

**PROGRAM GUIDELINES
FOR THE IMPLEMENTATION OF SB 1149**

**SCHOOLS
PUBLIC PURPOSE CHARGES**

Updated November 3, 2005

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Definitions

Average Daily Membership is calculated by (1) adding together the number of students attending each day plus the number absent each day that the school was in session during the school year, and (2) dividing that total by the number of days school was in session with students in class.

Baseline energy use index is determined by the energy use of the facility for the two years prior to the evaluation. Energy use index is the total energy used in a building for a specified period of time, stated in terms of Btu / gross conditioned square feet (Btu / sf / yr). The energy use index is used to indicate consumption history and to depict what a facility ought to use in relation to specified weather conditions and building use.

Commissioning of new equipment is the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the design intent. Commissioning requires the consultation and approval of the Oregon Department of Energy.

Completely implemented audit is when all eligible instructional school facilities have implemented all energy efficiency measures identified in their audits with a simple payback of less than or equal to 15 years and/or all eligible instructional school facilities in the school district are operating with the target energy use index.

Eligible school site includes any public school facility whose Average Daily Membership is included at the school district and/or Education Service District by the Oregon Department of Education and is within Portland General Electric or PacifiCorp territory.

Energy audit is the comprehensive assessment of a building's energy use and efficiency through the analysis of the building and all energy systems.

Energy audit report is a detailed report prepared by a qualified energy auditor that includes a summary of recommendations, baseline building description, description and cost of energy efficiency measures, calculations that support estimated energy savings, simple payback period and/or life-cycle cost analysis.

Energy conservation education programs are hands-on instructional programs intended to involve students, teachers, and staff in efforts to operate school facilities in an energy efficient manner. Programs strive to integrate education on energy, the environment, and their relationship to savings opportunities. Programs include those developed by: U.S. Department of Energy or its affiliated agencies or programs, Oregon Department of Energy, State Colleges or Universities or any curriculum approved by the Oregon Board of Education, the National Energy Education Association, and/or the local school district or school board.

Energy efficiency measures are capital or permanent improvements in capital equipment or facilities that are designed to reduce energy consumption, or that result in substantial savings in the amount of purchased energy at a site. The improvements include cost effective operations

and maintenance improvements to optimize equipment operation, including measures or projects that provide measurable environmental benefits in addition to the energy savings from the project.

Energy efficiency programs include conservation measures that provide energy savings and can have a simple payback of greater than 15 years, includes retro-commissioning, commissioning of new equipment, DDC Circuit Rider, and the training of operations and maintenance staff.

Energy use index is a measurement of the total energy used in a building (or facility) for a specific period of time stated in terms of British thermal units (Btu) per gross conditioned square foot per year (Btu / sf / yr). It may be used to indicate consumption history and is increasingly used to depict what a facility ought to use in relation to specified conditions.

Environmentally focused energy sources use a renewable energy resource to generate power, and produce electricity with little effect on the environment, but is more expensive to produce than traditional electricity (usually purchased from the electric company).

Implementation plan is a report downloaded from the Schools Interactive Database (SID) that includes all measures the school district is planning to implement, the funding source to be used for the measures, and all measures and costs of measures implemented to date.

Instructional school facility is an eligible school site whose primary function is instruction that may include facilities used for classroom instruction, multipurpose activities, and libraries in kindergarten through grade 12.

Operations and maintenance procedures include repair, replacement, and other capital maintenance of equipment to optimize equipment operation.

Other identified measures are energy efficiency measures that can be implemented when a school district has completely implemented their audits in all eligible instruction school facilities.

Public school facility includes facilities that are owned and operated by the school district and used for any purpose associated with public education in kindergarten through grade 12, and also includes facilities that are used by more than one school district. This also includes buildings that are owned by a school district and leased to another school district or Education Service District for educational purposes.

Qualified energy auditor is an individual that possesses, at a minimum, training from an accredited two or four-year school, which included the following areas of expertise: commercial and industrial technology, energy auditing, heating, ventilating, and air conditioning systems, lighting design, energy efficiency technology, and preventive maintenance procedures. Experience may be substituted for education on the basis of two years of experience for one year of education. The Oregon Department of Energy selects qualified professional auditors through the Request for Qualifications and Request for Proposals process.

Renewable energy resources include, but are not limited to straw, forest slash, wood waste or other wastes from forestland. It also includes industrial waste, solar energy, wind power, water power, geothermal resources, or waste heat recover. It does not include a hydroelectric or geothermal project with more than one megawatt of installed generating capacity. All projects must be pre-approved by the Oregon Department of Energy.

