%
MO	\$57,393,000	\$52,817,000	92%	\$31,624,879	55%	\$1,737,631	3.0%	\$502,764	\$1,870,088	\$11,276,630	8.7%
IA	\$40,546,000	\$36,649,164	90%	\$28,411,604	70%	\$1,160,550	2.9%	\$156,717	\$1,321,147	\$7,966,516	6.3%
DC	\$22,022,000	\$22,022,000	100%	\$20,161,073	92%	\$509,267	2.3%	\$37,834	\$717,563	\$4,326,903	9.6%
AL	\$55,570,000	\$30,517,550	55%	\$55,570,000	100%	\$1,211,056	2.2%	\$378,450	\$1,810,688	\$10,918,446	10.0%
MP	\$18,651,000	\$18,651,000	100%	\$11,000,000	59%	\$402,324	2.2%	\$92,088	\$607,722	\$3,664,566	N/A
LA	\$71,694,000	\$51,906,456	72%	\$69,850,660	97%	\$1,485,964	2.1%	\$311,677	\$2,336,070	\$14,086,504	7.1%
GA	\$82,495,000	\$80,380,863	97%	\$80,706,411	98%	\$1,501,008	1.8%	\$227,997	\$2,688,009	\$16,208,695	9.9%
ND	\$24,585,000	\$22,585,000	92%	\$9,707,000	39%	\$431,608	1.8%	\$0	\$801,075	\$4,830,484	3.3%
RI	\$23,960,000	\$23,960,000	100%	\$20,448,847	85%	\$351,901	1.5%	\$7,908	\$780,710	\$4,707,683	11.8%
ТХ	\$218,782,000	\$209,178,096	96%	\$148,619,327	68%	\$2,839,808	1.3%	\$374,672	\$7,128,772	\$42,986,493	8.0%
ОН	\$96,083,000	\$61,953,000	64%	\$53,355,183	56%	\$1,222,429	1.3%	\$47,669	\$3,130,759	\$18,878,478	10.1%
IN	\$68,621,000	\$52,471,000	76%	\$35,706,000	52%	\$471,056	0.7%	\$0	\$2,235,940	\$13,482,718	9.7%
NJ	\$73,643,000	\$56,018,000	76%	\$48,670,000	66%	\$0	0.0%	\$0	\$2,399,576	\$14,469,446	9.6%
AK	\$28,232,000	\$28,232,000	100%	\$15,942,000	56%	\$0 \$0	0.0%	\$0	\$919,909	\$5,547,050	7.9%
	\$3,069,000,000		87%	\$2,307,728,540	75%	\$307,693,685	10%	\$41,899,835	\$100,000,000	\$603,000,000	
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Monthly Run Rate (July 22 - August 20):	\$76,861,362
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	Legend									
St	State Allocation Rank Total CX'd		CX'd	Funds Ob	oligated	Cummulative Payments				
	1 - 10	Green	100% CX'd	Green	> 80% Obligated	Green	> 10% Spent			
	11 -20	Red	< 75% CX'd	Red	< 50%Obligated	Red	< 5% Spent			

ATTACHMENT A-2

State WAP: All States (19, August, 2010)

NOTE : THE BAR HAS BEEN RAISED <u>AGAIN</u> for red vs. green on expenditures-- green use to be 30% spent, and it is now 35% spent. THE BAR HAS BEEN RAISED AGAIN for red vs. green on production -- green use to be 25%, and it is now 30%.

Yellow Gold	Top 10 States by 2nd 10 States by 2	Awards	I								ts weatherized ts weatherized								
		Sr	pending	(iPortal)				Units Production					Analysi	s: Productio	n vs Plans		Onsite Visit	& Analysis	
States/ Territories	Total Award	Spend August 12	% Total Award Spent	Spend August 19	% Total Award Spent	Final 50% of Remaining Funds Released to States/ Territories	Planned Units Total	Units Completed (through Dec 2009	Q1 Total Units Completed	Units Completed (Apr 2010)	Units Completed (May 2010)	Units Completed (June 2010)	Share of 30k/Month Units Target "Peak Run Rate"	June 2010 Actual / Planned Units	Cumulative- to-Date Actual	Cumulative- to-date through June Actual / Planned Units	Actual through June / Total ARRA Planned Units	Date of Most Recent PO Onsite Visit	Score of Onsite Checklist
ID	\$30,341,929	19,239,099	63.4%	20,266,763		Yes	3,113	551	815	317	295	323	158	190%	2,301	147%	74%	2-Apr-10	95%
WI DC	\$141,502,133 \$8.089.022	68,218,004 3,744,438	48.2% 46.3%	70,138,176 3,882,643	49.6% 48.0%	Yes	16,891	772	1,870 110	854 27	1,022 35	1,221 27	1,046 40	81% 39%	5,739 199	91%	34% 25%	1-Jul-10	96%
ME	\$8,089,022 \$41,935,015	16,267,410	46.3% 38.8%	19,615,569		Yes	785 4,427	560	746	277	268	256	224	39% 121%	2,107	72% 109%	48%	29-Apr-10 16-Jul-10	90% 92%
OH	\$266,781,409	119,465,335	44.8%	120,277,987	45.1%	Yes	32,180	6474	3,654	1,220	1,521	1,722	1,628	131%	14,591	104%	45%	9-Jun-10	94%
н	\$4,041,461	1,694,834	41.9%	1,694,834	41.9%		672	0	75	61	41	37	34	46%	214	48%	32%	18-Jun-10	
ND	\$25,266,330	9,678,229 51,206,645	38.3%	10,427,423 51,206,645	41.3% 41.0%	Yes	3,267	310 632	345	95 431	89 501	70 525	165	64%	909	97%	28%	12-Aug-10	
GA MN	\$124,756,312 \$131,937,411	53.022.894	41.0% 40.2%	53,922,908	41.0%	Yes	13,871 16,858	1423	1,581	918	919	525 875	702 853	103% 103%	3,670 6,143	108% 94%	26% 36%	25-Jun-10 28-May-10	95% 94%
WA	\$59,545,074	23,870,225	40.1%	23,870,225	40.1%	Yes	7,170	1007	2,000	592	515	688	363	152%	5,215	167%	73%	30-Jul-10	94%
TN	\$99,112,101	37,563,117	37.9%	39,365,953	39.7%	Yes	10,524	1430	2,701	674	896	1,518	533	69%	7,219	93%	69%	11-Jun-10	0170
MS	\$49,421,193	19,304,572	39.1%	19,580,339		Yes	5,468	1472	988	124	147	191	277	63%	2,922	98%	53%	5-Mar-10	97%
NV	\$37,281,937	13,331,857 14,180,740	35.8%	14,320,054 14,242,718	38.4% 37.9%	Yes	5,539	84 660	1,486	748 174	534 130	901 162	280	626%	3,753	172%	68%	14-May-10	89%
WV AR	\$37,583,874 \$48,114,415	14,180,740	37.7% 34.4%	14,242,718 17,943,841	37.9%		3,574 5,578	625	533 626	258	247	296	181 282	188% 136%	1,659 2,052	119% 116%	46% 37%	30-Apr-10	88%
NH	\$43,114,413	8,541,723	36.8%	8,541,723	36.8%		2,609	356	394	103	136	155	132	174%	1,144	119%	44%	13-Aug-10 14-May-10	91% 92%
MT	\$26,543,777	9,659,359	36.4%	9,757,238	36.8%	Yes	2,477	322	297	232	179	218	125	263%	1,248	174%	50%	16-Jul-10	0270
OR	\$38,512,236	13,072,862	33.9%	13,346,163	34.7%	Yes	4,635	191	707	174	162	531	235	284%	1,765	154%	38%	23-Apr-10	93%
MA	\$122,077,457	40,900,639	33.5%	41,913,351	34.3%		16,926	1310	1,553	395	499 270	507	856	70%	4,264	97%	25%	29-Apr-10	L
KS	\$56,441,771 \$252,793,062	18,734,263 82,177,531	33.2% 32.5%	19,059,031 84,046,392	33.8% 33.2%		5,820 29,554	267 378	1,003 3,148	232 1,621	2/0	178	294 1,495	86% 105%	1,950 8,206	136% 102%	34% 28%	11-Jun-10	
	\$252,793,062 \$131,847,383	38.922.532	32.5% 29.5%	41,956,468	31.8%	Yes	29,554	974	1,972	1,021	1,070	1,069	999	185%	6,096	66%	32%	12-Aug-10 30-Jun-10	59%
SC	\$58,892,771	18,252,240	31.0%	18,252,240	31.0%	163	6,500	288	465	180	284	200	329	89%	1,417	111%	22%	11-Jun-10	95% 94%
UT	\$37,897,203	11,686,971	30.8%	11,687,242	30.8%		4,474	720	509	173	148	171	226	119%	1,721	112%	38%	19-Mar-10	
AL	\$71,800,599	20,873,683	29.1%	22,011,032	30.7%		6,651	477	753	264	332	310	337	116%	2,136	101%	32%	20-Aug-10	92%
DE	\$13,733,668	4,125,027 420,397	30.0%	4,125,027 420,397	30.0%		1,370	519 0	168 0	253 0	0	23	77	0%	940	94%	69%	19-May-10	80%
LA	\$1,415,429 \$50,657,478	14,939,429	29.7% 29.5%	14,939,429			430 5,136	104	635	186	181	165	22 260	177% 108%	34 1,271	58% 124%	8% 25%	30-Apr-10	93%
OK	\$60,903,196	16,750,997	27.5%	17,343,142			7,060	520	660	260	274	312	357	99%	2,026	99%	29%	1-Jul-10	93%
IA	\$80,834,411	22,621,309	28.0%	22,739,548	28.1%	Yes	7,196	370	807	401	366	235	364	87%	2,179	127%	30%	25-Jun-10	96%
VA	\$94,134,276	25,903,905	27.5%	25,913,447	27.5%		9,193	1358	1,095	152	404	204	465	65%	3,213	100%	35%	30-Apr-10	81%
IL	\$242,526,619	63,434,102 6,379,175	26.2%	66,457,310 7,153,866	27.4% 26.6%	Yes	26,933	331 155	3,426	1,941 279	2,459 129	2,957 144	1,363	156%	11,114	123%	41%	30-Apr-10	99%
NM VT	\$26,855,604 \$16,842,576	4,458,537	23.8% 26.5%	4,458,537	26.5%	Yes Yes	2,788 1,612	280	318 608	131	83	0	141 82	112% 0%	1,025 1,102	114% 133%	37% 68%	19-Feb-10 15-Apr-10	96%
AS	\$719.511	190,226	26.4%	190,226	26.4%	163	225	0	000	0	0	9	11	180%	9	45%	4%	13-Api-10	96%
RI	\$20,073,615	5,258,435	26.2%	5,258,435	26.2%		2,532	0	211	158	168	181	128	292%	718	274%	28%	21-May-10	88%
WY	\$10,239,261	2,217,211	21.7%	2,645,162		Yes	928	0	52	85	19	82	47	248%	238	179%	26%	15-Jul-10	96%
AZ	\$57,023,278	13,415,746 97.652.275	23.5%	14,617,997 99,289,987	25.6% 25.2%	Yes	6,409	359 319	865	136 443	257 389	315 1.164	324	143%	1,932	120%	30%	14-May-10	91%
NY	\$394,686,513 \$131,954,536	32,016,772	24.7%	32,016,772	25.2%		45,400 12,243	319 197	1,291	756	685	960	2,297	67% 102%	3,606 4,117	39% 82%	8% 34%	13-Aug-10 25-Jun-10	91%
NC KY	\$70,913,750	16,608,904	24.3%	16,741,333	23.6%	Yes	8,751	431	850	409	426	447	459	102%	2,563	93%	29%	25-Jun-10 30-Apr-10	84% 88%
MD	\$61,441,745	13,383,512	21.8%	14,211,468	23.1%		6,850	279	435	278	279	315	347	119%	1,586	106%	23%	18-Jun-10	78%
SD	\$24,487,296	5,415,683	22.1%	5,588,194	22.8%		2,327	53	370	140	145	103	118	77%	811	106%	35%	16-Jul-10	
CO	\$79,531,213	16,980,234 53,551,208	21.4%	16,980,234	21.4% 20.7%	Yes	10,478	1369 47	830	384	437 2,129	1,317 2,649	530	445%	4,337	142%	41%	18-Aug-10	90%
TX FL	\$326,975,732 \$175,984,474	53,551,208 33,892,660	16.4% 19.3%	67,751,321 36,304,152	20.7%		33,908 19,090	4/ 312	2,126 1,442	1,690 602	2,129 605	2,649 680	1,707 966	145% 125%	8,641 3,641	101% 107%	25% 19%	25-Jun-10 5-Feb-10	96%
MO	\$175,984,474 \$128,148,027	26,208,920	19.3%	26,362,973	20.6%		20,028	1089	1,442	547	523	584	1,088	125%	3,641	107%	20%	5-Feb-10 16-Jul-10	96% 95%
NE	\$41,644,458	8,310,701	20.0%	8,322,361	20.0%		4,000	190	347	208	147	215	202	131%	1,107	110%	28%	30-Jul-10	82%
CA	\$185,811,061	29,719,435	16.0%	34,072,568	18.3%		43,400	12	2,396	1,792	2,022	2,701	2,547	147%	8,923	102%	21%	2-Apr-10	94%
СТ	\$64,310,502	11,205,566 170,000	17.4%	11,665,317 170,000	18.1%		7,500	23 0	478	189	191 4	214 3	385	86%	1,095	69%	15%	11-Jun-10	92%
WY - Arapaho	\$956,210 \$243,398,975	170,000 40,000,492	17.8% 16.4%	170,000 42,836,496	17.8% 17.6%		126 33,410	0 385	7 2,224	3 987	4	3 1,510	6	60% 117%	17 6,231	63% 99%	13% 19%	13-Aug-10	65%
N.I	\$243,398,975 \$118,821,296	17,906,490	16.4% 15.1%	42,636,496	17.6%		33,410 13,381	53	2,224	108	1,125	606	1,691 661	117% 154%	6,231	99% 56%	19% 8%	12-Aug-10 18-Mar-10	96% 82%
MP	\$118,821,290	109,225	13.7%	109,225	13.7%		173	0	9	9	10	9	9	113%	37	116%	21%	10 1001-10	02%
GU	\$1,119,297	138,536	12.4%	151,865			204	0	0	25	8	0	10	0%	33	83%	16%		
AZ - Navajo	\$9,068,150	417,535	4.6%	417,535	4.6%		1,233		0	0	0		62	0%	0	0%	0%		
PR	\$48,865,588	1,302,341 191,624	2.7%	1,796,590 191,624	3.7%		5,500	0	0	1	0	31 0	278	155%	32	53%	1%	28-May-10	
AK Total	\$18,142,580 \$4,728,750,000	191,624	1.1%	1,371,232,431		21	1,523 569,962	30.038	0 55.515	23.708	25.298	31,868	77	0%	0	0%	0% 29%	13-Aug-10	97%
iotai	<i>4,120,130,000</i>	1,313,449,740	21.0%	1,371,232,431	23.0 /0	21	009,902	30,030	33,313	23,100	23,230	31,000	30,000	12170	100,421	10170	23/0		

