



**Department of Commerce**



# Energy Efficiency Grants for Higher Education and Local Governments

*2017 Joint Report per Chapter 1, Laws of 2012*

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Report to the Legislature

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## Executive Summary

This is the last and final legislative report for the 2012 Energy Efficiency Grants for Higher Education and Local Governments program. The Energy Efficiency Grants program was established by the 2012 Legislature, Chapter 1, Laws of 2012<sup>1</sup>, Sections 301 and 307.

*The department of commerce and the department of enterprise services must submit a joint report to the appropriate committees of the legislature and the office of financial management on the timing and use of the grant funds, program administrative function, compliance with apprenticeship utilization requirements in RCW 39.04.320, compliance with prevailing wage requirements, and administration fees by the end of each fiscal year, until the funds are fully expended and all savings verification requirements are fulfilled.*

The budget included two appropriations totaling \$38 million to the Washington State Department of Commerce (Commerce) for energy cost-savings grants.

- Section 301 appropriated \$18 million to local governments.
- Section 307 appropriated \$20 million to higher education.

Commerce awarded grants through three competitive solicitation rounds. Commerce executed 29 higher education contracts totaling \$18,644,993 and 55 local government contracts totaling \$16,881,564. All projects were completed.

The Energy Efficiency Grants program's primary purpose was to fund family wage jobs throughout Washington, specifically in the construction industry. The program funded 835 new jobs and 67 apprenticeships.

A long-term goal was to reduce energy costs at the state's public education facilities and local agencies. The grants are used solely for energy and operational cost-saving improvements.

Each project's energy savings are analyzed in Measurement and Verification reports, which were due approximately one year after the energy-efficiency measures had been installed. The reports detail how well the energy saving measures are working, what has changed in the facility's use, and what needs to be done to correct any energy savings measures that are not operating at peak performance.

Commerce and Department of Enterprise Services (DES) staff obtained and reviewed almost all of the reports. Based on the original Energy Savings Proposals or Investment Grade Audits, these projects were to save approximately annual kBtu 425,271,239.

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<sup>1</sup> <http://lawfilesexext.leg.wa.gov/biennium/2011-12/Pdf/Bills/Session%20Laws/Senate/5127.SL.pdf>

The 2012 Energy Efficiency Grants program was a success. Higher educational institutions and local governments saved energy and lowered their utility bills. Lower utility bills allowed grantees to invest more money in their students and staff or help eliminate the backlog of maintenance projects.

## Introduction

The 2012 Energy Efficiency Grants for Higher Education and Local Governments program was established by the 2012 Legislature, 2nd Special Session, ESHB 5127<sup>2</sup>, Sections 301 and 307. The budget included two appropriations totaling \$38 million to the Washington State Department of Commerce (Commerce) for energy cost-savings grants.

- Section 301 appropriated \$18 million to local governments.
- Section 307 appropriated \$20 million to higher education.

This report covers the second and third appropriations the Legislature made to Commerce for energy efficiency programs. The first appropriation was the Jobs Act for K-12 Public Schools and Higher Education Institutions (2010 Supplemental Capital Budget, ESHB 2836<sup>3</sup>, Section 1016).

The energy efficiency programs' initial goal was to stimulate Washington's economy by creating jobs. The long-term goal is to reduce energy costs at the state's public education facilities and local agencies. These grants are used solely for energy and operational cost-saving improvements.

The legislation directed Commerce to work with the Department of Enterprise Services Energy Program (DES) and the Washington State University Extension – Energy Programs (WSU) to conduct a competitive grant process and to solicit and evaluate applications. After projects were selected, Commerce worked with grantees to execute contracts.

This is the last and final legislative report prepared for the 2012 Energy Efficiency Grants for Higher Education and Local Governments program.

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<sup>2</sup> <http://lawfilesexternal.wa.gov/biennium/2011-12/Pdf/Bills/Session%20Laws/Senate/5127.SL.pdf>

<sup>3</sup> <http://leap.wa.gov/leap/Budget/Detail/2010/ccbill0413.pdf>

## Program Results

### Competitive Awards

The 2012 Energy Efficiency Grants for Higher Education and Local Governments program was the second and third legislative appropriations to Commerce for an energy efficiency program. The Legislature added local governments to Commerce's existing program, and K-12 school districts were no longer eligible because of a separate appropriation through the Office of the Superintendent of Public Instruction.