Renewable resource project is a project that uses a renewable energy resource at a school site to produce electricity to replace or supplement electricity to the site. All projects must be pre-approved by the Oregon Department of Energy.

Retro-commissioning is the process of identifying, repairing and/or replacing aging or dysfunctional equipment or systems in an existing facility. It involves design and specification review and trouble-shooting equipment. Retro-commissioning makes recommendations for required repairs, modifications, or changes to the equipment or system to improve energy efficiency, prolong equipment and system life expectancy, increase occupant comfort, and improve indoor air quality. The retro-commissioning agent provides facility operator training for operations and maintenance of equipment. The energy savings and simple payback period is calculated for each retro-commissioning measure identified. Retro-commissioning includes the actual cost to adjust, modify, repair, and/or replace capital equipment.

Schools Interactive Database (SID) is the database used by school districts to report information on projects implemented with funds from SB 1149.

Simple payback period is the total eligible cost of an energy efficiency measure or project divided by the first year energy cost savings, stated in years. The program standard for audit implementation is less than or equal to 15 years.

Staff training provides skills and techniques for trouble-shooting, adjusting, and modifying equipment in order to improve the energy efficiency of capital equipment.

Weatherization includes measures designed to reduce the heat loss of a facility through the building envelope.

Introduction

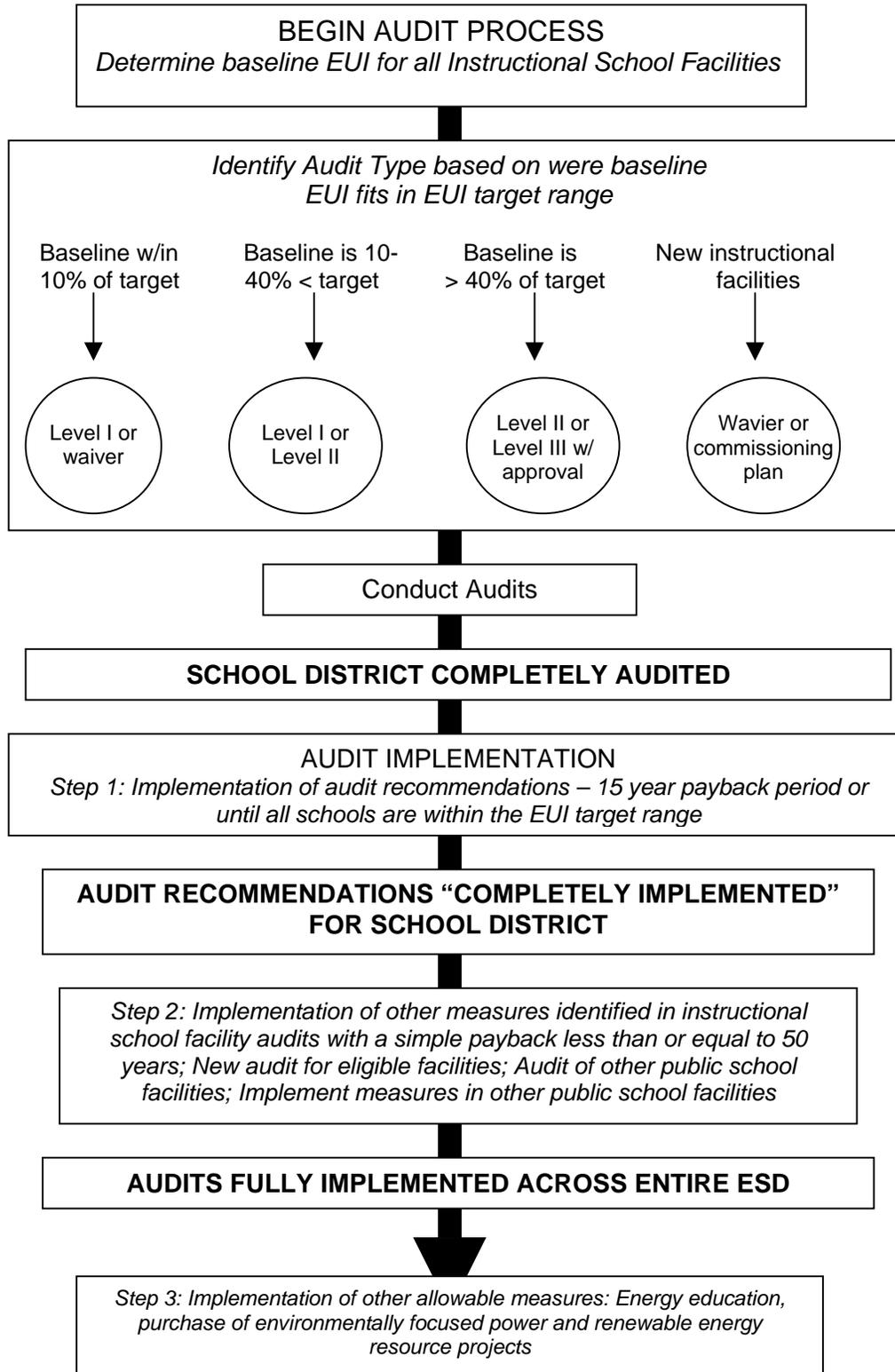
The Oregon Legislature passed Senate Bill 1149, which introduced competition into the retail electricity market of the two largest utilities, Portland General Electric and PacifiCorp. The bill went into effect on March 1, 2002. It provides that Portland General Electric and PacifiCorp must collect a public purpose charge from consumers within their service areas that is equal to 3 percent of the total revenues from electricity services. Ten percent of these public purpose funds must go towards energy efficiency efforts in public schools within their service areas. The Oregon Department of Energy facilitates the administration of the schools public purpose funds in cooperation with the Education Service Districts and individual school districts.