Blank spaces = no data entered

Actual Run Rate (Jul 14 - Aug \$200,484,533



COMMERCIAL ENERGY EFFICIENCY CAREERS

ATTACHMENT B-2

Career Pathways

Friday, August 27, 2010 7:19 AM

Energy Careers	Energy Educatio	on Energy			
Assess Yoursell V E	cpiore Energy Careers 🗸	Leant About Energy Indi		~ ~ ~	A CONTRACTOR OF
Careers in Co	mmercial Er 5 careers found	nergy Efficie	ency		∽ <u>Share</u> <u>Save</u> <mark> Print</mark>
Remove these selections to increase your results. Education Level	Career Title		Median Hourly Wage	Education Level Needed	
Long-term on-the-job training (more than 12 months)		Window Installer	\$22.90	Long-term on-the-job training (more than 12 months)	choose to compare
Narrow Your Results by: 🛨 Job Type		Building Engineer	\$26.31	Long-term on-the-job training (more than 12 months)	choose to compare
Compare Careers Select a career to compare		Sheet Metal Worker	\$27.13	Long-term on-the-job training (more than 12 months)	choose to compare
Select a career		Electrician	\$28.88	Long-term on-the-job training (more than 12 months)	choose to compare
2 to compare	19	Pipefitter / Steamfitter	\$29.57	Long-term on-the-job training (more than 12 months)	choose to compare
3 Compare				months)	

ISEEK | Energy | Careers in Commercial Energy Efficiency <u>http://www.iseek.org/industry/energy/careers/pathwaysResultCEE?award=I&x=54&y=11</u> Screen clipping taken: 8/27/2010, 7:20 AM

Job Comparison

Friday, August 27, 2010 7:24 AM

Careers in Commercial Energy Efficiency

Building Operator	Building Commissioning Technician
Building operators ensure that machines and equipment run efficiently by keeping them well maintained and in good repair.	Building commissioning technicians perform tests on a building's mechanical, electrical, and other equipment to ensure optimal and efficient operation.
Building operators perform work to keep machines, mechanical equipment, or the structure of an establishment in repair. The duties may involve pipe fitting, boiler making, insulating, welding, machining, carpentry, repairing electrical or mechanical equipment, and installing, aligning, and balancing new equipment.	Building commissioning technicians assist in the building commissioning process to determine whether a building's systems are operating properly. They might perform a variety of tasks related to commissioning, including verifying that mechanical systems operate according to standards, testing and adjusting air temperatures and flows, analyzing mechanical and electrical systems for faults, or reviewing the comprehensiveness of operation and maintenance documentation.
Median Hourly Salary:	Median Hourly Salary:
\$18.64	\$25.15
Education & Training:	Education & Training:
Moderate-term on-the-job training (1-12 months)	Associate degree
Work Environment:	Work Environment:
This job often involves:	This job often involves:
O Having face-to-face discussions	O Having face-to-face discussions

ISEEK | Energy | Careers in Commercial Energy Efficiency http://www.iseek.org/industry/energy/careers/pathwayCompareCEE?btCompate=Compare Screen clipping taken: 8/27/2010, 7:24 AM



RESIDENTIAL ENERGY EFFICIENCY CAREERS

ATTACHMENT C

Commercial/Industrial/Nonprofit Grants		
Grantee	County	Grantee Contact
3M Company	Ramsey	Steven Schultz
Aeon	Hennepin	Tom Nordyke
Aitkin Iron Works	Crow Wing	Jeffrey Chatelle
Arrowhead Promotion and Fulfillment Co. Inc.	Itasca	Tim McDonald
Caledonia Care and Rehab	Houston	Lloyd Swalve
Chippewa Valley Ethanol Company, LLLP	Swift	Vincent Copa
City Center Retail/AG 800 Washington LLC	Hennepin	Tracey Wright
Coastal Seafoods	Hennepin	Suzanne Weinstein
Davisco-Le Sueur Cheese Plant	Le Sueur	David Bero
Earle Brown Tower, LLP	Ramsey	Michael Koch
Fairview Health Services, Maple Grove	Hennepin	Dan Harrington
Gerdau Ameristeel Duluth	St. Louis	John Kuhn
Habitat for Humanity of South Central Minnesota	Blue Earth	Fred Snyder
HealthEast Care System-St. John's Hospital	Ramsey	Jed Field
Honeywell	Hennepin	Jeff Freeman
J&B Group	Wright	Michael Altimari
LifeCare Medical Center	Roseau	Brian Grafstrom
Mall of America	Hennepin	Richard Hoge
National Sports Center Foundation	Anoka	Paul Erickson
Northern Plains Dairy	Le Sueur	David Bero
Pequot Tool & Mfg., Inc	Crow Wing	Mark Shervey
Prospect Foundry	Hennepin	Michael Suchy
Resource, Inc	Hennepin	Gary Stevens
Rolco, Inc	Le Sueur	Lori Creighton
Spruce Tree Center LLP	Ramsey	Jason Sklar
SuperValu	Hennepin	Kelly Moylan
Walker Art Center	Hennepin	Phillip Bahar
Wausau Paper	Crow Wing	Roman Wasileski
YMCA of Greater Saint Paul	Hennepin	Joel Larson
YWCA of Minneapolis	Hennepin	Barbara Schubring
Douglas Machine Inc.	Douglas	Steve Jorud
Wendy's FourCrown	Washington	Arlyn Lomen
Clear Waters Life Center	Clearwater	Rebecca Dorman
Park View Terrace Apartments-The Schuett		
Companies	Hennepin	Amy Schuett
Cambria	Le Sueur	David Bero
Gander Mountain	Ramsey	Matthew Sansone
Le Sueur, Inc	Le Sueur	Mike Horton
North Memorial Health Care-Maple Grove	Hennepin	Robert Johnson

Seagate Technology	Hennepin	Peter Wentzel
Miller Hill Mall	St. Louis	Benjamin Martin
United States Steel Corporation	St. Louis	James Jarvi
Center for Energy and Environment (Program)	Hennepin	David King
City of Minneapolis EDA (Program)	Hennepin	Cathy Polaski
Community Reinvestment Fund (Program)	Hennepin	Keith Ford
St. Paul Port Authority (Program)	Ramsey	Pete Klein
Chisago County (Biomass Feasibility Study)	Chisago	Chris Eng

Emerging Renewable Industries

Grantee	County	Grantee Contact
Veeco Instruments, Inc.	Ramsey	Molly Doran
Silent Power, Inc.	Crow Wing	Anne Archibald
Precision Coatings Inc.	Ramsey	Linda Grundtner
Rural Renewable Energy Alliance	Cass	Jason Edens
tenKsolar, Inc.	Hennepin	Joel Cannon

EECBG/School District and Local Government Renovations						
Grantee	County	Grantee Contact				
Ada (City of)	Norman	Forest Carpenter				
Alexandria (City of)	Douglas	Martin Schultz				
Alexandria School District #206	Douglas	Terry Quist				
Aurora (City of)	St. Louis	Linda Cazin				
Austin (City of)	Mower	Kim Underwood				
Babbit (City of)	St. Louis	Bo Castellano				
Badger (City of)	Roseau	Pam Monsrud				
Barnesville (City of)	Clay	Michael Rietz				
Becker County	Becker	Steven Skoog				
Beltrami County	Beltrami	Steven Shadrick				
Benton County	Beltrami	James Whitcomb				
Big Stone County	Big Stone	Gary Haugen				
Biwabik (City of)	St. Louis	Jeff Jacobson				
Blackduck Public Schools	Beltrami	Bob Doetsch				
Bloomington Public Schools ISD #271	Hennepin	Craig Nordstrom				
Blue Earth County	Blue Earth	Katie Nerem				
Blue Earth County	Blue Earth	Katie Nerem				
Brainerd (City of)	Crow Wing	Scott Sjolund				
Breckenridge (City of)	Wilkin	Beverly Wilson				
Brownton (City of)	McLeod	Cindy Linderman				
Buffalo (City of)	Wright	Joseph Steffel				
Cannon Falls (City of)	Goodhue	Aaron Reeves				
Carlton (City of)	Carlton	CJ Van Guilder				
Carlton County	Carlton	Michael Stafford				