Commerce held three competitive solicitation rounds. The deadline for the first round was July 2, 2012; the deadline for the second round was December 31, 2012, and the deadline for the third round was May 20, 2013. The third round was only open to higher educational facilities.

#### Round One Results

- \$10,847,233 awarded to 10 higher education and 20 local government projects
- \$46,393,937 in total project costs

#### Round Two Results

- \$15,902,643 awarded to 12 higher education and 37 local government projects
- \$62,304,902 in total project costs

#### Round Three Results

- \$8,182,426 awarded to seven higher education projects
- \$14,812,988 in total project costs

### Total Executed Contracts and Completed Projects

The 2012 Energy Efficiency Grants for Higher Education and Local Governments program executed 29 higher education contracts totaling \$18,644,993. Two higher educational facilities (Bates Technical College and Evergreen State College) declined their grants due to lack of cost-sharing funds. Fifty-five local governments received executed contracts totaling \$16,881,564. Two local governments (city of Mabton and town of Ruston) declined their grants due to lack of cost-sharing funds. All projects have been completed (see Appendix A).

### Total Number of Jobs Funded

The final total number of jobs funded as reported by grantees was 835.

The 2012 Energy Efficiency Grants program's primary purpose was to fund family wage jobs throughout Washington, specifically in the construction industry. Commerce tracked the number of jobs funded from quarterly reports.

## **Total Apprenticeships**

The final total number of apprenticeships funded was 67.

Public works contracts that meet certain requirements must incorporate apprenticeship training programs (RCW 39.04.320). Projects that are required to have apprenticeship programs must demonstrate that a percentage of total hours of work was performed by apprentices. Not all of the projects funded through the Energy Efficiency Grants program were required to have apprenticeship programs. However, a significant number of projects that were not required to follow the apprenticeship standards nonetheless reported hiring apprentices on their quarterly reports, which was an unexpected outcome.

## **Prevailing Wages**

Commerce's energy efficiency contracts require all grantee contractors and subcontractors performing work on these projects to comply with the state prevailing wage laws set forth in RCW 39.12. The grantee must maintain records indicating compliance, and these records must be made available if requested by Commerce.

## **Leverage**

Commerce's goal was to have the grant funds constitute 25 percent or less of the total project cost (leverage ratio of 3:1). The original application leverage ratio for higher education was 1.56, for local governments it was 3.79, and for small cities and towns the ratio was 1.24. The original application overall ratio for all projects was 2.26.

## **Department of Enterprise Services**

The DES Energy Program partnered with Commerce to implement the 2012 Energy Efficiency Grants for Higher Education and Local Governments program. During this reporting period, DES provided Commerce with ongoing technical services that covered reviewing contractor bids and invoices, and measurement and verification plans and reports.

## **Measurement and Verification of Energy Savings**

Commerce's projects use two methods of delivering the energy efficiency work: Energy Service Companies (ESCOs) or energy/mechanical engineering firms that are not ESCOs. ESCOs are required to guarantee their energy savings projections. If the work does not meet these



projections, the ESCO works to achieve these savings or, in some cases, pays the project owner the difference between projected and actual energy savings.

Independent energy/mechanical engineering firms are not required to guarantee their energy savings projections. If there is a difference between projected and actual savings, the project owner assumes the risk.

Measurement and verification reports (M&V) were due approximately one year after the energy-efficiency measures have been installed. M&V reports are required under DES' Energy Savings Performance Contracting program. These reports detail how well the energy saving measures are working, what has changed in the facility's use, and what needs to be done to correct any energy savings measures that are not operating at peak performance.

Between Commerce and DES staff, almost all of the M&V reports were obtained and reviewed. Based on the original Energy Savings Proposals or Investment Grade Audits these projects were to save approximately annual kBtu 425,271,239.