“Program Guidelines for the Implementation of SB 1149 Schools Public Purpose Funds” were developed in March 2002. Superintendents, principals, facility directors and Department of Energy staff on two committees developed the guidelines to implement cost-effective energy efficiency improvements in schools utilizing SB 1149 Funds.

The Technical and Policy Committees were reconvened in 2005 to review and update the guidelines. This document represents recommendations made by the Technical Committee and adopted by the Policy Committee. Changes include:

- Specifies changes to the simple payback period requirements are as follows:
 1. Tier I projects (required to be implemented) must have a payback of 15 years or less.
 2. Tier II projects must have a payback of 50 years or less.
 3. Projects over 50 years require prior approval from the Oregon Department of Energy.
- Establishes reimbursement protocol.
- Requires school districts to submit implementation plans and to receive authorization from the Oregon Department of Energy to begin implementation of the audits. Education Service Districts are directed to withhold reimbursement for SB 1149 projects until this requirement is met.
- Specifies the requirement for energy use data to be entered into SID.
- Establishes a process for identifying financial incentives received from sources other than SB 1149 Public Purpose Funds.
- Makes data collected by the Oregon Department of Energy the official record.
- Establishes quarterly (or as needed) meetings for the Technical Committee, and biennial meetings for the Policy Committee.

PROGRAM IMPLEMENTATION OF SB 1149



Implementation Procedures

A. Eligible Facilities

Only school district facilities within Portland General Electric or PacifiCorp territories are eligible for SB 1149 Public Purpose Funds. School district facilities outside Portland General Electric or PacifiCorp territories that are not eligible for SB 1149 Public Purpose Funds are not required to audit or implement energy efficiency improvements under the Rules for Program Implementation of SB 1149 Public Purpose Funds.

Facilities Eligible for SB 1149 Funding

An *eligible school site* includes any public school facility whose Average Daily Membership is included at the school district and/or Education Service District by the Oregon Department of Education and is within Portland General Electric or PacifiCorp territory.

School districts shall submit a copy of the electric company billing statement for each eligible school site to the Oregon Department of Energy by the first day of October of each year beginning in 2001.

All eligible school districts shall provide notification of a change in electric service provider to the Oregon Department of Energy within 30 days.

Facilities Required to Conduct and Implement Audits

An *instructional school facility* is an eligible school site whose primary function is instruction that may include facilities used for classroom instruction, multipurpose activities, and libraries in kindergarten through grade 12.

School districts are required to conduct and completely implement audits in all eligible instructional school facilities, with funds available from SB 1149 Public Purpose Funds. On completion of this requirement, other eligible public school facilities, within Portland General Electric or PacifiCorp territories, may conduct and implement audits at the discretion of the school district.

SB1149 funds may be used for energy efficiency improvements in the remodel or renovation of existing space, if the energy efficiency measure(s) were identified in an audit. Only the energy efficiency improvements are eligible for reimbursement from SB 1149 funds.

A *public school facility* includes facilities that are owned and operated by the school district and used for any purpose associated with public education in kindergarten through grade 12, and also includes facilities that are used by more than one school district. This also includes buildings that are owned by a school district and leased to another school district or Education Service District for educational purposes.

Ineligible Facilities

Excluded school facilities are any facility owned and operated by a school district that is:

- 1) Destined for closure within 2 years; or
- 2) Leased by a school district for non-educational purpose; or
- 3) Leased, but not owned, by a school district.

Exclusion of any eligible instructional school facility requires an audit waiver and written notification to the Oregon Department of Energy annually.

