



# **PBEEEP REPORT**

**Public Buildings Enhanced Energy Efficiency Program**

This information will be made available in alternate format,  
for example, large print, Braille, or cassette tape, upon request  
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**Cost to prepare this report: \$300**

## PUBLIC BUILDINGS ENHANCED ENERGY EFFICIENCY 2010 REPORT

Minnesota Statutes 16B.322, subdivision 8, states that the Commissioner of Administration shall submit a report containing, at a minimum, the following regarding projects implemented under this section:

- *the total number of projects*
- *the amount of calculated and, if available, actual energy savings for each project*
- *the cost of each project*
- *the total amount paid for technical services provided under subdivision 3 for each project.*

### 1.0 PROGRAM OVERVIEW

With the recent application by Bemidji State University, the Public Buildings Enhanced Energy Efficiency Program (PBEEEP) has achieved several milestones:

- 55 state government sites have enrolled in the program since its inception in August of 2009
- The total building area included in these projects exceeds 27.3 million square feet.
- These sites represent over 75 percent of all high-potential sites in the state.

PBEEEP, the Public Buildings Enhanced Energy Efficiency Program, provides expert services for recommissioning and retrofit projects, in combination with innovative financing, to help save energy and money at state government buildings. Recommissioning focuses on cost repair to, or optimization of, building operations (schedules, procedures), equipment, facilities, or systems to primarily enhance energy efficiency. It generally targets major building systems (building envelope, HVAC and controls), for quick payback energy conservation opportunities.

PBEEEP's goal is to reach every site in the state that appears to offer the potential for cost-effective savings through the use of recommissioning. Currently, these are sites with the following features:

- Over 100,000 square feet of conditioned space at a single location (this includes groups of buildings, such as Correctional Facilities and MnSCU campuses);
- Annual energy bills of at least \$120,000 (\$10,000 a month);
- Energy use that is 80 percent or more of the benchmark value in the Minnesota Benchmarking and Beyond (B3) database ([www.mnbenchmarking.com](http://www.mnbenchmarking.com)).

Approximately 1,100 buildings in the state, with a total of 36 million square feet, have these features. Minnesota's State Government PBEEEP, administered by the Center for Energy and Environment (CEE), is well on the way to its goal of offering all of them the opportunity to realize cost-effective energy savings.

PBEEEP uses a four-phase process to assure high quality and to control costs. Projects begin with a careful screening by CEE engineers and managers. This step ensures that all projects are objectively considered for their potential savings using a consistent, rigorous method. The next phase, an Energy Investigation, is performed by firms on the State's Master Roster of Energy Engineers. CEE then administers and reviews this work as part of the quality assurance process. This phase, lasting a minimum of six months, covers both heating and cooling seasons. The third

phase, implementation, is when the actual energy savings measures are put into place. The fourth and final phase is measurement and verification.

## A. PBEEEP ORGANIZATION

The Center for Energy and Environment (CEE) has been engaged by the State Of Minnesota, Department Of Administration to develop and administer PBEEEP. CEE is a Minnesota-based nonprofit organization that works to promote public interest through the responsible and efficient use of natural and economic resources. CEE is the quality assurance provider and day-to-day administrator of the program. Providers manage individual projects and work with CEE and the Project Manager designated by the Department Of Administration, Real Estate & Construction Services.

## B. PROGRAM DEVELOPMENT

The Findings Workbook, and all associated documentation, was revised as version 2.0 to accommodate additional energy sources, such as District Energy. The only remaining activity is completion of The Financial Guidelines. When complete the Financial Guidelines and Forms will be added to the Guidance Manual.

## C. PROGRAM RELEASE

The State Public Building Enhanced Energy Efficiency Program was formally launched on August 6, 2009 with a webinar jointly presented by the Center for Energy and Environment (CEE) and the Department of Administration for state agencies and the Minnesota State Colleges and Universities campuses.

