INDUSTRIAL EQUIPMENT INCENTIVES FOR OREGON BUSINESS CUSTOMERS

SAVE MONEY AND ENERGY NOW AND FOR YEARS TO COME

EFFECTIVE JANUARY 2020—INCENTIVES ARE SUBJECT TO AVAILABILITY AND MAY CHANGE.

Energy Trust of Oregon offers cash incentives when you purchase energy-efficient equipment that can help lower energy use and reduce operating costs at your industrial facility.

Contact Energy Trust today to get started.
Call 1.866.202.0576, email production@energytrust.org or visit www.energytrust.org/industry.
Are You Eligible?

Energy Trust Industrial incentives are available for qualifying energy-efficiency upgrades and retrofits to industrial facilities. To qualify you must typically:

• Have an eligible industrial, municipal or agricultural project site, located in Oregon and served by a participating utility. Incentives for electric equipment are available to Portland General Electric or Pacific Power sites. Incentives for natural gas equipment are available to NW Natural, Cascade Natural Gas and Avista natural gas sites.

• Pay the public purpose charge; check your bill or contact Energy Trust if you have questions.

Additional eligibility requirements may apply, depending on your project. Incentives are subject to funding availability and may change. Visit www.energytrust.org/industry for the latest incentive information.

Industrial Energy-Efficient Equipment Standard Incentives

Every piece of equipment in an industrial facility can be an opportunity to save energy and money. Energy Trust can provide cash incentives to help you reduce energy costs and increase efficiency at your facility.

Easy Steps to Savings

1. Contact an Energy Trust Program Delivery Contractor (PDC) or your vendor to learn about incentives and projects available for your facility.
2. Once the upgrade is installed, work with your PDC or vendor to submit your incentive application.
3. Receive your incentive check in 4 to 6 weeks.

With You All the Way

Energy Trust will work with you to see your upgrade through. We can help you select an energy-efficient solution for your business by connecting you with vendors and Energy Trust trade allies who are familiar with the latest Energy Trust standards and what equipment qualifies for incentives. Your vendor or contractor can even help you with your Energy Trust incentive application.
CASH INCENTIVES

COMPRESSED AIR

Energy Trust calculates the incentive for compressed air based on operating hours and usage. You will receive an incentive estimate amount prior to purchase. Talk with your PDC or vendor for more information.

Incentives may be available for the following:
- Additional receiver capacity
- Air compressor upgrade
- Air compressor cooling fan variable frequency drive (VFD)
- Compressed air leak reduction
- Cycling refrigerated dryers
- Low pressure-drop filters
- Zero-loss condensate drain

BATTERY CHARGERS

For complete details on efficiency requirements and eligibility for battery chargers incentives, see [www.energytrust.org/420BC](http://www.energytrust.org/420BC).

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>INCENTIVE</th>
<th>PRODUCT SPECIFICATIONS</th>
</tr>
</thead>
</table>
| Industrial battery charger | $1,000 per battery charger | - Must replace an existing SCR or ferroresonant battery charger.  
- Must have a rating of 24 to 48 V.  
- Must charge forklift or pallet jack batteries.  
- Must be high-frequency with a conversion efficiency of at least 89%.  
- Must replace existing working equipment. |
**NATURAL GAS EQUIPMENT**

For complete details on efficiency requirements and eligibility for natural gas incentives, see [www.energytrust.org/420G](http://www.energytrust.org/420G).

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
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</thead>
<tbody>
<tr>
<td>Radiant heater, non-modulating</td>
<td>$6.50 per kBtu/hr in</td>
<td>New install or must replace non-radiant heating system. Indoor use only. 5,000 to 20,000 square feet.</td>
</tr>
<tr>
<td>Radiant heater, modulating</td>
<td>$8 per kBtu/hr in</td>
<td>Minimum 94% thermal efficiency</td>
</tr>
<tr>
<td>HVAC boiler</td>
<td>$8 per kBtu/hr in</td>
<td>Minimum 94% thermal efficiency</td>
</tr>
<tr>
<td>High-efficiency process hot water boiler</td>
<td>Varies</td>
<td>Incentive is based on operating hours and usage.* Preapproval is required.</td>
</tr>
</tbody>
</table>

*For incentives not listed on Form 420G, contact your vendor or PDC for additional details.*

For complete details on efficiency requirements and eligibility for natural gas steam trap incentives, see [www.energytrust.org/420ST](http://www.energytrust.org/420ST).