Carlton Public Schools ISD #93	Carlton	Kirk Johnson
Cass County	Cass	Tim Richardson
Chaska (City of)	Carver	Tim Wiebe
Chippewa County	Chippewa	Cheryl Landgren
Chisago (City of)	Chisago	Doris Zacho
Chisago County	Chisago	John Moosey
Chisago County	Chisago	Jon Thompson
Chisago Lakes Public School District #2144	Chisago	Tim Burton
Chisholm (City of)	St. Louis	Mark Casey
City of Afton	Washington	Sara Irvine
City of Bemidji	Beltrami	David Hoefer
City of Brooklyn Center	Hennepin	Steven Lillehaug
City of Brownton	McLeod	Cindy Linderman
City of Chisholm	St. Louis	Mark Casey
City of Clearbrook	Clearwater	, Heather Richardson
City of Cohasset	Itasca	Rick Horton
City of Columbia Heights	Anoka	Kevin Hansen
City of Detroit Lakes	Becker	Becky Renner
City of Franklin	Renville	Wendy Pederson
City of Harmony	Fillmore	Chris Giesen
City of Hopkins	Hennepin	Norbert Kerber
City of Hoyt Lakes	St. Louis	Richard Bradford
City of Hutchinson	McLeod	Gary Plotz
City of Lakeville	Dakota	Neil Normandin
City of Lino Lakes	Anoka	Rick DeGardner
City of Marshall	Lyon	Ben Martig
City of Minneapolis	Hennepin	Brian Millberg
City of Moose Lake	Carlton	Dan Benzie
City of North Mankato	Nicollett	Mike Fischer
City of Pelican Rapids	Otter Tail	Don Solga
City of Spicer	Kandiyohi	Leslie Valiant
City of St. Paul	Ramsey	Brian Vitek
City of Warroad	Roseau	Kathy Lovelace
City of Wells	Faribault	Jeremy Germann
Clay County	Clay	Shannon Thompson
Cold Spring (City of)	Stearns	Julie Zimmerman
Cook County	Cook County	Braidy Powers
Cook County/Grand Marais (Joint)	Cook County	Braidy Powers
Cottage Grove (City of)	Washington	Howard Blin
Cromwell Wright School District	Carlton	Herb Hilinski
Crookston (City of)	Polk	Pat Kelly
Crosby-Ironton Public Schools	Crow Wing	William Tollefson
Crystal (City of)	Hennepin	Tom Mathisen
East Bethel (City of)	Anoka	Tammy Schutta
	/	i anni y Schatta

Edgewood School ISD 287	Isanti	Thomas Schutlz
Elk River (City of)	Sherburne	Tim Simon
Elk River (Program)	Sherburne	Rebecca Haug
Elk River ISD #728	Sherburne	Tom Baranick
Ely (City of)	St. louis	Harold Langowski
Eyota (City of)	Olmstead	Cathy Enerson
Fairmont (City of)	Martin	Troy Nemmers
Fertile-Beltrami ISD #599	Polk	Brian Clarke
Fillmore Central ISD #2198	Fillmore	Myrna Luehmann
Finlayson (City of)	Pine	Chad Katzenberger
Franklin (City of)	Renville	Wendy Pederson
Fridley ISD #14	Anoka	Duane Knealing
Gaylord (City of)	Sibley	Kevin McCann
Glencoe-Silver Lake Schools	McLeod	Michelle Sander
Golden Valley (City of)	Hennepin	Mitchel Hoeft
Gonvick (City of)	Clearwater	Stacy Halvorson
Grand Marais (City of)	Cook County	Mike Roth
Grant County	Grant	Chad Van Santen
Grant County	Grant	Chad Van Saten
Greenway Public Schools ISD 316	Itasca	Jim Smith
Halstad (City of)	Norman	Alli Tice
Hassan Township	Hennepin	William Craig
Hennepin County	Hennepin	Leah Hiniker
Hermantown (City of)	St. Louis	John Mulder
Hibbing (City of)	St. Louis	Ginny Richmond
Hoffman/Barret/ Glenwood (Joint)	Grant/Pope	Gene Wenstrom
Hopkins (City of)	Hennepin	Norbert Kerber
Houston County	Houston	Theressa Arrick-kruger
Hoyt Lakes (City of)	St. Louis	Rick Bradford
Hutchinson (City of)	McLeod	Gary Plotz
Inver Grove Heights (City of)	Dakota	, Michael Sheggeby
Inver Grove Heights ISD #199	Dakota	David Slomkowski
Itasca County	Itasca	Randal Washburn
Kanabec County	Kanabec	Gregory Nikodym
Kanabec County	Kanabec	Gregory Nikodym
Kandiyohi County	Kandiyohi	Dave Pederson
Kasson-Manterville ISD #204	Dodge	Peter Grant
Kelliher Public School District #36	Beltrami	Tim Lutz
Koochiching County	Koochiching	Terry Glowack
Lac qui Parle County	Lac qui Parle	Jake Sieg
Lewiston ISD #857	Winona	Bruce Montplaisir
Lewiston ISD #857 Madison Lake (City of)	Winona Blue Earth	Bruce Montplaisir Kelly Steele

Marshall Public Schools	Lyon	Warren Buchholz
Meeker County	, Meeker	Joel Ramthun
Mille Lacs County	Mille Lacs	Roxy Traxler
Mille Lacs County	Mille Lacs	Roxy Traxler
Minnetonka Beach (City of)	Hennepin	Susanne Griffin
Minnetonka ISD #276	Hennepin	Mike Condon
Moorhead Area School District	Clay	Daniel Bacon
Mound (City of)	Hennepin	Carlton Moore
New London-Spicer Public Schools	Kandiyohi	Lorena Shemon
New Prague Area Schools	Le Sueur	Tim Ryback
Nicollet County (SHPO)	Nicollett	Ms. Jamie Haefner
Northfield (City of)	Rice	Michele Merxbauer
Northfield Public Schools ISD #659	Rice	Kevin Larson
Oak Park Heights (Program)	Washington	Eric Johnson
Oak Park Heights (City of)	Washington	Eric Johnson
Oakdale (City of)	Washington	Jen Hassebroek
Olmsted County	Olmstead	Daryl Fieck
Olmsted County	Olmstead	Daryl Fieck
Owatonna Public School District #781	Steele	Dave Ihrke
Paynesville (City of)	Stearns	Renee Eckerly
Pelican Rapids Public Schools ISD #548	Otter Tail	Deb Wanek
· · ·		Kenneth Olson
Pennington County Perham (City of)	Pennington Otter Tail	Chuck Johnson
Pine River-Backus Schools ISD #2174	Cass	
Prior Lake ISD #719	Scott	Jolene Bengston Jim Dellwo
Red Lake Public School District #38	Beltrami	Brent Gish
Redwood County	Redwoon	Loren Gewerth
· · · · · · · · · · · · · · · · · · ·		
Renville County	Renville	Sara Folsted
Robbinsdale (City of)	Hennepin	Robin Verkinnes
Robbinsdale Area Schools ISD #281	Hennepin	Lonnie Smith
Rosemount (City of)	Dakota	Dan Schultz
Rothsay (City of)	Wilkin	Chris Buckingham
Rush City Public Schools ISD #139	Chisago	Jeanne Korf
Rushford-Peterson Schools	Fillmore	Charles Ehler
Sauk Rapids (City of)	Benton	Todd Schultz
Scanlon (City of)	Carlton	Marshall Johnson
Shakopee (City of)	Scott	Kris Wilson
Shakopee Public Schools ISD #720	Scott	John Gates
Sherburne County	Sherburne	David Lucas
Silver Bay (City of)	Lake	Lana Fralich
South St. Paul (City of)	Dakota	Glenn Burke
South St. Paul SSD #6	Dakota	Glen Birnstengel
St. Clair Public School ISD #75 St. Joseph (City of)	Blue Earth Stearns	Tom Bruels Terry Thene

St. Louis County	St. Louis	Erik Birkelande
St. Paul Public Schools ISD #625	Ramsey	Sara Guyette
Steele County	Steele	Mary Overlee Olson
Stevens County	Stevens	Dave Schmidt
Stewartville Public Schools ISD #534	Olmstead	Amy Thompson
Swift County and Benson (City of)	Swift	Jennifer Gruis
Tri-County Public School ISD #2358	Kittson	Ron Ruud
Two Harbors (City of)	Lake	Judy Osbakken
Warren-Alvarado-Oslo School District #2176	Marshall	Bryan Thygeson
Warroad (City of)	Roseau	Kathy Lovelace
Warroad School District	Roseau	Albert Hasburgen
Wayzata Public Schools ISD #284	Hennepin	Joe Matson
Westbrook Walnut Grove Schools ISD #2898	Redwood	Loy Woelber
White Bear Lake (City of)	Ramsey	Ellen Richter
Windom (City of)	Cottonwood	Kirby Kruse
Winona (City of)	Winona	Dan Wicka
Wright County	Wright	Lee Kelly

Residential Energy Efficiency & Outreach, Training				
Grantee	County	Grantee Contact		
Builders Assoc. of MN	Ramsey	Karen Linner		
MHFA	Ramsey	Jeanette Blankenship		
City of Duluth	St. Louis	Keith Hamre		
City of Park Rapids	Hubbard	Bill Smith		
Common Ground	St. Louis	Jodi Slick		
Neighborhood Energy Connection	Ramsey	Chris Duffrin		
Northwest Community Action	Roseau	Randy Nordin		
Fond Du Lac Tribal & Community College	Carlton	Candi Broeffel		
Community Action of Minneapolis	Hennepin	Anthony Spears		
Red Lake Band of Chippewa Indians	Red Lake	Ramona Desjarlait		
Minnesota Valley Action Council	Blue Earth	Judd Schultz		

Attachment D - State ARRA Completions / Demographics Program Year 2009

Period: 07/01/2009 to 06/30/2010

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	<u>Program Year</u>
<u>1. Units By Dwelling Type</u>					
Owner-Occupied Single Family Site Built	374	808	1715	2185	5082
Renter-Occupied Single Family Site Built	46	200	285	346	877
Multi-Family (5 or more units per building)	0	4	17	41	62
Owner-Occupied Mobile Home	13	115	142	205	475
Renter-Occupied Mobile Home	1	5	3	6	15
Shelter	0	0	3	2	5
Other	0	0	1	1	2
UNCATEGORIZED	0	0	0	1	1
TOTAL ARRA Units:	434	1132	2166	2787	6519
2: Units By Primary Heating Fuel Type					
Natural Gas	297	797	1521	1937	4552
Fuel Oil	73	111	193	198	575
Electricity	10	46	84	127	267
Propane/LPG	44	160	326	460	990
Kerosene	0	0	0	0	0
Wood	3	16	38	48	105
Other	7	2	4	17	30
UNCATEGORIZED	0	0	0	0	0
<u>3: Units By Occupancy</u>					
Elderly-Occupied	178	387	735	906	2206
Disabled-Occupied	104	304	575	698	1681
Native American-Occupied	13	46	97	124	280
Children-Occupied	176	571	1145	1538	3430
High Energy Use	267	698	1190	1255	3410
High Energy Cost Burden	0	13	26	37	76
4. Other Unit Categories					
ReWeatherized	12	8	12	46	78
Low Cost / No Cost	0	1	1	2	4
TOTAL Other Units:	12	9	13	48	82
5. Total People Assisted with Grant Funds					
Elderly	216	466	904	1112	2698
Persons with Disabilities	121	359	681	873	2034
Native American	21	129	259	330	739
Children	380	1381	2761	3770	8292
TOTAL Occupants:	1065	3226	6331	8417	19039

State ARRA Completions / Demographics Report Run On: 8/23/2010 DOE Weatherization Assistant Version 8.6.0 Page 33 of 33

more than \$50,000 \$40,000 to \$50,000 Annual Income for ARRA Weatherized Households - Program Year 2009 Household Annual Income \$30,000 to \$40,000 \$20,000 to \$30,000 \$10,000 to \$20,000 less than \$10,000 40 35 30 25 20 15 10 ß 0 splodesuoh Percent of Weatherized

ATTACHMENT E - Annual Income for ARRA Weatherized Households - Program Year 2009

Geographic Area	Persons of Color	Women	Disabled	Veteran
Seven-County Metro				
* Total Hires - 689				
Hired	76	107	3	57
% of Total	11%	16%	0%	8%
Central MN				
** Total Hires - 87				
Hired	6	7	0	3
% of Total	7%	8%	0%	3%
Couthwest MN				
Southwest MN ** Total Hires - 155				
Hired	2	2	0	2
% of Total	7%	<u>-</u> 7%	0%	7%
<u>Southeast MN</u> Total Hires - 93				
Hired	3	22	1	5
% of Total	3%	24%	1%	5%
Northeast MN				
Total Hires - 288				
Hired	7	59	0	28
% of Total	2%	20%	0%	10%
Northwest MN				
Total Hires - 250				
Hired	35	36	3	36
% of Total	14%	14%	1%	14%

ATTACHMENT F - Weatherization Service Provider Actual Hiring Outcomes Employed April to August 2010

* The Total Hires number represents the total number of employees hired by the weatherization service providers and their contractors using ARRA stimulus funding. These numbers do not correspond to the full-time equivalents (FTE) referenced elsewhere, since the FTE calculations are based on the actual number of hours worked during the reporting quarter relative to the available hours during the quarter.