B. Distribution of Funds

SB 1149 Section 3 establishes a public service charge of 3 percent of the total revenues collected by the electric company from all of the retail electric customers within its service area for a period of ten years. Section 3(e)(A) establishes that the first 10 percent of the funds collected annually be distributed to Education Service Districts located within the service territory of the electric utility, as described in ORS 334.010. Public Purpose Funds from SB 1149 will provide funding for efficiency improvements, energy education, the purchase of environmentally focused energy, and renewable resource projects in Oregon K-12 schools in Portland General Electric and PacifiCorp service territories.

Funds are distributed monthly to the Education Service Districts directly by the electric companies according to the Weighted Average Daily Membership of the individual Education Service District for the prior fiscal year, as calculated under ORS 327.013. The Public Utility Commission has established by rule a methodology for distributing a proportionate share of funds to Education Service Districts that are partially located in the service territories of the electric companies.

Education Service Districts shall allocate SB 1149 Public Purpose Funds to eligible school districts proportional to the eligible Average Daily Membership of schools within Portland General Electric and PacifiCorp service territories. Education Service Districts have the ability to develop a district-wide plan for distribution of funds with the consensus of their member school districts. School districts may utilize funding for energy efficiency improvements in any eligible schools in accordance with the district-wide implementation plan.

C. Energy Audits

An *energy use index* is a measurement of the total energy used in a building (or facility) for a specific period of time stated in terms of British thermal units (Btu) per gross conditioned square foot per year (Btu / sf / yr). It may be used to indicate consumption history and is used to depict what the typical use of a given facility should be in relation to specified conditions.

An **energy audit** is the comprehensive assessment of a building's energy use and efficiency through the analysis of the building and all energy systems. A qualified energy auditor must perform audits. The auditor will identify potential energy savings opportunities available through the purchase and installation of specified energy efficiency measures and/or the implementation of improved operation and maintenance procedures. An audit will identify current energy use and provide cost-benefit analysis of potential energy efficiency measures.

Energy Audit Requirements

Audits must be conducted according to the Oregon Department of Energy standards and performed by a qualified energy auditor. The Oregon Department of Energy posts a list of currently qualified auditors on its Web site.

Each eligible instructional school facility shall have met the audit requirement, if they have:

1. Performed a new audit; or
2. Updated an existing audit; or
3. Received a waiver for an audit.

Types of Audits

Level I: Energy Audit

A Level I Audit is a walk-through survey of a facility to assess current energy cost and usage and to determine energy savings potential for effective energy efficiency measures. The audit identifies energy efficiency measures necessary to achieve such savings potential for capital intensive projects and low-cost/no-cost measures. The audit provides a savings and cost analysis and simple payback period of all measures recommended.

Level II: Energy Audit

A Level II Audit includes a more detailed building survey and energy analysis. A breakdown of energy use by system is required. The facility's equipment and systems are reviewed to evaluate and confirm equipment and system operating profiles, methods of control, equipment efficiency, and changes of facility energy usage that have occurred or are anticipated. The audit identifies low-cost/no-cost operations and maintenance procedures and capital equipment and installation costs, with calculations to support energy savings, costs, and simple payback period or life cycle cost analysis.

Level III: Energy Audit

A Level III Audit consists of a detailed analysis of capital intensive measures that follow the same basic steps as the energy audit described above, but includes detailed analysis and calculations and/or modeling to determine the viability and interactive effects of potential energy efficiency measures identified. The audit requires identification of capital equipment and installation cost, calculations to support energy savings and costs, and simple payback and life cycle cost analysis. This audit requires a detailed scope of work and authorization by the Oregon Department of Energy prior to starting.

Process to Determine Audit Type Required

An eligible school facility can meet the audit requirement by following the audit process guidelines:

The audit process uses a *baseline energy use index*, determined by the energy use of the facility for the two years prior to the evaluation. Energy use index is the total energy used in a building for a specified period of time, stated in terms of Btu / gross conditioned square feet (Btu / sf / yr). The energy use index is used to indicate consumption history and to depict what a facility ought to use in relation to specified weather conditions and building use.

Energy efficiency target ranges (refer to Appendix I) is used to identify how well each building is functioning in relation to a regional expectation. The Oregon Department of Energy updates the energy efficiency target ranges biennially. The first step in the audit process is to create a baseline energy use index for each facility being audited. The baseline energy use index is then compared to the energy efficiency target range to determine the type of audit required.

Audit Waivers

Audit waivers for instructional school facilities may be obtained for the following facilities:

- 1) A facility that has an energy use index within the target range; or
- 2) A facility that is destined for closure within two years; or
- 3) A facility that is leased by a school district for non-educational purposes; or
- 4) Facilities that are leased, but not owned, by a school district; or
- 5) New facilities for their first two years of operation.