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Low pressure steam trap (&lt;15 psig)</td>
<td>$500 per steam trap</td>
<td>- Steam trap orifice size ≤ 1.5 inches</td>
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<tr>
<td></td>
<td></td>
<td>- Must replace or rebuild existing steam trap</td>
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<tr>
<td></td>
<td></td>
<td>- Steam trap must be installed at an industrial facility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>using a natural gas-fired steam boiler</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The steam system must operate year round</td>
</tr>
<tr>
<td>Med pressure steam trap (15-200 psig)</td>
<td>$500 per steam trap</td>
<td>- Steam trap orifice size ≤ 1 inch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Must replace or rebuild existing steam trap</td>
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</tr>
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**Customers must receive natural gas service under an eligible utility rate schedule, as shown below:**

- NW Natural: 03C, 03I, 31CSF, 31CSI, 31ISF, 31ISI, 32CSF, 32CSI, 32ISF, 32ISI
- Cascade Natural Gas: 104, 105, 111, 170
- Avista: 420, 424
INSULATION

For complete details on efficiency requirements and eligibility for insulation incentives, see www.energytrust.org/420IN.

<table>
<thead>
<tr>
<th>BUILDING AND PIPE INSULATION</th>
<th>INCENTIVE</th>
<th>PRODUCT SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attic insulation*</td>
<td>$0.60 per square foot</td>
<td>New insulation must be ≥R25.</td>
</tr>
<tr>
<td>Roof insulation*</td>
<td>$0.50-$1 per square foot</td>
<td>If no existing insulation, new insulation must be ≥R15 for $0.50 incentive and ≥R30 for $1 incentive. If existing insulation &lt;=R5; new insulation must be ≥R30 for $1 incentive.</td>
</tr>
<tr>
<td>Wall insulation*</td>
<td>$0.60 per square foot</td>
<td>New insulation must be ≥R20.</td>
</tr>
<tr>
<td>Pipe insulation, domestic hot water*</td>
<td>$4 per lineal foot</td>
<td>If pipe diameter is ≤1.5&quot;, the minimum thickness is 1.5&quot;; if pipe diameter is &gt;1.5&quot;, the minimum thickness is 2.0&quot;.</td>
</tr>
<tr>
<td>Pipe insulation, low-pressure steam**</td>
<td>$8 per lineal foot</td>
<td>If pipe diameter is ≤1.5&quot;, the minimum thickness is 1.5&quot;; if pipe diameter is &gt;1.5&quot;, the minimum thickness is 2.0&quot;.</td>
</tr>
<tr>
<td>Pipe insulation, med-pressure steam**</td>
<td>$12 per lineal foot</td>
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</table>

*No existing insulation, unless existing is damaged or missing. Damaged or missing insulation must be prequalified and documented by the installation contractor.

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MOTORS AND DRIVES

Variable Frequency Drives

A variable frequency drive (VFD) is an electronic motor control which adjusts motor speed to match variable system requirements. They are universally available and can be added to motors where system demand or load varies. VFDs can be installed for a wide range of applications, including fans, dust collection systems and pumps. VFDs can also reduce stress on equipment by lowering operating speeds, create a soft start which eliminates the stress of across the line starts and create a safer work environment.

Energy Trust calculates the incentive for variable frequency drives based on operating hours and usage. You will receive an incentive estimate amount prior to purchase. Talk with your PDC or vendor for more information.

Green Motor Rewind

Incentive amount: $1 per hp, per qualifying green rewind. Incentive is given in the form of an “instant discount” on the qualifying rewind invoice.