## Challenges, Lessons, and Successes

Commerce's 2012 Energy Efficiency grant program operated during 2012 and 2013, when Washington's economy was slowly recovering from a major national economic downturn. Construction jobs were becoming more plentiful and equipment shortages were lessening, allowing more projects to be built. The Legislature understood that Washington's construction industry, especially in eastern Washington and rural areas, would not come back as fast as the more urban Puget Sound region. To keep the construction industry moving forward, the Legislature appropriated \$38 million, and opened Commerce's energy efficiency program to local agencies. The Legislature recognized the importance of helping local agencies reduce their energy use and costs.

### Challenges

Opening Commerce's energy efficiency program to local agencies brought on a new set of challenges not encountered during the 2010 Jobs Act (Commerce's first energy efficiency program).

- The definition of local agencies used by the Legislature was extremely broad. "Local agencies" included any city, town, county, special district, municipal corporation, agency, port district or authority, political subdivision of any type, or any other entity or authority of local government in corporate form or otherwise. Having such a broad definition was confusing to many potential applicants, and eligibility questions were common. Commerce solved this dilemma by changing "local agencies" to "local governments."
- Local governments needed clarity regarding state funds vs. non-state funds. Only non-state funds were allowed as leverage/match. Commerce added a list of eligible non-state funds to the program guidelines.
- Local government projects tended to have much longer simple paybacks than higher education projects. Commerce realized this was because local government projects often included structural rehabilitation along with energy efficiency measures.

### Lessons Learned

One of the most important lessons Commerce learned involved scoring applications. The Legislature directed Commerce to score applicants on three criteria in the following order.

- Leverage ratio (non-state to state funds)
- Energy savings
- Expediency of expenditure

The first scoring criterion, leverage ratio, was a confusing concept to many applicants, and many did not understand what funds were non-state, and why state funds could not match state funds. Commerce solved this confusion by defining “state funds” and “non-state funds” in the program guidelines, and repeatedly explained why state funds were not eligible as a match. For example, all utility rebate or incentive funds and loans from the state treasurer are non-state funds.

The third scoring criteria, expediency of expenditure, means how quickly the project could begin. Commerce’s application asked for the start date, but staff subsequently learned most of the given start dates were erroneous and, at best, good guesses. Commerce decided to eliminate this criteria in future programs, although expediency in project completion is still a program goal.

Midway through the 2012 Energy Efficiency Grant program, Commerce staff began exploring web-based online application systems. The number of applications Commerce received exceeded the capabilities of Commerce’s Word-based application system. After considering improvements to the application process, Commerce selected ZoomGrants, a highly flexible and easy to navigate online application, for future programs.

Also during this time period, Commerce staff decided to hold future meetings with the energy community (Energy Service Companies, energy engineering firms) and higher education and local government associations. At these meetings, participants would review and analyze program guidelines, express their opinions on what works or doesn’t, and give ideas on how to improve the program.

As mentioned before, local government projects often required some structural rehabilitation or operation and maintenance work before energy efficiency measures could be installed. For example, a new roof would often be needed before installing insulation. These structural improvements significantly raised the project’s total cost. Commerce staff began educating both potential applicants and the ESCO’s about not making structural rehabilitation or operation and maintenance work the prime focus of the application. Commerce, in concurrence with legislative staff, decided to limit the simple payback to 50 years or less.

## **Program Successes**

The 2012 Energy Efficiency Grant program was a success. With Washington’s economy beginning to rebound, 835 jobs were created, especially in the construction industries. Higher educational institutions and local governments saved energy and lowered utility bills. Lower utility bills allowed grantees to invest more money in their students and staff or help eliminate the backlog of maintenance projects.

There are many other tangible benefits to the 2012 Energy Efficiency Grant program. For example, the end users (students, teachers, administrative staff, maintenance staff, and the public) have more comfortable and healthy buildings. The buildings no longer have areas that are either too cold or too hot, and the overall indoor air quality has improved with adequate fresh air. Students and teachers are now working in classrooms with improved lighting and in some cases, daylighting, and maintenance staffs have more time to work on other pressing needs instead of repairing outdated equipment.