** Individual category hires were not provided by all weatherization service provider contractors. Percentages are based only on service providers that submitted complete data.

Male Employees B H AI/NN A/PI 3 0 2 2 Total Total Total Minority Total Total Total Minority Total Minority Hours M F Minority Total Inty 0 3 2,764 1,367 Inty 9 3 1,367 1,367	M 113 113 113 113 113 113 113 113	Female Employees B H Al/AN a Male; F Female Al/AN a Male; F Female Al/AN a Black; H Hispanic; Al/AN Amer ress Employees by Race and Gender Amer API W B Amer API M B Amer API M B Amer API M B Amer API M B Amer	A/PI	Windrity Windrity 54 10 53 10 54 10 59 10 59 10 7 7 7 4/American Native; A/ 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	tity Total rees Employees 172 Employees 172 122 172 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	s icific Islander; W = Total Mnonity Employees Emp 2 2 0 2 2 0 0 0 0 0 0 0 0 0 0 0	V = White Employees Total Hours 1 111 1 111 1 295 1 295 1 10 1 595 6 6.5 5 281.5 2 281		F Total Minority F Total Minority 97 0 320 200 63.75 0 10 1 10 0 35 0 0 0 0 0 0 0
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ATTACHMENT G Summary of Hiring Practices for Non-Weatherization ARRA Grants

Hiring Practices Totals

M = Male; F = Female B = Black; H = Hispanic; Al/AN = American Indian/American Native; A/PI = Asian/Pacific Islander; W = White

ATTACHMENT H - Training Courses

Training Course Name / Opportunity	Training Course Location	Training Course Provider	<u>Number</u> of Trainees - ARRA Funded
EPA Lead Renovator's Certification	Lakes and Pines, Mora MN 55051	Midwest Environmental Consulting	35
Energy Design Conference	Duluth, MN	MN Power	2
Auditor Training	Bemidji MN	Dunwoody	6
Motivational Interviewing	Lakes and Pines, Mora MN 55051	Susan Littrell	8
Supervisor Training	Lakes and Pines, Mora MN 55051	Total Development Concepts	8
Performance Evaluations	Lakes and Pines, Mora MN 55051	Soldo Consulting	8
Residential Contractors Continuing Ed(New Federal Lead Requirements	Worthington Travel Host	Kaplan Professional School	1
Excel Training EPA Renovation, Repair, & Painting Training	In House Sustainable Resources Center- Minneapolis, MN	Agency Personnel National Center for Healthy Housing	1
WX Multi Family Training	St Cloud Civic Center, St Cloud, MN	Wisconsin Division od Energy	1
Energy Auditor Course	Dunwoody College	Dunwoody	1
Energy Design Conference	Duluth Event and Convention Center	MN Power	9
Lead RRP Training	Marshall, MN	Midwest Environmental Consulting	2
Round Table Training	St. Cloud	State of MN	2
Advanced NEAT Training	Willmar	State of MN	3
Auditor training	Grand Rapids MN	KOOTASCA	4
ARRA Round Table	St Cloud, MN	State of MN	3
Auditor Certification Training/Test	St Paul, MN	Dunwoody Tech College	4
Best Practices Training	Grand Rapids, MN	Dunwoody Tech College	24
Testing Protocols and Performance Indicators	Civic Center St Cloud MN, February 25th 2010	State of Minnesota	2
Weatherization Assistant Basic Training	Willmar, MN	State staff	1
Auditor's Roundtable	St. Cloud, MN	State staff	2
Wa 101	Wilmar, MN	Mark McLaughlin	3
Lead safe practices / Certification	Alexandria, MN	Sustainable Resource Center	1
Energy auditor course	Minneapolis, MN	Dunwoody	1
Remodeling in Today's Economy	Detroit Lakes Holiday Inn	Kaplan Professional Schools	1
Advanced Weatherization Assistant	Heartland Community Action	Mark McLaughlin	2
Basic Weatherization Assistant	Heartland Community Action	Mark McLaughlin	1
EPA Renovation Training	Arrowwood Conference Center	Sustainable Resources Center	3
Emerging Leaders	St. Cloud	MINNCAP	1
NCAF Concerence	Washington, DC	various speakers	2
Energy Auditor Course	Dunwoody	Dunwoody	1
Auditor Round Table	St. Cloud	DOC	4
Auditor Training	St. Cloud	Auditor Staff	2
Partnership Opportunities	Maple Grove	Great River Energy	1
WA Software Training	Mora	Auditor Staff	2
Mechanical/CO training	Wadena Technical College	Bob Dwyer/Al Lindal	5
Advanced Auditor training	Northwest Technical College	Andy Imig	4
Web Mapping	Beltrami County	Jane Mueller	1
Microsoft Excell training	Beltrami County		1
Auditor Roundtable	St. Cloud	Mark Mclaughlin	1
Duluth Energy Design Conference	Civic Center Duluth MN	Minnesota Power and Light	2
Auditors Round Table	Civic Center St. Cloud MN	State of MN	1
From Ashes To Empire: Rehabbing Distressed Properties (Including Energy)	Kaplan Professional Schools	Kaplan Professional School	2

Training Course Name / Opportunity	Training Course Location	Training Course Provider	<u>Number</u> of Trainees - ARRA Funded
Lead Certifications Courses (4/14 - 5/7/10)	Sustainable Resources Center Minneapolis MN	Steven Johnson	5
EPA Renovation, Repair and Painting (RRP) Refresher	Sustainable Resources Center, Mpls, Mn	SRC	10
Energy Design Conference	Duluth Entertainment Convention Center, Duluth, MN	MN Power	1
Residential Energy Auditor Training	Dunwoody College of Technology, Mpls, MN	Dunwoody	1
Computer Classes for Support Staff EPA Renovation, Repair and Painting (RRP) Refresher	St. Paul Science Museum Association of General Contractors, Savage, MN	Science Museum Association of General Contractors	5
Duluth Energy Expo	DECC Duluth, Mn.	Mn Power	1
Energy Auditor Course	Minnkota Power, Grand Forks N.D.	Dunwoody	1
W.A. training, advanced	Heartland Com. Action Agency Inc.	Weatherization Training CO	2
Certified Energy Auditor Course	Dunwoody College of Technology	Dunwoody College of Technology	1
Mechanical Training	Wadena	MOES	4
Lead Renovator	Cosmos	Midwest Envirnmental	24
MWAG	St. Cloud	MWAG	1
Auditors Roundtable	St. Cloud	MOES	4
Auditor Roundtable	St. Cloud Civic Center	DOC	4
Contractor Continuing Education	St Cloud Civic Center	Central MN Builders Assoc.	1
Contractor Continuing Education	Alexandria, MN	Kaplan	1
Auditor Certification Course	Minneapolis	Dunwoody	5
Tri-CAP ARRA Contractor Update	St. Cloud Public Library	Tri-CAP	18
WA Advanced Training	Heartland Community Action	DOCMark M.	3
WA Basic Training	Heartland Community Action	DOCMark M.	1
MWAGS	St. Cloud		1
Lead Renovator Training	St. Cloud	Midwest Environmental Services	6
Contractor Code Training (License Renewal)	Granite Falls	City officials-Montevide/Granite	1
Duluth Energy & Design Expo	Duluth MN.	Duluth Energy & Design Expo	3
ACI	Austin, MN	Affordable Comfort	2
Duluth Energy & Design Expo	Duluth MN.	Duluth Energy & Design Expo	3
Air Duct Sizing	Wadena Technical College, Wadena, MN	Minnesota State Community Technical College	1
AREA Training	TCC Offices, Little Falls MN	Dunwoody	6
Diagnostic Test Trainng	St Cloud Civic Center	State Office	3
Diagnostic Test Trainng	Anoka Client House	Brian Foust	9
Energy Design Conference	DECC in Duluth	Mn Power	2
Weatherization Assistant Advanced Training	Heartland Community Action, Willmar	Mark McLaughlin	1
Davis Bacon	CA of MpIs	State Energy office	6
Mechanical Contractors	CA of MpIs	CA of MpIs	40
Weatherization Contractors	CA of MpIs	CA of Mpls	30
Energy Auditor	St Cloud	State Energy office	4
Adult/Child CPR, Blood Borne Pathogens, Back Injury Prevention	Rushford, MN	American Red Cross, Winona County Chapter	26
Auditor Roundtable	St. Cloud, MN	OES	3
Energy Auditor Course	NW Technical College Bemidji Mn	Dunwoody	7
Lead renovator training	Hibbing MN	UND Environmental Training Institute	30
Mechanical Training	MPLS MN	COSA	8

Training Course Name / Opportunity	Training Course Location	Training Course Provider	<u>Number</u> <u>of</u> <u>Trainees -</u> <u>ARRA</u> <u>Funded</u>
Mechanical Training	Wadena MN	COSA	6
Lead renovator training	Hermantown MN	Arrowhead builders Assoc	30
Energy Auditor Course(advanced)	MPLS MN	Dunwoody	3
Safety Training/Sensitivity	Duluth MN	MCIT	34
Building Inspection Certification	St. Paul MN	State of Mn	1
Duluth Energy Design Conference and Expo	Duluth	Minnesota Power	5
Certified Lead-Based Paint Renovator	Arrowwood Conference Center Alexandria, MN	Sustainable Resources Center, Inc/National Center for Healthy Housing	4
Advanced Weatherization Assistant Software Training	Heartland Community Action Willmar, MN	Department of Commerce	1
Energy Auditor Course	Bemidji	Dunwoody Auditor Course	2
TRAINING TOTAL FOR WEATHERIZATI	ON THROUGH MARCH 2010 = 544 TRAIN	ES	
Lead Training	Sustainable Resource Center	Sustainable Resource Center	3
State Weatherization Conference	Brainerd, MN	MWAG, State of MN	20
Affordable Comfort Conference	Austin, TX	Affordable Comfort	4
Dense Packing Methods	St. Paul, MN	Keith Williams	40
ADOBE PDF Training	Science Museum, St. Paul	Science Museum	3
Outlook 2007/Windows 2007	St. Paul, MN	Community Action IT Dept.	11
ACCESS Database VBA	St. Paul, MN	Science Museum	1
Auditor training	Grand Rapids MN	KOOTASCA	4
ARRA Round Table	St Cloud, MN	DOC	3
Auditor Certification Training/Test	St Paul, MN	Dunwoody Tech College	4
Best Practices Training	Grand Rapids, MN	Dunwoody Tech College	24
State Energy Conference	Brainerd, MN	State Energy Conference	10
Auditor Round Table	St Cloud, MN	DOC	2
MWAGS	St Cloud, MN	CAPS-DOC	1
MWAGS	St Cloud, MN	CAPS-DOC	1
MWAGS	St Cloud, MN	CAPS-DOC	1
Duluth Energy Expo	DECC Duluth, MN	Mn Power	1
Energy Auditor Course	Minnkota Power, Grand Forks ND	Dunwoody	1
W.A. training, advanced	Heartland Com. Action Agency Inc.	Weatherization Training CO	2
Installer Training	Red Lake weatherization Agency	Dunwoody	5
Installer Training	Red Lake weatherization Agency	Ks Kimbal	4
Installer Training	State Energy Conference Brainerd	Weatherization Training CO	2
Lead Renovator Training & Certification	University of North Dakota	University of North Dakota	2
General WX Audit Peer Training	On site/in field White Earth Reservation CAP office	State of Minnesota Monitor	2
General Furnace Testing & Training	On Site/In Field Red Lake Reservation CAP office	Ken Kimball Consulting	2
Auditor Round Table General Auditing Best Prac.	St Cloud Civic Center	State of Minnesota Trainer	1
Infrared Thermography	State WX Conference	Snell	1
General WX Auditor Training	State WX Conference	Minnesota Dept of Commerce	3
MN WX Advisory Group	CAP office St Cloud	Minnesota Dept of Commerce	1
Emerging Leaders Training	MCIT Building	MN CAP	1
Weatherization Assistant Training	Tri-CAP, Little Falls	Dept. of Commerce	2
Infrared Training	State Energy Conference Brainerd	Snell	1
MN State Energy Conference	State Energy Conference Brainerd	Various presenters	4