## 2.0 REPORTING

### A. TOTAL NUMBER OF PROJECTS

**Table 1A: Project Count**

<b>Total Number of Projects (aggregate):</b>	<b>Reporting Period*</b>	<b>Total</b>
Applications (queue)		55
Screen Phase		55
Investigation Phase		30
Implementation Phase		1
Verification Phase		0
Completed**		13

\* Only applicable to monthly reporting

\*\* Completed projects include those where investigation was not recommended following screening

**Table 1B: Building Count\*\***

<b>Total Number of Buildings (aggregate):</b>	<b>Reporting Period*</b>	<b>Total</b>
Applications (queue)		733
Screen Phase		733
Investigation Phase*		329
Implementation Phase		1
Verification Phase		0
Completed		316

\* Only applicable to monthly reporting

## Detailed Information on Projects:

Facility	Agency	Buildings	Square feet	Screen	Investigation	Implement	M&V	Complete
Minnesota History Center	PMD	1	492,097	●	●	○	○	
Faribault	Mn Academies	18	437,068	●	●	○	○	
Minneapolis	MVH	6	231,850	●	●	○	○	
Shakopee	Corrections	14	242,068	●	●	○	○	
Willow River	Corrections	13	57,806	●				●
Faribault	Corrections	37	1,085,368	●	●	○	○	
Moose Lake	Corrections	26	540,487	●	●	○	○	
MSU Moorhead	MnSCU	40	1,725,190	●	●	○	○	
St Cloud State U	MnSCU	63	3,130,898	●	●	○	○	
Lino Lakes	Corrections	36	569,702	●	●	○	○	
Elmer Andersen Office Bldg	PMD	1	395,752	●	●	○	○	
BCA Maryland Ave	PMD	1	235,414	●	●	○	○	
Stassen Building	PMD	1	454,392	●				●
State Office Building	PMD	1	272,085	●	●	○	○	
M State Detroit Lakes	MnSCU	7	191,824	●				●
M State Fergus Falls	MnSCU	12	165,862	●				●
M State Moorhead	MnSCU	12	190,328	●				●
M State Wadena	MnSCU	10	136,836	●				●
Riverland Albert Lea	MnSCU	8	146,322	●				●
Riverland Austin	MnSCU	19	361,379	●	●	○	○	
Riverland Owatonna	MnSCU	1	25,471	●	●	○	○	
Normandale CC	MnSCU	18	476,110	●	●	○	○	
State Parking Garages	PMD	7	1,280,000	●	●	●	○	
Anoka Ramsey Coon Rapids	MnSCU	26	380,446	●	●	○	○	
Anoka Ramsey Cambridge	MnSCU	2	95,000	●	●	○	○	
MSU Mankato	MnSCU	42	2,767,715	●	●	○	○	
Hennepin Technical College No.	MnSCU	17	423,922	●				●
Hennepin Technical College So.	MnSCU	13	395,697	●				●
AASF Holman Field	Military Affairs	1	95,329	●	○	○	○	
Rosemount TACC	Military Affairs	1	99,522	●	○	○	○	
Orville Freeman	PMD	1	374,744	●	○	○	○	
Centennial	PMD	1	317,893	●				●
Veterans Services	PMD	1	87,648	●				●
Health Agriculture Laboratory	PMD	1	181,019	●	○	○	○	
Transportation Building	PMD	1	371,996	●	●	○	○	
Administration Building	PMD	1	78,524	●	○	○	○	
Judicial Building	PMD	1	252,275	●	○	○	○	
Capitol Building	PMD	1	378,825	●	○	○	○	
Mn State Retirement Systems	PMD	1	146,518	●	●	○	○	
Fond du Lac Tribal & CC	MnSCU	9	173,274	●	○	○	○	
Moose Lake	DHS	1	186,048	●				●
Bemidji State University	MnSCU	27	1,600,000	●	○	○	○	
Waters Edge	DOT	2	185,000	●	○	○	○	
Northland CC East Grand Forks	MnSCU	8	162,832	●	○	○	○	
Northland CC Thief River Falls	MnSCU	24	321,707	●	○	○	○	
Perpich Center for the Arts	PCAE	4	171,908	●	○	○	○	
St Paul College	MnSCU	2	497,112	●	○	○	○	
<b>Total</b>		<b>733</b>	<b>27,269,140</b>	<b>12</b>	<b>30</b>	<b>1</b>	<b>0</b>	<b>13</b>