A school district or Education Service District must request an audit waiver annually, by written notification to the Oregon Department of Energy. The Oregon Department of Energy must review and approve or deny all waivers. No energy efficiency measures will be funded for these facilities.

Updated Audit

For audits older than three years, school facilities verify their existing audits by comparing their current year energy use index to the audit baseline energy use index at the time of the audit.

1. If the current energy use index is less than 110 percent of the audit energy use index, the existing audit and the measures identified in the audit are deemed valid.
2. If the current energy use index is greater than 110 percent of the audit energy use index, a new Level I or II Audit is required. The type of audit is at the discretion of the school district.

Buildings Requiring a New Audit

The energy audit requirement can be met in one of the following ways:

1. If the energy use index of an instructional school facility is within the recommended Energy efficiency target range:
 - The audit requirement can be waived because the facility is relatively energy efficient. An audit waiver from the Oregon Department of Energy is required; or
 - A Level I Audit can be performed at the discretion of the school district.
2. If the energy use index of an instructional school facility is within ten percent of the recommended energy efficiency target range, a Level I Audit must be performed.
3. If the current energy use index of a school facility is between 10 and 40 percent greater than the recommended energy efficiency target range, a Level I or II Audit is required. The type of audit performed is at the discretion of the school district.
4. If the current energy use index of a school facility is 40 percent greater than the recommended energy efficiency target range, a Level II or Level III Audit is required. A Level III Audit or retro-commissioning requires consultation and approval by the Oregon Department of Energy.

New Facilities

If the facility is a new instructional school facility, the audit requirement may be met by:

1. Using the commissioning plan developed during the design phase as their audit; or
2. If a new facility was not commissioned during construction, a firm on the qualified energy auditor and qualified commission list may perform a modified energy audit or retro-commissioning. The Department of Energy must pre-approve.
3. Applying for an audit waiver from the Oregon Department of Energy for the first two years of operation.

New buildings use their second year of billing data to establish a baseline energy use index for the facility.

Qualified Energy Auditors

Qualified energy auditors may conduct energy audits. A *qualified energy auditor* must possess, at a minimum, training from an accredited two or four-year school, which included the following areas of expertise: commercial and industrial technology, energy auditing, heating, ventilating, and air conditioning systems, lighting design, energy efficiency technology, and preventive maintenance procedures. Experience may be substituted for education on the basis of two years of experience for one year of education. The Oregon Department of Energy selects qualified professional auditors through the Request for Qualifications and Request for Proposals process.

Audit Reports

All audits must include an energy audit report. An **energy audit report** is a detailed report prepared by a qualified energy auditor that includes a summary of recommendations, baseline building description, description and cost of energy efficiency measures, calculations that support estimated energy savings, simple payback period and/or life-cycle cost analysis. Audit reports must follow the energy report guidelines provided by the Oregon Department of Energy.

Eligible Audit Costs

Eligible audit costs are expenses for audit services to perform required audits and identify energy efficiency measures or renewable resource projects. All energy audits conducted to comply with the requirements of SB 1149 after July 1, 2001 by a utility representative or after October 5, 2002 by a qualified energy auditor are eligible for reimbursement by SB 1149 Public Purpose Funds available after March 1, 2002. Only energy efficiency measures or projects initiated and installed after March 1, 2002 are eligible for SB 1149 funding.

D. Audit Implementation

Eligibility for Implementation of Audits

A school district is eligible to implement audits when all instructional school facilities within that school district have:

1. Met the audit requirement criteria; and
2. Submitted an implementation plan and received authorization from the Oregon Department of Energy to begin implementation of audits. Note:
 - A model implementation plan is available for downloading on SID.
 - Education Service Districts will withhold reimbursement for SB 1149 projects until the Oregon Department of Energy has approved an implementation plan for each eligible facility and the school district has entered the current years EUI into the database.

The purpose of the **implementation plan** is to:

- Verify that all required audits are complete and entered into SID; and
- Ensure that all cost-effective energy efficiency measures are implemented (i.e., measures with a simple payback less than or equal to 15 years); and
- Avoid implementing measures that are not eligible for reimbursement with SB 1149 funds; and
- Designate and confirm funding sources available for proposed projects; and
- Avoid co-mingling Energy Trust of Oregon funds with SB 1149 funds for the same measure; and
- Identify measures requiring commissioning and PCB disposal.

Audit Implementation Process

Step 1: Completely Implemented Audit

A school district must complete and install the implementation measures required for a completely implemented audit before proceeding to other implementation measures.