Training Course Name / Opportunity	Training Course Location	Training Course Provider	<u>Number</u> of Trainees - <u>ARRA</u> Funded
MN Energy Conference	State Energy Conference Brainerd	Matt Schwoegler	2
MN Energy Conference	State Energy Conference Brainerd	John Tooley	6
MN Energy Conference	State Energy Conference Brainerd	Paul Morin	2
MN Energy Conference	State Energy Conference Brainerd	Rick Karg	3
MN Energy Conference	State Energy Conference Brainerd	Dick & Kevin Gruber	4
MN Energy Conference	State Energy Conference Brainerd	Mac Pearce	3
Annual Weatherization Contractor Meeting	Arrowwood Conference Center	C Trost, Agency staff	15
Dept of Commerce visit	St Paul, MN	Agency staff	4
Weatherzation monitor	Moorhead MN	B Dixon	2
Minnesota Weatherization Advisory Group	St Cloud MN	Statewide Coordinators	3
Auditor Roundtable	St Cloud MN	M McLaughlin	1
MWAG (April)	St. Cloud	OES	1
MWAG (May)	St. Cloud	OES	1
MWAG (June)	St. Cloud	OES	2
MWAG (July)	Duluth	OES	2
Affordable Comfort Conference (April)	Austin, TX	Affordable Comfort	3
Multi-Unit Audit Training (June)	Mankato	DOC	3
EPA Lead Renovator Training (June)	Mankato	Midwest Environmental Consulting	8
Auditor Roundtable (July)	St. Cloud	OES	5
State Energy Conference (August)	Brainerd	OES	4
Lead Firm Application	Lead Renovator	UND	1
CAMIS	Brainard	OEO	2
MN Energy Confrence	Baxter	DOC	4
		UND	7
Lead Renovator Training	Grand Forks, ND		
Energy Auditor Training Course Minnesota State Energy Conference	Dunwoody, Minneapolis, MN State Energy Conference Brainerd	Dunwoody MWAGS/MN Dept of Commerce/CIP's	1
Energy Auditor Training - Audit Assists	Tri-CAP - Waite Park, Mn	Tri-CAP	11
Safety Training	St Paul, MN	Minnesota Safety Council	1
Lead EPA Certified Renovator	St Cloud, MN	Midwest Environmental Consulting	4
Minnesota Energy Conference	Brainerd, MN	Various	12
Infrared Camera Training	Brainerd, MN	The Snell Group	3
Agency Wide Training	St Cloud, MN	Various	8
Management Team Training	Avon, MN	Tri-CAP	1
MNCAP Conference	Brainerd, MN	Various	1
MWAGS	Duluth, MN	Various	1
IR Infrared Course	CA of Mpls	Snell Thermograph	2
Weatherization Assistant Advanced Course	SRC Mpls	State Staff/Mark McLaughlin	2
Back Drafting	Client Home Fridley	Brian Foust	7
Multi-Webnar	Web	State Staff	2
Auditor RoundTable	St Cloud Civic Center	State Staff	3
Mn Energy Conference	Brainerd MN	Mn Energy Conference	10
Minnesota State Energy Conference	Brainerd, MN	MN Commerce Department	11
Certified Lead-Based Paint Renovator	Arrowwood Conference Center Alexandria, MN	Sustainable Resources Center, Inc/National Center for Healthy Housing	4
Advanced Weatherization Assistant Software Training	Heartland Community Action Willmar, MN	Department of Commerce	1
MN State Energy Conference	State Energy Conference Brainerd	MN State Energy Providers	2

Training Course Name / Opportunity	Training Course Location	Training Course Provider	Number of Trainees - ARRA Funded
Minnesota Weatherization Conference- SRC staff	MN Weatherizaton Confernece - Brainerd	MN weatherization programs	15
Minnesota Weatherization Conference- SRC contractors	MN Weatherizaton Confernece - Brainerd	MN weatherization programs	12
2010 Affordable Comfort Conference-SRC staff	Austin, TX	ACI	10
Mechanical/CO training	Wadena Technical College	Bob Dwyer/Al Lindal	5
Advanced Auditor training	Northwest Technical College, Bemidji	Andy Imig	4
Web Mapping	Beltrami County	Jane Mueller	1
Microsoft Excel training	Beltrami County		1
Auditor Roundtable	St. Cloud	Mark McLaughlin	1
MN State Energy Conference	Brainerd	State trainers	6
IR Thermograph	Brainerd	Snell	2
Mechanical/CO training for Contractors	Bemidji	Ks Kimball	15
Weatherization Training for Contractors	Northwest Technical College, Bemidji	Dunwoody	8
Basic Weatherization Assistance Training	Little Falls	Mark McLaughlin	1
Advance Weatherization Assistance Training	Little Falls	Mark McLaughlin	1
Residential Energy Auditor Training	Dunwoody College of Technology, Minneapolis, MN		5
Mechanical Contractor Training	Rochester, MN	Ken Kimball	95
Advanced WA Training	MVAC, Mankato, MN	Mark McLaughlin	3
ACI Home Performance Conference	Austin, TX	Affordable Comfort	8
MN State Energy Conference	Brainerd, MN		25
Snell INFRA RED Training-(4-15 AND 4- 16)	Community Action of Mpls	Snell Corp	12
MECHANICAL TRAINING (4-1-10)	Community Action of Mpls	CA OF Mpls	16
CONTRACTOR TRAINING MEETING (4- 2-10)	Community Action of Mpls	CA OF Mpls	15
TECHNOLOGY MEETING (5-18-10	Community Action of Mpls	CA OF Mpls	4
ENERGY CONFERENCE (8-4-10 TO 8-6- 10)	State Energy Conference Brainerd	MWAG	5
LEADSAFE TRAINING (8-16-10)	Community Action of Mpls	CA OF Mpls	10
MN Energy Programs Conference	State Energy Conference Brainerd	Conference presenters	1
Lead Risk Assessor Refresher	Midwest Environmental Consulting, Cambridge MN	Midwest Environmental Consulting	5
Microsoft Office EXCEL 2007	Pine Technical College, Pine City MN	Pine Technical College	17
Microsoft Office Word 2007	Pine Technical College, Pine City MN	Pine Technical College	17
Affordable Comfort Home Performance Conf	Austin TX	Affordable Comfort, Inc.	4
Weatherization Assistant Training	Mora MN	MN Dept of Commerce	17
Auditor Round Table VENTILATION / COMBUSTION	St Cloud MN	MN Dept of Commerce	2
SPILLAGE	Minneapolis MN	MN Building Performance Assoc	1
MN State Energy Conference	Brainerd MN	MN WX Advisory Group	34

		Weatherization Training Total	1275
Webinar - lenders	In-house	MN Housing Staff	142
Classroom - lenders	In-house	MN Housing Staff	21

Vinnesota Success Stories: <u>Project ReEnergize is model program</u>

Brenda Miller Residence

Location: Shorewood Energy improvements: air sealing, insulation, windows Contractor: DB Raskob Construction, Maple Plain

Energy efficiency rebates delight homeowners, contractors alike

Project ReEnergize, Minnesota's energy efficiency rebate program designed to save homeowners energy and money and create jobs in the residential construction industry, was so successful that it's been called a model for other proposed federal stimulus projects, including the Home Star program.

"I don't think I have ever seen a government-generated program that has directly assisted the building industry as Project ReEnergize has," said Pam Perri Weaver, president of the Builders Association of Minnesota (BAM). "Project ReEnergize created an environment where consumers wanted to spend money. Consumer confidence soared with the help of Project ReEnergize."

Project ReEnergize was the \$3 million program funded by the American Recovery and Reinvestment Act of 2009 and administered by BAM on behalf of the Minnesota Department of Commerce's State Energy Program (SEP). The program, which launched in the fall of 2009 with a half-day training for qualified licensed contractors, issued average rebates of \$2,200 to about 1,200 homeowners. The average cost per home improvement project was \$13,700. The program was so popular that rebates were fully committed by March 2010.

Energy efficiency measures eligible for rebate included replacement ENERGY STAR windows without attic air sealing (\$250 per window) and with attic sealing (\$300 per window), advanced air sealing of attics (\$800), exterior wall insulation (\$800), and replacing orphaned atmospherically vented water heaters (\$750). Maximum rebate was \$4,000 per home, or \$4,750 if replacing an orphaned water heater.

Construction field gets boost

"We found that for every \$1 in rebate money issued by Project ReEnergize, consumers spent \$5 upgrading their homes with energy efficient improvements and other upgrades," Perri Weaver said. "Project ReEnergize was a consumer-based program, one in which government looked to the private market to create construction jobs and encourage homeowners to upgrade their homes."

Contractors agree that the program gave a boost to their business, but they are anxious for more programs like Project ReEnergize. Eligible contractors were limited to two rebate packages each.

"I got two (rebate) packages, but I could have sold 20," said David Raskob of DB Raskob Construction in Maple Plain, Minn. "Many clients with limited funds were on the fence about doing work, but when Project ReEnergize came around they said, 'Let's do it.' Many others are still waiting for new incentives."

One of Raskob's rebate jobs went to Brenda Miller, a single mother from Shorewood, Minn., who had her attic air sealed, insulation blown in (20 inches R-44), and 12 windows replaced. Miller's home improvements cost \$10,200, but with a \$4,000 rebate she paid only \$6,200. "I did it because of the discount," she said. "I couldn't afford it otherwise. And now I look forward to significant savings on my heating bill next winter."

"Brenda's home needed the work badly," said Raskob. "It was heart warming to be able to make it happen for her."

Contractor David Raskob describes to Brenda Miller the air sealing that was done around a light fixture in her home.



Rebates spur additional construction

Project ReEnergize propelled some rebate recipients to proceed with additional home improvement work, according to contractor Shawn Nelson of New Spaces in Burnsville. For instance, one of Nelson's Project ReEnergize clients in Eagan received attic air sealing, insulation, eight new windows for the upper level, and a new water heater. The client's rebate of \$4,750 convinced the family to go ahead on a kitchen remodel.

"We had a lot of people interested in Project ReEnergize," said Nelson. "But a lot did not move forward when they couldn't get the rebate. I'd love to see more funding—I've got a long list of people waiting."



One of the dozen windows that were replaced in Brenda Miller's home as a result of a Project ReEnergize rebate.