**B. AMOUNT OF CALCULATED AND ACTUAL ENERGY SAVINGS FOR EACH PROJECT**

**Table 2: Energy and Cost Savings**

<b>Total Energy and Cost Savings (aggregate)</b>	<b>Reporting Period</b>	<b>Total</b>
Electric Savings		
Annual Savings (kWh)		0*
Annual Cost Savings (\$)		0*
Peak Demand Savings		
Annual Savings (kWh)		0*
Annual Cost Savings (\$)		0*
Gas Savings		
Annual Savings (kWh)		0*
Annual Cost Savings (\$)		0*
GHG reductions (US Tons)		0*

\*No active projects in measurement and verification phase.

**C. TOTAL PAID FOR TECHNICAL SERVICES PROVIDED UNDER SUBD. 3**

**Table 3: Technical Services Costs for CEE Services**

<b>Development Costs (aggregate):</b>	<b>Reporting Period*</b>	<b>Total</b>
Program Development Costs		82,345.00
<b>Project Costs (aggregate):</b>		0
Program Administration Costs		219,040.00
Technical Services (from Table 3)		288,318.75
Total Cost of CEE's Services		589,703.75

\* Only applicable for monthly reporting

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## D. COST OF EACH ACTIVE PROJECT

**Table 3: Project Costs**

<i>Project Name and Phase:</i>	<i>Reporting Period*</i>		<i>Total</i>	
	CEE Technical Services	Provider Project Cost**	CEE Technical Services	Provider Project Cost
MnSCU: Southwest MN State			12,667.50	62,295.00
MnSCU: Rochester CTC			12,680.00	61,198.80
DNR			11,501.25	2,765.70
Corrections: Oak Park Heights			7,042.50	
Corrections: Red Wing			10,246.25	4,988.40
Corrections: Rush City			9,112.50	30,648.00
MnSCU: Century College			14,837.50	53,500.00
Minnesota History Center			11,495.00	55,216.00
MN Academies			11,038.75	14,147.00
MVH: Minneapolis			3,040.00	15,015.00
MCF Shakopee			6,685.00	29,280.00
MCF Faribault			11,083.75	24,569.00
MCF Moose Lake			9,471.25	4,518.00
MnSCU: MSU Moorhead			14,071.25	57,176.00
MnSCU: St Cloud State			21,986.25	
MCF Lino Lakes			11,280.00	17,445.00
PMD: Andersen			5,881.25	6,200.00
PMD: BCA			5,825.00	3,820.00
PMD: State Office Building			3,941.25	4,320.00
MnSCU: Riverland Austin			5,803.75	6,000.00
MnSCU: Riverland Owatonna			1,892.50	
MnSCU: Normandale			8,471.25	
PMD: Parking Garages			7,255.00	
MnSCU: Anoka-Ramsey Coon Rapids			13,081.25	9,165.00
MnSCU: Anoka-Ramsey Cambridge			3,525.00	1,152.00
MnSCU: Mankato State University			19,756.25	
Military Affairs: AASF St Paul			1,520.00	
Military Affairs: Rosemount TACC			1,820.00	
PMD: Centennial Building			2817.50	
PMD: Veterans' Services			1577.50	
PMD: Orville Freeman Bldg			235.00	
PMD: Health Ag Lab			97.50	
PMD: Transportation Bldg			3,427.50	
PMD: MN Retirement Systems			2,636.25	
MnSCU: Fond du Lac CC			1,080.00	
DHS: Moose Lake			637.50	
MnSCU: Bemidji State Univ			200.00	
MnSCU: Northland CC EGF			40.00	
MnSCU: Northland CC TRF			40.00	
MnSCU: St Paul College			80.00	
Completed Projects			17,959.00	13,800.00
Total State Project Grants			288,318.75	477,218.90
Total Agency Funds Committed				0

\* Only applicable for monthly reporting