

Pasadena Water & Power's

High-Performance Building Program

- **Receive Matching Funds for Energy Savings**
 - **Obtain Technical Assistance**
 - **Lower Energy Costs**
 - **Improve the Work Environment**
 - **Reduce Use of Natural Resources**
 - **Strengthen the Bottom Line!**



P A S A D E N A
Water&Power

Pasadena Water & Power (PWP) is offering the **High-Performance Building Program (HPBP)** to help PWP business customers like you to increase your company's energy efficiency and reduce your monthly electric bill. These incentives are offered to encourage owners and developers to explore higher levels of energy efficiency and to ensure the inclusion of energy-efficiency features in a new construction or large retrofit project.

The High-Performance Building Program offers:

- **An energy efficiency matching rebate and lower energy costs.**
- **Free technical assistance to provide additional resources, new technologies, and other financial incentives that may be available.**

Financial Incentives

Financial incentives are available to customers when the efficiency of the new building or large retrofit exceeds the minimum threshold (12% above California's 2005 Title 24 Energy Efficiency Standards). These incentives encourage owners to make energy efficiency a major goal in their projects, and recognize the extra effort required to achieve these higher levels of efficiency.

Rebates are capped at a maximum of \$100,000 per freestanding building or individual electric meter. **The program matches one month's electricity savings for each percentage better than code that the building performs.** As shown in the table below, the incentives escalate as buildings become more efficient.

Table 1
Example: Building with a Base Electric Cost of \$100,000 / Year

Efficiency Scenario	% Better Than 2005 Title 24	Annual Electric \$ Savings	Monthly Average Electric \$ Savings	# Months Matching Rebate	Rebate (Max \$100,000)
	Column A From PERF-1*	Column B From ECON-1*	Column C = B / 12	Column D = A * 100	Column E = C * D
1	0 to 11%	\$0 to \$11,000	\$0 - \$917.00	0	\$0
2	12%	\$12,000	\$1,000	12	\$12,000
3	20%	\$20,000	\$1,667	20	\$33,333
4	24%	\$24,000	\$2,000	24	\$48,000
5	30%	\$30,000	\$2,500	30	\$75,000

* PERF-1 and ECON-1 are EnergyPro reports which are available when the Whole Building Performance Method is used.

Table I shows examples of how it works. The building used in this example, if designed and built to meet the energy code, would have electric costs of \$100,000 per year. Five different scenarios are shown, each one with a progressively higher level of overall efficiency. Highest efficiency is achieved with the integration of improvements in the building, such as but not limited to insulation, daylighting, electric lighting, and mechanical systems.

- Scenario 1 is less than 12% better than 2005 Title 24 energy standards. This building does not qualify for HPBP incentives.
- Scenario 2 performs 12% better than code and the annual electricity cost is reduced from \$100,000 to \$88,000. This results in an annual savings of \$12,000, or a simple average of \$1,000 per month. The building qualifies for a rebate equaling 12 months worth of energy savings, or \$12,000 (\$1,000 x 12 months).
- Scenario 3 performs 20% better than code and the annual electricity cost savings are \$20,000, or \$1,667 per month. The building qualifies for a rebate equaling 20 months worth of energy savings, or \$33,340 (\$1,667 x 20 months).
- Scenario 4 performs 24% better than code and the annual electricity savings are \$24,000, or \$2,000 per month. The building qualifies for a rebate equaling 24 months worth of energy savings, or \$48,000 (\$2,000 x 24 months). Note that when efficiency is doubled (in this case from 12% to 24%), the rebate is four times larger (from \$12,000 to \$48,000) and the annual electric savings were doubled from \$12,000 to \$24,000.

This is how the Pasadena High-Performance Building Program works...

1. Customer designs the building to perform at least 12% better than Title 24-2005 Whole Building Performance Method.
 - PWP Account Managers can assist customers in determining which energy efficiency strategies and programs are appropriate for the project. Customers can contact their Account Manager by calling the AnswerLine at (626) 744-6970.
 - Customers are encouraged to contact their Account Manager during the Schematic phase to let them know the project is interested in higher energy efficiency.
 - Account Managers are available at all phases of the project to provide technical assistance to the Design Team.
 - Customers state in a Letter of Intent that they will actively consider designing and installing higher efficiency into their project.
2. At the completion of design, Customer submits to PWP:
 - An electronic copy of the proposed building's 2005 Title 24 Whole Building Performance Method energy model (EnergyPro v4) prepared by a CABEC (California Association of Building Energy Consultants) Certified Energy Analyst or Certified Energy Plan Examiner. For an

updated list of certified professionals, visit the CABEC website at www.cabec.org/index.php

- A hard copy of the plans (1/2 size) and any specifications or cutsheets needed to verify energy performance.
 - A copy of the City of Pasadena building permit.
 - A Project Energy Efficiency Measures (EEMs) Summary.
 - Letter of Commitment between Owner and PWP.
3. Upon approval of the Letter of Commitment, PWP will reserve funds for the project:
- Funds will be reserved for up to 24 months
 - Incentives will be reserved on a first-come, first-served basis.
 - Reserved funds are subject to final approval by PWP upon building completion and verification of energy efficiency measures.
4. Customer manages the project through construction and integrates the operation of the energy efficiency measures.
- Customer should inform PWP of any changes in energy efficiency measures or construction timeline.
 - Changes in the project's energy measures may result in lower HPBP incentives.
5. When construction is completed and all energy efficiency measures have been installed and are operating properly:
- Customer shall submit a Request For Energy Efficiency Measures Verification.
 - Customer assures that the energy efficiency elements are included in the completed project and submits a copy of the Title 24 Acceptance Requirements to verify the proper functioning of the energy efficiency measures.
 - PWP will verify all energy efficiency measures.
 - Incentives will be paid within 30 days upon approval by PWP.

For more information

Contact your PWP Account Manager early in the design process to determine funding availability, to learn about other programs, and available options to enhance your project's energy efficiency potential.

All programs are subject to funding availability. PWP reserves the right to modify the terms of this program at any time.