Said Jim Barrato of Baratto Brothers Construction in Cross Lake, Minn.: "Project ReEnergize was money well spent. It made homes more energy efficient and it put people to work. However, in my opinion, it should be done on a much larger scale. If the country could spend a few billion dollars on this, it would have a huge economic impact.

"Project ReEnergize gave a great boost to our industry as a whole," added Baratto, "because it got so many different people involved—insulators, painters, HVAC installers, inspectors, manufacturers and more. It was a great idea and neat that it came from Minnesota. BAM worked hard on this and made the most of the funds it received."

Creating 'a smarter workforce'

Project ReEnergize effectively forged a partnership between contractors and consumers, said Perri Weaver. "We trained a whole group of (Minnesota-based) contractors with the intent of assisting homeowners to determine if they qualify for rebates or Fix-Up Fund home improvement loans. In essence, the training has created a smarter workforce. Project ReEnergize has become a stepping stone for working with government to improve energy efficiency and stimulate the home retrofit market."

To learn more...

For more information on BAM, call 1-800-654-7783 or visit its website at www.bamn.org. For information on energy-efficient home improvements and incentives, visit the Office Energy of Security (OES) website at www.energy.mn.gov or contact OES at 800-657-3710 or energy. info@state.mn.us.

Minnesota Success Stories creating jobs · saving energy



Vinnesota Success Stories: <u>Energy Saver rebate program</u>

The Wright Residence

Location: Twin City suburb

Energy improvements: High efficiency furnace, central air conditioner, and water heater; air sealing; attic insulation; CFLs

Funding: State Energy Program, Minnesota Housing, and the Neighborhood Energy Connection

Contractors: Thermal Boundary East, Stillwater, and Four Seasons Air Specialists, Inc., White Bear Lake



Contractor David Jackson of Thermal Boundary East explains to Richard Wright how the spaces above and below the bay window were air sealed and insulated.

NEC, rebates, other incentives pave way for energyefficient home improvements

Richard Wright and his wife started with the idea of replacing their more than 20-year-old water heater, but they found the time was right to do much more. When all was complete, their 1950's rambler home had received a thorough energy-efficient makeover: a new 95 percent AFUE furnace, central air conditioner with a SEER rating of 16, a high efficiency water heater, air sealing, attic insulation, and CFLs.

The timing was perfect for the Wrights, thanks to a low-interest Fix-Up Fund home improvement loan from Minnesota Housing coupled with the Energy Saver Rebate Program. Richard Wright learned of the handsome financing opportunity through the Neighborhood Energy Connection (NEC), a nonprofit organization that promotes residential energy improvements by providing financing to homeowners. After an Xcel Energy home performance evaluation helped determine his home's broader needs, it was a no-brainer. Wright did his homework, qualified for the Fix-Up Fund loan, got bids from several contractors, had the work done, and with NEC's help, he applied for rebates.

The total project cost was \$12,723—about \$10,000 for the furnace, AC, and water heater and about \$2,500 for air sealing and attic insulation. He received an Energy Saver rebate of \$4,223, and once he receives a \$1,000 Xcel Energy rebate and a \$1,500 federal tax credit, his net cost for the project will be \$6,000.

1,400 receive Energy Saver rebate

The Wrights were among 1,400 homeowners in Minnesota who benefited from the Energy Saver rebate, a program for homeowners made available through a grant from the U.S. Department of Energy and the Minnesota Department of Commerce, Office of Energy Security (OES). The funds were provided by the American Recovery and Reinvestment Act of 2009, the federal stimulus package designed to save energy and create jobs. The Energy Saver Rebate Program, administered by Minnesota Housing on behalf of OES's State Energy Program, launched in December 2009. By late March 2010, all funds for the \$5.7 million program had been committed.

Jeanette Blankenship, housing policy specialist for Minnesota Housing, reports that \$16 million in Fix-Up Fund loans have closed, with an average loan of \$11,500 and

an average rebate of \$3,500. To receive the rebate, work had to be performed by a contractor and completed within 120 days of the loan closing. All work had to be financed by the Fix-Up Fund loan.

Wright had heard through his church about NEC. He connected with NEC and NEC paved the way for the Wrights, a retired couple, to get the work done. The loan and rebate, combined with other incentives, made for the "perfect storm," said Leanne Karras, NEC loan program manager who assisted the Wrights. "The Wrights needed a lot of energy improvements, and the incentives were there."

"Our furnace was old like our water heater, our AC wasn't working well, we had drafts—we were losing heat, and we needed insulation," Wright said. "We needed a lot of work."

The work, completed in January 2010, resulted in a much tighter, energy-efficient home that showed immediate energy savings. Air sealing (especially around recessed lights and the chimney) and new R-50 attic insulation along with new high efficiency mechanical upgrades helped trim the Wrights' gas bill by about 30 percent, said Wright. "We noticed the difference right away," he said. "We couldn't be more pleased with how well it all came together."



Creating or sustaining jobs

In addition to energy savings, the Energy Saver Rebate Program helped sustain or create jobs for construction crews, mechanical workers, workers who manufacture energy products, and support staff, including those administering Energy Saver. For instance, for the three-month period of March through May 2010, construction and mechanical workers

NEC loan program manager Leanne Karras and homeowner Richard Wright inspect the Wright's new 95% efficient gas furnace and high efficiency gas water heater. put in about 20,000 hours of labor on 716 Energy Saver projects. That equates to 38 full-time equivalent jobs.

"Energy Saver produced phenomenal response," said Chris Duffrin, executive director of NEC. "It got many people who had been on the fence about energy efficiency work to make all kinds of improvements. We've never seen this level of demand.

"Compared to some energy efficient programs that are more technology based, Energy Saver was very labor intensive and *Minnesota* labor intensive," said Duffrin. "This type of work was not going to be farmed out to out-of-state workers. Minnesota really got great bang for the buck on this program."

To qualify for the rebate, homeowners needed to find a lender that originated Fix-Up Fund loans and was trained to administer the Energy Saver Rebate Program. In the case of the Wrights, the lender was NEC. To qualify for a Fix-Up Fund loan, the gross household income has to be at or below \$96,600 and the property (single family homes, duplexes, triplexes or four-plexes) needs to be owner-occupied.

Although Energy Saver funding has ended, Duffrin said there are many good lending and incentive programs for homeowners who want to pursue energy-saving home improvements. Minnesota Housing's Fix-Up Fund loan is a great funding option, and many local utilities are offering rebates for energy-efficient upgrades. Also, a federal tax credit extended through 2010 can be taken for up to 30 percent of the purchase and installation costs (up to \$1,500) for qualifying energy-saving home improvements.

"With the energy efficiency and rebates I received, I can't tell you how impressed I am with NEC and the process," said Wright. "Energy Saver was great for us, and I know it's helped a lot of businesses and put a lot of people to work. It's a win-win."

For more information...

...on Minnesota Housing, visit www.mnhousing.gov or call 651-296-8215 or 800-710-8871. For more on NEC, visit www.thenec.org or call 651-221-4462. For information on energy-

efficient home improvements, visit the Office of Energy Security website at www.energy.mn.gov or contact the office at 800-657-3710 or 651-296-5175 or energy.info@state. mn.us.





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Vinnesota Success Stories: <u>Solar Pioneer Touts Conservation</u>

Ross/Coleman Residence

Location: North Minneapolis

System type: Solar electric, 1.2 kW, UniSolar solar shingles with a Sunnyboy inverter; Solar thermal, two 4x8' collector panels (64 square feet), with an 80-gallon storage tank

State Solar Rebate: \$2,448

Solar pioneer touts conservation, not financial gain

For Brian Ross there's much more to solar power than the financial payback.

"If we're talking about payback, we're probably talking two or three decades for me," said Brian Ross. "I didn't do this for the financial benefits."

Rather, Ross said he installed separate solar electric and solar thermal systems in his north Minneapolis home/business more than six years ago "to be environmentally friendly, to watch my carbon footprint." The price and financial incentives for residential solar systems then were not as attractive as they are today. (He was, however, among the first to receive a state solar rebate of nearly \$2,450.) But that didn't stop him from launching a 1.2 kW solar electric system, one of the first to be supported in part by the Minnesota Solar Electric Rebate Program.

"When I first put up the PV [photovoltaic] system, I remember sitting there on a sunny day in May, pondering my investment," said Ross. "I had just sunk a lot of money into this [a net \$7,000] and I was wondering, 'Did I do the right thing?' I was having a little post-installation letdown and second-guessing myself. And then I walked over to the electric meter and saw it spinning backward; my solar shingles were producing more energy than I was using, and I was putting clean energy on the grid. That moment crystallized everything; my system was worth every penny."

Ross hasn't questioned himself ever since.

Solar electricity

Solar shingles on his garage serve a dual purpose of electricity generation and roofing shingles. They have produced about 1,100 kWh per year for the last six years, providing about 20 to 25 percent of the electric power needed for the home. He purchases wind power from his utility company's green pricing program for the remainder of the home's electric needs.

Solar hot water

Two 4- by 8-foot solar thermal collectors, mounted on the south-facing side of the home's roof, are part of a closed-loop glycol thermal system that provides about 75 percent of the household's hot water needs. The collectors supply hot water to an 80-gallon storage tank which feeds preheated water to a 24-gallon indirect water heater that runs off his high-efficiency boiler. During the summer, the solar thermal system provides nearly all of the household's hot water needs, while in the winter, the system relies more on natural gas to heat water.



Solar shingles on the garage have produced about 1,100 kWh per year for the last six years, providing 20 to 25 percent of the electric power needed for the home.

Ross said the motivation to implement his solar system was part "technical fascination" and part energy conservation, but there were additional features. "It certainly removes the uncertainty of gas and electric prices," he said. "With solar, the fuel is free and it's never going to run out. Also, a solar system increases the value of my home and makes it almost energy-independent. I can put energy generated that we don't use back on the grid and the utility pays me [in our net metered system]."

Ross is clearly an "early adopter" of solar energy and a huge advocate of renewable energy. He is an urban planner who provides energy policy consultation for local governments, nonprofit organizations, and government agencies. He's also the coordinator of the Minneapolis-St. Paul Solar America Cities Program.

Ross has made other energy-efficient improvements to his home, including the installation of a high-efficiency sealed combustion boiler that also supplies an indirect water heater, ENERGY STAR appliances, and lighting that was completely converted to compact fluorescent and LED. But he's not calculating financial payback.

"When you talk about solar, it seems people want to talk about payback, yet rarely does anyone talk about payback for other major purchases," he said. "To the naysayers I say: I'm already there—I've gotten my payback."

To learn more...

Minnesota offers a solar rebate program for both solar electric and solar thermal installations. Funds are limited and program details may change. In addition, there is currently a 30% federal tax credit for qualifying solar installations. Many utility companies also offer rebates and incentives for solar installations.

For a complete listing of all available government and utility incentives, visit the Database of State Incentives for Renewables and Efficiency: www.dsireusa.org

ith solar, the fuel is free and it's never going to run out. Also, a solar system increases the value of my home and makes it almost energy-independent. I can put energy generated that we don't use back on the grid and the utility pays me. —Brian Ross



Two 4- by 8-foot solar thermal collectors are part of a closed-loop glycol thermal system that provides energy for about 75 percent of the household's hot water needs.

Minnesota Success Stories creating jobs · saving energy



Vinnesota Success Stories: <u>Solar Hot Water for Apartments</u>

The Wellstone Apartments

Location: Minneapolis

System type: Solar thermal, 24 Solar Skies NSC40 collector panels (960 square feet) with two 505 gallon Niles B-42-093 storage tanks State Solar Rebate: \$10,000

Minneapolis' Wellstone Apartments goes solar

The Wellstone Apartments on Franklin Avenue in south Minneapolis is doing its part to help Minnesota reduce greenhouse gas emissions. The Wellstone Apartments, a new 49-unit affordable housing development that was completed in December 2008, offers a range of green and sustainable features, including a solar hot water system that provides energy for most of the building's hot water needs.