A school district has met the criteria for a ***completely implemented audit*** if all the eligible instructional school facilities have:

1. Implemented all energy efficiency measures identified in their audits with a simple payback of less than or equal to 15 years; or
2. All eligible instructional school facilities in the school district are operating within the target energy use index range.

Energy efficiency measures are capital or permanent improvements in capital equipment or facilities that are designed to reduce energy consumption, or that result in substantial savings in the amount of purchased energy at a site. The improvements include cost effective operations and maintenance improvements to optimize equipment operation, including measures or projects that provide measurable environmental benefits in addition to the energy savings from the project.

The ***simple payback period*** is the total eligible cost of an energy efficiency measure or project divided by the first year energy cost savings, stated in years. The program standard for audit implementation is less than or equal to 15 years.

Step 2: Other Identified Measures

When a school district has completely implemented their audits in all eligible instruction school facilities the school district may:

1. Implement other energy efficiency measures identified in their audits at instructional school facilities with a simple payback greater than 15 years and less than 50 years; or
2. Complete a new audit of eligible instructional school facilities; or
3. Complete audits of other eligible public school facilities; or
4. Implement energy efficiency measures identified in audits of other eligible public school facilities.

The Step 2 energy efficiency measures include:

- An ***energy efficiency program***, which provides energy savings and can have a simple payback of greater than 15 years, includes retro-commissioning, commissioning of new equipment, DDC Circuit Rider, and the training of operations and maintenance staff.
- ***Retro-commissioning*** is the process of identifying, repairing and/or replacing aging or dysfunctional equipment or systems in an existing facility. It involves design and specification review and trouble-shooting equipment. Retro-commissioning makes

recommendations for required repairs, modifications, or changes to the equipment or system to improve energy efficiency, prolong equipment and system life expectancy, increase occupant comfort, and improve indoor air quality. The retro-commissioning agent provides facility operator training for operations and maintenance of equipment. The energy savings and simple payback period is calculated for each retro-commissioning measure identified. Retro-commissioning includes the actual cost to adjust, modify, repair, and/or replace capital equipment.

- The **commissioning of new equipment** is the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the design intent. Commissioning requires the consultation and approval of the Oregon Department of Energy.
- **Operations and maintenance** procedures include repair, replacement, and other capital maintenance of equipment to optimize equipment operation.
- **Other energy measures** include energy efficiency measures or projects identified in the audit that have a simple payback less than 50 years, or that provide benefits in addition to measurable energy savings. Projects with a simple payback greater than 50 years are subject to approval by the Oregon Department of Energy.
- **Staff training** provides skills and techniques for trouble-shooting, adjusting, and modifying equipment in order to improve the energy efficiency of capital equipment.
- **Weatherization** includes measures designed to reduce the heat loss of a facility through the building envelope.

Step 3: Other Implementation Measures: Energy Education, Purchase of Environmentally Focused Power, and Renewable Energy Resource Projects

When all school districts within an Education Service District have completely implemented audits for all eligible instructional school facilities, and have received authorization from the Oregon Department of Energy, then the school district may expend SB 1149 Public Purpose Funds for:

1. Audits to identify other energy efficiency measures; or
2. Implementing other energy efficiency measures identified in an audit; or
3. Initiating energy conservation education curriculum or programs; or
4. The incremental cost to purchase electricity from environmentally focused energy sources, (usually purchased from the electric company); or
5. The purchase of a renewable energy resource project to replace or supplement power to the site. All projects require approval by the Oregon Department of Energy.

Energy conservation education programs are hands-on instructional programs intended to involve students, teachers, and staff in efforts to operate school facilities in an energy efficient manner. Programs strive to integrate education on energy, the environment, and their relationship to savings opportunities. Programs include those developed by: U.S. Department of Energy or its affiliated agencies or programs, Oregon Department of Energy, State Colleges or Universities or

any curriculum approved by the Oregon Board of Education, the National Energy Education Association, and/or the local school district or school board.

Environmentally focused energy sources use a renewable energy resource to generate power, and produce electricity with little effect on the environment, but is more expensive to produce than traditional electricity (usually purchased from the electric company).

Renewable energy resources include, but are not limited to straw, forest slash, wood waste or other wastes from forestland. It also includes industrial waste, solar energy, wind power, water power, geothermal resources, or waste heat recover. It does not include a hydroelectric or geothermal project with more than one megawatt of installed generating capacity. All projects must be pre-approved by the Oregon Department of Energy.

A renewable resource project is a project that uses a renewable energy resource at a school site to produce electricity to replace or supplement electricity to the site. All projects must be pre-approved by the Oregon Department of Energy.