To participate, you need to have the motor rewound to meet established Green Motor Initiative “green rewind” standards by a member service center (list available on the Green Motors Practices Group website). Visit www.greenmotors.org for more information.
WELDERS

For complete details on efficiency requirements and eligibility for welding incentives, see www.energytrust.org/420PW.

<table>
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<tbody>
<tr>
<td>Inverter welder</td>
<td>$1,200 per</td>
<td>- Must replace existing working transformer welder.</td>
</tr>
<tr>
<td></td>
<td>welder</td>
<td>- Must operate at least 2,000 hours/year.</td>
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<tr>
<td></td>
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<td>- Must be rated at least 210 amps and at least 40% duty cycle.</td>
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REFRIGERATION

Energy Trust calculates the incentive for refrigeration based on operating hours and usage. You will receive an incentive estimate amount prior to purchase. Talk with your PDC or vendor for more information.

High-Speed Doors

High-speed doors can reduce unnecessary temperature spikes in refrigerated spaces, protecting your cold products and helping to cut down on energy costs. These doors can help maintain cool temperatures in your refrigerated spaces, eliminate gaps where frost can build up, and increase plant safety. Energy Trust offers cash incentives for upgrading to energy-efficient high-speed doors.

Refrigeration Controllers

Refrigeration controllers eliminate inefficient defrost heater time clocks and increase the effectiveness of evaporator fans, allowing your system to run more efficiently. Installing refrigeration controllers can also decrease defrost heater use by up to 90%, resulting in increased cooling capacity and energy savings.

Municipal Water Leak Repair

Locating and repairing leaks in underground water distribution systems can save water and energy, reduce long-term operating costs, improve operations and help avoid expensive, catastrophic line breaks.

Energy Trust offers cash incentives for both leak detection assessments and repairs.

Energy Trust will cover up to $1,000 of the leak assessment study and may offer additional calculated incentives for leak repairs based on the assessment. For more information, call 503.928.3154, email production@energytrust.org, or visit www.energytrust.org/wastewatertreatment.
More Ways to Save

Custom Incentives
In addition to standard incentives, Energy Trust also offers custom incentives and energy analysis for many cost-effective energy efficiency improvements.

We can provide:
• Scoping studies: Your PDC can conduct a technology-specific or facility-wide scoping study to help you identify energy and cost saving opportunities. See the industry pages of our website for PDC contact information.
• Technical energy studies: Once a custom project has been identified, Energy Trust can conduct a technical study, typically at no cost to you, to identify the most cost-effective and energy-saving solution.
• Installation guidance: Energy Trust can also support your project throughout installation with technical assistance, development of project specifications and evaluation of contractor bids.
• Cash incentives: Energy Trust offers cash incentives of $0.30/annual kWh or $2.50/therm saved, up to 70% of the eligible project costs. Incentives are calculated based on operating hours and usage.
• Post-installation verification: When the project is complete, Energy Trust verifies that implemented energy-saving improvements are consistent with technical study expectations and calculates the final incentive payment.

Lighting Incentives
Upgrading to today’s improved industrial light sources, fixtures and controls could significantly reduce your facility’s lighting energy costs and disruption from lamp replacement. Improved lighting can also increase production, improve safety and security, lighten the load on your electrical system and boost employee productivity.

Energy Trust can provide access to cash incentives on qualifying projects. To learn more, call 1.866.202.0576, email production@energytrust.org, or visit www.energytrust.org/industry.

Solar Incentives
Energy Trust offers incentives for solar electric systems that produce electricity for use in your facility. Industrial facility owners or managers must work with an approved Energy Trust solar trade ally contractor to qualify for incentives.

To request a preliminary solar assessment, go to www.energytrust.org/solarbid.
Get more from your energy.
To learn more visit www.energytrust.org/industry, email production@energytrust.org, or call 1.866.202.0576.

Energy Trust provides technical assistance and financial incentives for energy systems or equipment that meet its program criteria, but does not install energy systems or equipment or guarantee any specific energy savings through its assistance or programs. Installation work is done by independent businesses that are solely responsible for the quality and performance of their installations.