"Discussion and planning for the Wellstone hot water system started in 2005 and was part of our early design and construction planning," said Marcia Cartwright, real estate manager for Hope Community, Inc., co-developer with Aeon for The Wellstone Apartments. "Our goals were to reduce the building's overall energy costs and consumption and to serve as a demonstration project, especially for larger commercial and multifamily developments."

Exceeding system expectations

The solar thermal system was designed to meet about 50 percent of The Wellstone's hot water needs, said Cartwright. "However, it appears that the system is exceeding expectations and meeting 60 percent of our hot water needs. It is working well, and we're delighted to be tapping a clean energy source."

The solar thermal system, designed by Craig Tarr, PE, of Energy Concepts in Hudson, Wisconsin, uses 24 4- x 10-foot Solar Skies solar collector panels mounted on the roof of the four-story building. The location is excellent to tap solar energy, with a clear path to the sun. A closed-loop glycol system is employed, and the system includes two 505-gallon storage tanks. A conventional natural gas-fueled backup system with three storage tanks provides for the remainder of the building's hot water needs.

The cost for the solar thermal system was about \$125,000; a \$10,000 Minnesota Solar Hot Water Rebate helped defray the costs. The system is projected to pay for itself in 7-9 years.



The solar thermal system for The Wellstone Apartments is exceeding expectations and meeting about 60 percent of the building's hot water needs. (Photo by Bruce Silcox Photography)

Tarr notes that solar thermal used for domestic water heating in buildings with a consistent daily hot water demand—such as The Wellstone—is one of the best renewable energy investments (especially when energy costs are high). Multifamily housing, nursing homes, and hospitals are high-value applications of solar water heating as well. However, judging projects solely on return on investment betrays the overall value and understanding of renewable energy. The Wellstone project displays leadership in contributing to a healthier, more stable environment and helps our nation realize energy independence and less reliance on fossil fuel consumption, said Tarr.

Saving energy, reducing CO2

Given that The Wellstone building has been fully occupied for only six months, the estimated annual fuel savings and reduced carbon emissions are not available. But Tarr said the amounts will represent a significant savings to the environment. Also, it's too early to estimate tenants' savings in decreased water heating bills, said Cartwright. "We are seeking utility releases from our tenants so we can access tenant accounts and start tracking and measuring utility costs and potential savings." BTU energy meters were installed recently and will provide data to help measure the percentage of solar contribution to the building's overall domestic water heating requirements.

The Wellstone development is a Minnesota Green Communities award winner, and has other energy efficient features such as ENERGY STAR appliances (including front-loading clothes washers), efficient lighting, and energy-efficient heating and cooling systems. Construction field testing and verifications were performed by Minneapolis-based Center for Energy and Environment and included air tightness via blower door testing, duct leakage via duct blaster, pressure balancing, and measuring outside air intake. These tests were part of commissioning the building and ensured that The Wellstone was built as designed. Post-construction testing and verifications were also performed. Testing services were part of a national pilot program coordinated by Enterprise and the national Green Communities Initiative.

Alternative energy investments make more economic sense today than in the past, especially for larger commercial projects, said Cartwright. The Wellstone Apartments was not able to take advantage of tax credits for its solar thermal system, but a federal Renewable Energy Tax Credit of 30 percent can be applied to the cost of residential or business solar thermal systems installed between Jan. 1, 2009 and Dec. 31, 2016. Cartwright added that government and utility incentives for solar thermal and other renewable energy technologies are more plentiful now, making them more cost-effective.

he solar thermal system was designed to meet about 50 percent of The Wellstone's hot water needs. However, it appears that the system is exceeding expectations and meeting 60 percent of our hot water needs. It is working well, and we're delighted to be tapping a clean energy source. —Marcia Cartwright

To learn more...

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For more information about the Office of Energy Security: www.energy.mn.gov.

Minnesota Success Stories creating jobs · saving energy



0310

Vinnesota Success Stories: Jobs + Saving Energy = Success

St. Paul Residence

Weatherization Improvements: Attic and sidewall insulation, airsealing, weather stripping

Weatherization Service Provider: Community Action Partnership of Ramsey and Washington Counties

Working to weatherize homes

Daniel Orchard, an apprentice carpenter from South St. Paul, is one of many who can say the federal stimulus money for the low income weatherization program is hitting the mark: creating good jobs with benefits while improving energy efficiency in people's homes. Orchard has been working on homes that qualify for the state's



Daniel Orchard fills a blowing machine with cellulose insulation that is being dense-packed into the walls of a client's home in St. Paul.

Weatherization Assistance Program (WAP). WAP provides low-income homeowners and renters with services such as energy education, energy audits, exterior wall and attic insulation, and air leak sealing. The program also does specific safety testing as well as repairs and replacement of mechanical equipment.

"I probably would not be working today if not for the stimulus funding," said Orchard, who weatherizes homes for the Community Action Partnership of Ramsey and Washington Counties (CAPRW). "I was out of work for five months before the union called me in May



about this job. I'm very grateful for the work."

ARRA has provided a much-needed hiring boost to the depressed building and trades fields, said Jeff Fjeld, a journeyman carpenter and WAP crew leader for CAPRW. "There are so many carpenters who are laid off. I wish there was even more stimulus money."

More weatherized homes

The weatherization program has existed for more than 30 years, providing about 4,000 Minnesota households per year with services totaling about \$10 million. But in March 2009, the Office of Energy Security in Minnesota received \$131.9 million in federal funding for WAP from the American Recovery and Reinvestment Act (ARRA). The stimulus money (spread out over 18 months) represents a tenfold increase in weatherization program funding for Minnesota.

Marilou Cheple, Weatherization Supervisor in the Office of Energy Security for the state, explained that the program will be able to serve over 10,000 households this year. She stressed that the dramatically increased number is from combining both the regular Department of Energy funding that comes to Minnesota each year, along with this year's ARRA stimulus money—plus private sector resources from both gas and electric utilities.

Jobs across the state

Cheple also said over 340 new green jobs have been created thus far in Minnesota from the ARRA funding.

"We weatherized 343 low income homes during the past fiscal year," says CAPRW Director Cindy Webster."We will serve over four times that many homes this year." That translates into many new jobs, including carpenters, auditors, and office staff—more than double (38) from the previous year. What's more, the agency subcontracts some work to private contractors, which keeps additional weatherization contractors and workers employed. Similarly, other weatherization service providers across the state have greatly increased their weatherization work force—and contracted workers—to ramp up weatherization services.

Lower energy bills, more smiling faces

The ARRA funding has provided employment to those charged with overseeing and administering the program, as well. Weatherization energy auditors and agency



Florenda Cox explains program benefits to clients and schedules visits with weatherization auditors and crews. She is one of the new hires at CAPRW as a result of ARRA funding.

support staff count themselves among the benefactors of the stimulus funding.

Florenda Cox, energy conservation associate for CAPRW, was hired in August after working part-time: "My job is to help people understand how they can benefit from our program and to schedule their energy audits," she said. "It's a wonderful program for the community, it helps people afford energy upgrades. It's gratifying to know I can put a smile on someone's face, helping them lower their energy bills."



Joy Graf was unemployed for five months before accepting the position of support services supervisor at CAPRW.

Joy Graf is support services C, supervisor at CAPRW. She was laid off and did not work for

five months before accepting her new job last May. "You hear on the news about all the people who have lost their jobs," she said, "and some question the impact of the stimulus funding—they say it's not helping. Well, we've hired 15 new people since I arrived, and most of those people had been out of work."

The stimulus funding for the Weatherization Assistance Program is a "win-win" situation. It is doing what it set out to do: putting people to work, making lasting improvements and conserving energy in people's homes—year after year.

To Learn More...

For information about Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710. Minnesota Success Stories creating jobs · saving energy



0310

Weatherization Lowers Heat Costs

Gretchen & Louis Wilson Residence

Location: Minneapolis

Weatherization Improvements: High efficiency furnace, attic insulation, air-sealing, weather stripping, ventilation fan Weatherization Service Provider: Community Action of Minneapolis

Minneapolis couple's heat costs reduced through state's Weatherization Program

When Eric Boyd arrived to inspect the weatherization work conducted on a north Minneapolis home, he was overwhelmed by the reception.

"The homeowners greeted us with a big hug," said Boyd, a weatherization monitor for the state's Weatherization Assistance Program. "They were tremendously grateful and said it was one of the greatest things to ever happen to them."

Boyd was recounting his visit in January to the Gretchen and Louis Wilson home. The Wilsons were all smiles because they had recently received a new high-efficiency furnace and significant energy upgrades to their 1950's rambler-style home. All told, they received more than \$7,000 in energy-efficient improvements, thanks to the Weatherization Program. What's more, they were beaming about their latest utility bill from CenterPoint Energy; it showed a \$232 credit from the savings.

"We couldn't believe it when we saw our bill," said Gretchen Wilson, a veteran on disability who lives on a fixed income with her husband. "We have been toasty warm this winter—no drafts, no icy windows—thanks to the weatherization work of Jack (Bethke) and his weatherization crew. What a great program! We've been telling everyone about it—friends, neighbors and fellow parishioners. We could never have afforded the work that was done."

Gretchen Wilson heard about Weatherization Assistance, a program that increases energy efficiency for low-income households, through a VISTA contact at the Veteran's Hospital. She applied first for Energy Assistance to help with their high energy bills. Over 160,000 Minnesota households get some financial assistance with their fuel bills each year. Energy Assistance, through Community Action of Minneapolis (CAMPLS), referred Gretchen to the Weatherization Program because the family had a disability status and was struggling with high heating costs.



Louis and Gretchen Wilson (right) were most grateful to Jack Bethke (left) and Community Action of Minneapolis for their new high-efficiency furnace and other energy-saving improvements made to their home.

Dangerous CO levels discovered

The energy auditor assigned to assess the Wilson home took one look at the couple's energy bills and knew immediately that something was terribly wrong. The gas bill was about twice as high as it should have been for a house its size.

When assessing the home's energy needs and doing safety tests, Minneapolis weatherization auditor, Juan Palacios, immediately "red tagged" the Wilson's furnace as unsafe and inefficient. It was emitting dangerously high levels of carbon monoxide (CO) due to a cracked heat exchanger. What's more, the house had significant air leaks, where heated air was escaping into the attic and eventually to the outside. To seal up the home and retain heat, the energy auditor authorized workers to install attic insulation and plug the home's air leaks. Weather stripping was applied around doors, and air leaks were sealed; CO detectors and smoke alarms were installed, along with a bathroom exhaust fan. Those improvements and a new high-efficiency furnace combined to make for a tighter, far more energy-saving home. Work was completed in mid November, and the results were felt immediately. "A 200 percent difference—like night and day," said Gretchen Wilson.

All of the weatherization work on the Wilson home was coordinated by CAMPLS, which, in a regular year, would weatherize about 300 homes. But with the state receiving \$131 million in stimulus funding from the American Recovery and Reinvestment Act of 2009 (ARRA), "We're being asked to do seven times the number of homes over an 18- to 24-month period," said Jack Bethke, manager of weatherization for CAMPLS. "So, the stimulus funds are pushing us to dramatically expand



our services." Bethke said his agency and others across the state have ramped up hiring to meet the demands of the new funding.

Serving more with energy efficiency

According to Marilou Cheple, Weatherization Supervisor in the Office of Energy Security, 17,000 households overall in Minnesota are expected to receive weatherization work from the ARRA funds by March 2012. The majority of those will be completed by the end of 2010. In a normal year, the state's Weatherization Program serves about 4,000 homes.

Cheple said that weatherization assistance is available to homeowners and renters who are at or below 200 percent of the Federal Poverty Income Guidelines. Priority is given to households with at least one elderly or disabled member and to those with the highest heating costs.