Eligible Costs

Capital costs and expenses needed to acquire, build, install, or commission an energy efficiency measure or program covered in this program are eligible for funding. Measures must be performed, installed, or implemented after March 1, 2002.

E. Reporting Process

The Oregon Department of Energy collects data from school districts and Education Service Districts. This data is the official record for the purpose of meeting requirements of SB 1149.

Audit Reporting

School districts report the following information to the Oregon Department of Energy:

- Annual reporting of energy use index for all public school facilities for the life of the program; and
- Date of audit, audit level, EUI, EEM descriptions, EEM costs, EEM energy savings, EEM cost savings, and cost of audit by instructional school facility and public instructional school facility if applicable.

Audit Implementation Plan

School districts report the following information to the Oregon Department of Energy for their review prior to implementing measures:

- An ***implementation plan report*** from SID that includes all measures the school district is planning to implement, the funding source to be used for the measures, and all measures and cost of measures implemented to date.

Audit Implementation Reporting

School districts report the following information to the Oregon Department of Energy after audit implementation:

- Description of energy efficiency measure(s) implemented; and
- Cost of measure(s); and
- Estimated energy savings (include kilowatt-hour savings, kilowatts, British thermal units saved, gallons saved); and
- Simple payback and/or life cycle cost analysis of measure; and
- Fuel source; and
- Number of audits completely implemented by school district; and
- Other benefits (measurable benefits, CO₂ reduction, improved comfort, improved indoor air quality, etc).

Energy Education Reporting

School districts report the following information to the Oregon Department of Energy after implementing energy education:

- Number of instructional hours, and
- Number of students by program; and
- Measure of success of program (benchmark or project completed); and
- Cost of energy education materials.

Environmentally Focused Fuel Sources

School districts report the following information to the Oregon Department of Energy following the purchase of environmentally focused fuel sources:

- Alternative fuel source; and
- Incremental cost / kilowatt-hour or Btu; and
- Number of kilowatt-hours purchased and Btu; and
- Savings of CO₂.

Renewable Resource Reporting

School districts report the following information to the Oregon Department of Energy after implementing renewable resource projects:

- Renewable energy source; and
- Energy savings in kilowatt-hour / Btu / therms; and
- Estimated avoided cost.

F. Quality Control and Verification of Measures

The purpose of verification includes:

1. Documentation to verify that Public Purpose Funds have been spent on qualified expenditures; and
2. To provide assurance that energy audits are accurate; and
3. To provide assurance to school districts that energy efficiency measures are installed correctly.

Verification and Quality Control of Audits

1. All energy audits are subject to random review by the Oregon Department of Energy, and/or school districts or Education Service Districts.
2. The Oregon Department of Energy provides training to all qualified energy auditors participating in the program to ensure consistency in audits and reports.
3. The Oregon Department of Energy reviews the first three audits performed by qualified energy auditors to provide quality control of audits.

Verification and Quality Control of Implemented Measures

1. All energy efficiency improvements are subject to random inspection and verification by the school district and/or Education Service District. Inspectors can be an auditor, Professional Engineer, the Oregon Department of Energy, or an independent third party.
2. A school district superintendent or business official can verify projects are installed and complete up to an identified dollar amount.
3. Projects, that exceed a stated dollar amount, require inspection and verification by an auditor, Professional Engineer, Oregon Department of Energy, or an independent third party.
4. Commissioning or retro-commissioning is required for the following energy-related capital projects funded by SB 1149 Public Purpose Funds:
 - All HVAC and/or DDC capital projects exceeding \$50,000; and
 - All boiler and chiller capital projects exceeding \$100,000; and
 - Any other energy-related (e.g., lighting and lighting controls, building envelope) capital projects exceeding \$150,000.

G. Process for Identifying Other Incentives Received

Projects identified by SB 1149 audits are eligible to receive funding from the SB1149 Schools Program and other incentive programs including, but not limited to, the Business Energy Tax Credit and the Energy Trust of Oregon. Total funds from SB 1149 and other incentives can not exceed the total cost of an eligible project. Energy Trust of Oregon incentives and funding from the SB1149 Schools Program can not be combined on the same project.

- School districts are required to report all financial incentives received for SB 1149 funded projects to the Oregon Department of Energy. These incentives must be identified in the school district's implementation plan.
- Education Service Districts may not reimburse school districts for SB 1149 projects until they receive verification from the Oregon Department of Energy that all incentives have been reported in the implementation plan.

Special Note: Energy Trust of Oregon incentives:

- May be used within the same facility, but may not be used for the same project within the facility; and
- Are approved by the Oregon Department of Energy before the Energy Trust of Oregon provides an incentive payment.