## Appendix A: Final Contract Grant Awards and Expenditures

As of April 30, 2017

Higher Education	Grant Amount	Amount Paid
Bellevue College	815,000	815,000
Bellevue College	1,185,000	1,185,000
Bellingham Technical College	153,241	153,241
Big Bend Community College	472,032	472,032
Cascadia Community College	142,386	142,386
Central Washington University	1,200,000	1,200,000
Clover Park Technical College	180,000	180,000
Columbia Basin College	1,762,301	1,762,301
Community Colleges of Spokane	141,378	141,378
Community Colleges of Spokane	80,000	80,000
Edmonds Community College	1,971,537	1,971,537
Green River Community College	453,000	453,000
Highline Community College	452,699	452,699
Highline Community College	196,877	196,877
Olympic College	1,025,000	1,025,000
Peninsula College	692,374	692,374
Peninsula College	1,307,114	1,307,114
Pierce College	825,000	825,000
Shoreline Community College	349,643	349,643
South Puget Sound Community College	600,000	600,000
UW Friday Harbor Laboratories	533,147	478,767
UW Main	978,555	978,555
UW Medical Center	496,769	496,769
Washington State University	1,924,439	1,924,439
Wenatchee Valley College	258,881	258,881
Yakima Valley Community College	503,000	503,000
<b>Total</b>	<b>18,699,373</b>	<b>18,644,993</b>

\* University of Washington – Friday Harbor refunded \$22,374 to Commerce.

\*\*Washington State University had four contracts totaling \$1,924,439.

Local Government	Grant Amount	Amount Paid
City of Bellevue	\$410,000	\$410,000
City of Blaine *	\$500,000	\$500,000
City of Bremerton	\$500,000	\$500,000
City of Buckley *	\$325,000	\$316,923
City of Camas	\$110,711	\$110,711
City of Centralia	\$423,508	\$423,508
City of Edmonds	\$187,566	\$187,566
City of Everett	\$262,206	\$232,220
City of Everett	\$191,949	\$179,357
City of Kirkland	\$208,000	\$208,000
City of Lacey	\$108,000	\$96,824
City of Longview	\$500,000	\$500,000
City of Mountlake Terrace	\$79,500	\$79,500
City of Olympia	\$500,000	\$500,000
City of Pateros *	\$500,000	\$500,000
City of Port Townsend	\$500,000	\$500,000
City of Renton	\$500,000	\$500,000
City of Royal City *	\$244,812	\$244,812
City of SeaTac	\$100,562	\$100,562
City of Seattle	\$500,000	\$500,000
City of Shelton	\$106,415	\$106,415
City of Tacoma	\$273,000	\$273,000
City of Tenino *	\$300,000	\$248,563
Des Moines Pool Metropolitan Park District	\$83,675	\$83,675
Ferry County Memorial Hospital	\$500,000	\$500,000
Grant County Public Hospital District #1	\$200,000	\$200,000
Grant County Public Hospital District #1	\$214,535	\$214,535
Grays Harbor County	\$170,000	\$170,000
Harborview Medical Center	\$500,000	\$500,000
Island County	\$367,000	\$367,000
Island Hospital	\$164,850	\$164,850
Kitsap County	\$33,634	\$33,634
Kittitas County	\$330,384	\$330,384
Lakehaven Utility District	\$368,411	\$368,411
Lincoln County	\$5,809	\$5,809
LOTT Clean Water Alliance	\$352,120	\$352,120
Mason County	\$499,500	\$499,500
Model Irrigation District 18	\$40,500	\$40,500
Okanogan County	\$500,000	\$500,000
Port of Bellingham	\$328,405	\$328,405

Port of Longview	\$45,744	\$45,744
Port of Seattle	\$384,450	\$384,450
Port of Tacoma	\$128,445	\$128,445
Skagit County	\$103,419	\$103,419
Snohomish County	\$462,000	\$462,000
Sound Transit	\$400,000	\$400,000
Spokane County	\$500,000	\$500,000
Spokane Regional Health District	\$500,000	\$500,000
Thurston County	\$178,544	\$178,544
Thurston County	\$189,125	\$189,125
Tukwila Metropolitan Park District	\$416,666	\$416,666
Valley Medical Center	\$500,000	\$500,000
Walla Walla County	\$281,388	\$281,388
Whitman Hospital and Medical Center	\$500,000	\$500,000
William Shore Pool District	\$415,000	\$415,000
<b>Total</b>	<b>\$17,019,583</b>	<b>\$16,881,564</b>

\*Small cities and towns (populations 5,000 and under)