Eligible households receive an energy audit to determine cost-effective measures to meet the needs of each home. Services that are typically provided include energy education, exterior wall and attic insulation, and air leak sealing. The energy audit also does efficiency testing and determines repairs or necessary replacements of home heating systems, ensuring energy efficiency and safety.

Cheple explained that with the increased federal funding, weatherization assistance is able to more thoroughly address the energy conservation needs of a home. "For instance, in cases where furnace upgrades are combined with insulation, air leak sealing, and new efficient appliances from the local utility, we can achieve household savings of over 30 percent in energy bills."

"We're very grateful to the Community Action staff and the fine job they did on our house," said Louis Wilson. "They came quickly and took really good care of us and we now have a warm house, and our gas bill is way down. We are very happy."

To Learn More...

For information about Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710.

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0310

Innesota Success Stories: *Tribal Homes Receive Weatherization*

Suzanne Monahan Residence

Location: Fond du Lac Reservation

Weatherization Improvements: Attic and sidewall insulation, air sealing, weather stripping, furnace maintenance

Weatherization Service Providers: Fond du Lac Band of Lake Superior Chippewa and the Arrowhead Economic Opportunity Agency

Fond du Lac, Arrowhead agency partner to weatherize tribal homes

Thanks to the partnership of the Fond du Lac Band of Lake Superior Chippewa and the Arrowhead Economic Opportunity Agency (AEOA), many tribal households are enjoying more energy-efficient homes and significantly reduced heating bills. Tribal families are benefiting from the Weatherization Assistance Program, which provides low-income homeowners in Minnesota with audits and energy-saving measures to reduce home energy and utility bills. The program is administered by the Office of Energy Security, which partners with 32 local service providers to deliver energy conservation improvements. AEOA is the service provider for Fond du Lac and an extensive area across northeastern Minnesota.

Joan Markon, director of Community Services at Fond du Lac Reservation, identifies tribal members who qualify for weatherization work—people with high-energy costs who are eligible for Energy Assistance to help pay for their heating bills. She then connects the families with AEOA to schedule an energy audit of their home and determine cost-effective conservation work. Weatherization services may include energy education, exterior wall and attic insulation, and air leak sealing. Safety and efficiency testing determines necessary repairs or replacements to home heating systems, ensures carbon monoxide safety, and reduces fuel consumption.

Tighter home reduces heat loss

Tribal member Suzanne Monahan recently received weatherization assistance. An AEOA crew insulated her home's attic and walls, sealed air leaks, added a storm window, insulated and caulked windows, weather stripped doors, cleaned and tuned the furnace, and installed carbon monoxide detectors. The result was a much "tighter" home with significantly reduced heat losses.

"When a furnace upgrade, insulation, and attic air leak sealing is carefully done on



Suzanne Monahan (left), a Fond du Lac tribal member who received weatherization work on her home, and Joan Markon (right), director of Community Services at Fond du Lac, are pleased with the work provided by the Arrowhead Economic Opportunity Agency.

a home, we often see 30 to 40 percent energy savings for the homeowner," said Jon Tekautz, supervisor for the AEOA Weatherization Program.

"I'm very happy with the results," said Monahan. "The crew was here for two days and was very professional and efficient. The work made a huge difference. It used to feel chilly and drafty. Now the floor is warmer, and every part of our home feels more comfortable. I set the thermostat at 65 degrees and it feels like 70 in here. My heating bill is almost half what it was."

Stimulus funds expand weatherization

Monahan was a beneficiary of the American Recovery and Reinvestment Act of 2009, the federal stimulus package that has provided \$132 million to Minnesota's



AEOA crew member Brian Leppala installs attic insulation.

expanded weatherization efforts. The stimulus money, a tenfold increase in regular annual funding for weatherization, is intended to conserve energy and create jobs through March 2012.

In a normal year, Markon said Fond du Lac would receive enough funding to weatherize just three homes. But in 2009, about 20 tribal homes got energy upgrades, and by the end of 2010, 20 to 25 more will receive weatherization, thanks to the stimulus funding.

"We have more than 500 tribal members who qualify for Energy Assistance, and most of those qualify for weatherization as well," said Markon. Many of those homes could be weatherized, but because of limited funding households are targeted that need the work the most: those with elderly, disabled, and families with children and those that have the highest energy bills.

Each reservation in Minnesota conducts weatherization a bit differently, said Daryl Sager, tribal weatherization field monitor. Some have their own auditors and contract the insulation work, while others have their own crews to do the work. "Our partnership with AEOA has worked extremely well," said Markon. "Even as weatherization opportunities have increased for our residents, AEOA has served our tribal community well."

AEOA's Tekautz agrees the partnership is strong. His agency has the ability to serve a high volume of homes. The stimulus funding created a six-fold increase in his agency's services, which includes weatherization for residents of Duluth and surrounding counties. His team hired more than 50 new people—80 percent of whom were unemployed—to meet the energy conservation work demands.

Safe and healthy homes are critical

Safety is a primary goal, Tekautz said. "We pride ourselves on doing a complete analysis of the mechanical systems of a home, from the furnace to the water heater to the duct work," he said. "All of our auditors carry carbon monoxide and gas leak detectors. Health and safety are critical in our energy auditing work."

Blower-door testing is conducted to determine the air leakage in a dwelling and the overall duct leakage in heating distribution. The measure for the Monahan home was "about twice the average amount," said Tekautz, meaning the home was experiencing huge heat losses from air leaks. After sealing, the air leakage rate was reduced by half. This tightening of Monahan's home creates a more energy-efficient dwelling. "Weatheriza-

tion work on the average decreases heating bills by 23 percent, but it can be much higher, depending on each home," said Tekautz.

The energy savings translate to less reliance on fossil fuel consumption. "We're doing our part to help as many tribal families achieve self-sufficiency, reduce energy consumption, and save money," said Tekautz. "And we're putting people to work at the same time—and at a good wage. That's a win-win for the homeowner, the environment, and the Fond

du Lac community."

To Learn More...

For information about Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, go to www.energy.mn.gov or call 800-657-3710.



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Vinnesota Success Stories: *Tribe Combines Solar & Weatherization*

Daniel Stover Residence

Location: Fond du Lac Reservation

Weatherization Improvements: Insulation, air sealing, furnace tune-up, duct-leak sealing

Solar Air Heat System: Two 4- x 8-foot panels, complementing a propane heating unit (500-gallon tank)

Fond du Lac family receives energy combination weatherization and solar air heat system

Daniel Stover said it used to take three to four 500-gallon propane tanks each year to heat his home on the Fond du Lac Indian Reservation. But after receiving weatherization assistance in 2007 and a solar air heat system in 2009, his home's fuel consumption decreased by more than 50 percent.

The Stover family, part of the Fond du Lac Band of Lake Superior Chippewa (about 20 miles from Duluth), qualified for Energy Assistance to help pay for their heating bills; subsequently they also qualified for weatherization and a special grant to install a solar air heat system. Two 4- x 8-foot, vertically mounted solar air heat panels were installed on the south-facing wall of the Stover house to produce heat. The result was what might be considered a model for incorporating energy efficiency improvements with emerging technologies in homes of low-income families.

"I'm very fortunate," Stover said. "A weatherization crew came in and plugged air leaks, blew in insulation, tuned up our furnace, and sealed duct leaks. That all made a big difference—and then we had the opportunity to add solar. Solar [air heat] panels became the main heating source for our upstairs." At about \$2 per gallon for propane, Stover said he saved more than \$2,000 on fuel costs for the past heating season.

Breaking the 'renewable energy divide'

The Stover household is a great example of breaking the "renewable energy divide," where the more affluent communities have greater access to solar energy than low-income people, said Mark McLaughlin, a senior energy



Daniel Stover, a Fond du Lac tribal member, says he's been pleased with the performance of his two 4- x 8-foot solar air heat panels.

specialist in the state's Weatherization Assistance Program. McLaughlin administered the Renewable Energy Equipment Grant Program that provided Stover's solar system. During 2008 and 2009, the \$190,000 state grant allowed for the installation of 38 solar air heat systems and four low-emission wood boilers for low-income households across Minnesota.

"We think often about reducing our carbon footprint. We've gotten a toe into [renewables] and now we're looking at dipping a foot...." —Karen Diver, Fond du Lac Tribal Chair

Making renewable forms of energy (such as solar) more accessible to lowincome families was a goal of the grant, and that is the mission of the Rural Renewable Energy Alliance (RREAL), a nonprofit group based in Pine River, Minnesota. RREAL conducted the site visits and designed and installed most of the solar air heat systems in the grant program. RREAL also makes its own solar panels.

"By delivering solar heat to low-income families on public energy assistance, our goal is to make solar energy accessible to people of all income levels," said Jason Edens, director of RREAL. "It is our lower-income communities that are most gravely affected by the energy crisis. When energy costs spike, they have to devote a larger percentage of personal income to the basics of heat and electricity. By mitigating the impact of energy cost volatility, solar energy can dramatically reduce one of the root causes of poverty."

The process of expanding renewables

The Stover home was one of two Fond du Lac households to receive a grant for solar air heat systems. Tribal Chair Karen Diver said she welcomes more funding to expand renewable energy on the 100,000-acre reservation. Renewable energy development is a priority of the reservation, she said. Fond du Lac adopted the Kyoto Protocol in 2007 by pledging to obtain 20 percent of its electricity from renewable energy resources by 2020.

"We think often about reducing our carbon footprint," said Diver. "We've gotten a toe into [renewables] and now we're looking at dipping a foot. We're

implementing renewable energy in several ways. We've retrofitted our school buses, and we have a small biomass unit in place and are looking at the feasibility of expanding it. We're studying wind energy, and we're also doing a feasibility study on solar panels."

Diver lauded the Tribe's Environmental Program for helping to achieve sustainable energy goals. Converting to higher efficient light bulbs, conducting energy seminars, and performing energy audits are just a few program activities. Said Wayne Dupois, manager of the Environmental Program: "We need to protect our environment and use our resources in the wisest way."

The Stover household took the energy-smart way to conserve energy, said McLaughlin. It initially invested in weatherization, a key first step in costeffective energy efficiency. By having an energy audit and then making some basic energy upgrades first, a home can optimize the returns on a renewable energy system, said McLaughlin. "Reducing demand for energy through efficiency helps reduce the size and cost of a renewable energy system."

To learn more...

For information about renewable forms of energy and funding sources, visit the State Energy Office Web site at www.energy.mn.gov and click on "renewables." For more on Minnesota's Weatherization Assistance Program, including service provider contacts and qualification requirements, visit the Web site and click on "low income assistance." Or call the Energy Office tollfree number: 800-657-3710.

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Name of RFP	Type*	Posting Date	Close Date	Number of RFP's Downloaded	Number of Proposals Rec'd	Evaluation Completed	Number of Proposals Selected
Increase Residential Participation in Energy Efficiency Activities	G	10/05/2009	11/06/2009	204	10	11/30/2009	3
Weatherization Training Providers	G	10/14/2009	11/20/2009	N/A	3	12/02/2009	3
Emerging Renewable Energy Industries	G	10/19/2009	12/18/2009	337	26	01/28/2010	10
Appliance Rebate Fulfillment Vendor	РТ	11/09/2009	11/30/2009	55	6	12/09/2009	1
EECBG - 60% Competitive	G	12/14/2009 (reopened 02/18/2010)	01/25/2010 (closed 02/22/2010)	1024	125	03/19/2010	93
EECBG - 40% Facility Cost Share	G	04/19/2010	05/24/2010	674	114	07/20/2010	83
Energy Programs in Commercial and Industrial Buildings	G	12/21/2009	02/12/2010	842	150	03/24/2010	44
Local Government Renewable Energy	G	06/21/2010	08/04/2010	317	18	N/A	N/A
*Type: G = Grant; PT = Professional Technical Contract							