H. Process to Reimburse School Districts by Educational Service District

Reimbursement to the school district by the Education Service District involves two steps. First, the educational service district obtains verification from the school districts within its territory that implementation costs for energy efficiency capital measures are entered into SID. School districts can verify implementation costs by printing out and signing a copy of the implementation cost page or implementation plan report from SID. The second step is to attach the signed and printed SID output to documentation detailing the costs. Acceptable documentation includes:

- Copy of paid invoice(s) from the contractor(s) of specified work; or
- Schedule of values (if they identify the specific energy efficiency capital measures) with a copy of issued payment; or
- CPA letter; or
- Copy of payment coupon; or
- Copy of issued check.

In addition, the Education Service District will not provide reimbursement for a project unless the energy use index for all schools within the school district is entered into SID. The energy use index will be entered into SID by January 1 of the year following the academic year. For example, by January 1, 2006, energy use index data for the 2004-05 academic year (July 2004 – June 2005) shall be entered into SID for year 2005.

The implementation plan must also be approved by the Department of Energy before the school district can receive reimbursement for implemented projects. The implementation plan will include the energy use index status, school district audit, requirement status, funding sources; incentives used, and measures approved for implementation. The Education Service District can access the implementation plan directly from SID.

I. Process to Develop a Statewide Program

Preliminary discussions about the development of a statewide program to implement SB 1149 began in January 2000. The Oregon Department of Energy worked with Education Service Districts and school districts statewide to bring together interested parties to facilitate the development of the program.

The Technical Committee

The ongoing task of the Technical Committee is to make recommendations to the Policy Committee in order to enhance the efficiency of SB 1149. The recommendations of the Technical Committee are based on the experiences of committee members and the input of other school districts as they implement energy efficiency projects using the SB 1149 guidelines.

The Policy Committee

The role of the Policy Committee is to review, modify if appropriate, endorse the Technical Committee recommendations, and create an administrative structure that supports the Technical Committee recommendations.

Table 1: Technical Committee Members

Member	Position	Organization
Dave Church	Director Physical Plant	North Clackamas School District
David Furr	Energy Manager	Salem-Keizer Schools
Sue Foster	Business Manager	Willamette Education Service District
Jerry Green	Administrator, Energy and Environmental	Beaverton School District
David McKay	Senior Project Manager	Willamette Education Service District
Dave Fajer	Business Manager	Multnomah Education Service District
Don Staehely	Business Manager	Clackamas Education Service District
Patrick Wolfe	Manager, Environmental Health & Safety	Portland Public Schools
Tim Woodley	Director of Operations	West Linn-Wilsonville School District
Jim McGowan	Facilities Manager	Greater Albany School District

Table 2: Policy Committee Members

Member	Position	Organization
Milt Dennison	Superintendent	Clackamas Education Service District
Anthony Lanni	Superintendent	North Central Education Service District
Pat Evenson Brady	Superintendent	Hood River Co. School District
Maureen T. Casey	Superintendent	Willamette Education Service District
Loren Rogers	Director, Facilities Management	Hillsboro School District
B.J. Hollensteiner	Superintendent	North Santiam School District
Ed Schmidt	Superintendent	Multnomah Education Service District
Rick Howell	Superintendent	South Coast Education Service District
George Murdock	Superintendent	Umatilla/Morrow Education Service District
Michael Schofield	Business Manager	Winston-Dillard School District
Sue Foster	Business Manager	Willamette Education Service District

Table 3. Oregon Department of Energy Staff

Betty Merrill	Building Technologies Manager
Brandon Adams	School Program Coordinator
Bruce Alford	Energy Analyst
Greg Churchill	Energy Analyst
Shelly Carlson	Energy Specialist

Appendix 1

Energy Efficiency Target Ranges Energy Use Index for K - 12 Schools

Energy use index is the total energy used in a building for a specified period of time, stated in terms of Btu / gross conditioned square feet (Btu / sf / yr). It may be used to indicate consumption history and is used to depict what the typical use of a given facility should be in relation to specified conditions.

Typical Elementary School

Approximately 2,000 hours / year Operating Schedule

Western Oregon

30,000 - 42,000 Btu/sf/yr

Eastern Oregon

34,000 - 50,000 Btu/sf/yr

Typical Middle School

Approximately 2,200 hours / year Operating Schedule

Western Oregon

41,000 - 51,000 Btu/sf/yr

Eastern Oregon

46,200 - 60,000 Btu/sf/yr.

Typical High School

Approximately 3,200 hours / year Operations Schedule

Western Oregon

59,200 - 64,000 Btu/sf/yr

Eastern Oregon

53,000 - 72,000 Btu/sf/yr

These proposed ranges were developed by Washington State University and modified by the Oregon Department of Energy.