Advanced Energy Solutions

2020 Go Electric Business Incentives

Did you know — SMUD’s energy efficiency programs in 2020 include new incentives to convert commercial natural gas fired appliances to efficient heat pump and induction technologies.

Commercial heat pump water heater

Using a vapor-compression cycle like the refrigerator in your home, heat pump water heaters pull heat out of the air and efficiently transfer it to water. Instead of creating heat by burning fossil fuels, a properly applied heat pump water heater quietly and safely heats water using about 1/3 of the energy required by a gas-fired water heater. Replacing a gas water heater with a heat pump water heater requires additional considerations. Most importantly, a heat pump water heater must be sized to allow the greatest operation in heat pump mode (also called “efficiency” mode), and limit the need for supplemental electric resistance heat. The available air space, necessary storage capacity, warranties in commercial service, and electrical service considerations require evaluation by a qualified plumber, engineer or contractor to ensure that a heat pump water heater is the proper solution.

Commercial heat pump space heaters

Using heat pumps to heat residential and commercial spaces is a common, well understood technology. The winter weather in Sacramento is ideal for heat pump heating, but heat pumps need to operate differently than a gas furnace. A heat pump’s air is not as hot as a gas furnace’s so extra time is needed to warm a space while avoiding the supplemental heating. Care must be taken to program the thermostat to maximize the efficient operation of the heat pump and realize even heating and bill savings.

Induction cooking

The magnetic field generated by an induction cooktop heats a pot or pan, but not the surrounding air. Gaining in popularity due to quick heating and precise controls, induction cooktops are sealed, easy to clean, generate no pollutants, and cool off rapidly when cookware is removed.
# Heat pump water heaters — commercial applications

Replace your gas or electric resistance water heater with an efficient heat pump water heater.

<table>
<thead>
<tr>
<th>Residential-style storage hot water heater:</th>
<th>Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-80 gallons</td>
<td>$1,500 Residential-style heat pump water heater - gas to electric heat pump conversion</td>
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<tr>
<td>Intermittent use</td>
<td>$500 Residential-style heat pump water heater - electric resistance to electric heat pump</td>
</tr>
<tr>
<td>Less than 10 kBTu/hr in “efficiency” mode (heat pump operating without electric elements)</td>
<td>$500 Electrical infrastructure support bonus if wiring changes or panel changes are required on gas to electric conversion (retrofit only)</td>
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<tr>
<td>Must appear on SMUD’s qualified products list</td>
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<table>
<thead>
<tr>
<th>Commercial duty storage hot water heater:</th>
<th>Incentive</th>
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<tr>
<td>80-120 gallons</td>
<td>$4,000 Commercial-style heat pump water heater - gas to electric heat pump conversion</td>
</tr>
<tr>
<td>Minimum 30 kBTu/hr input in “efficiency” mode (heat pump operating without electric resistance elements)</td>
<td>$500 Electrical infrastructure support bonus if wiring changes or panel changes are required on gas to electric conversion (retrofit only)</td>
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<tr>
<td>Must appear on Energy Star commercial water heater qualified products list</td>
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<tr>
<th>Split system water heater:</th>
<th>Incentive</th>
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<tr>
<td>80-120 gallons</td>
<td>$3,000 Split system heat pump water heater</td>
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<tr>
<td>Minimum 12 kBTu/hr input in heat pump mode operating without electric resistance elements</td>
<td>$500 Electrical infrastructure support bonus if wiring changes or panel changes are required on gas to electric conversion (retrofit only)</td>
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<tr>
<th>Custom engineered systems:</th>
<th></th>
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<tbody>
<tr>
<td>Heat recovery</td>
<td>Contact our Custom Energy Efficiency Incentive Program at 916-732-5095 for details or email <a href="mailto:CustomEnergyEfficiency@smud.org">CustomEnergyEfficiency@smud.org</a></td>
</tr>
<tr>
<td>Chillers</td>
<td></td>
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<td>Hybrid systems</td>
<td></td>
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<tr>
<td>Central heat pump water heaters</td>
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## Other efficient gas-to-electric conversions

### Commercial induction range

<table>
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<tr>
<th>Requirements</th>
<th>Incentive</th>
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<tbody>
<tr>
<td>2 Hobs minimum (burners)</td>
<td>$450 / hob</td>
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<tr>
<td>Food service only – primary business is preparing food</td>
<td></td>
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<tr>
<td>208 V - single phase minimum</td>
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<tr>
<td>3.5 kW/hob minimum</td>
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## Heat pump space heating — commercial applications

### Single zone and multi-zone mini split heat pumps

**Cooling capacity**
- 12,000 - 18,000 Btu/h: 17 SEER
- 24,000 - 30,000 Btu/h: 17 SEER
- 36,000 - 42,000 Btu/h: 17 SEER

**Incentive**
- $300 Single Zone, $400 Multi Zone
- $600 Single Zone, $800 Multi Zone
- $900 Single Zone, $1,200 Multi Zone

Must serve spaces previously served by gas heat.

### Packaged and split system heat pumps

**Cooling capacity**
- < 65,000 Btu/h
- 65,000 – <135,000 Btu/h
- 135,000 – <240,000 Btu/h
- ≥ 240,000 Btu/h

**Incentive**
- 14 SEER, 8.2 HSPF: $500/Ton
- 16 SEER, 8.5 HSPF: $550/Ton
- 11 EER, 12.2 IEER, 3.3 COP: $500/Ton
- 12 EER, 13 IEER, 3.4 COP: $550/Ton
- 10.6 EER, 11.6 IEER, 3.3 COP: $500/Ton
- 12 EER, 13 IEER, 3.4 COP: $550/Ton
- 9.5 EER, 10.6 IEER, 3.3 COP: $500/Ton
- 10.8 EER, 11.5 IEER, 3.3 COP: $550/Ton

COP Rating at 47°F
Retrofit projects must serve spaces previously served with gas heat.

### Engineering and permitting support (Retrofit only)

**Units with electric resistance supplemental heat only**

$750 per project site

### Electrical infrastructure support

Panel improvements or new circuits to support electric resistance supplemental heat (retrofit only)

$500 per unit

### Variable refrigerant flow (VRF) multi – zone systems

**Outdoor unit cooling capacity:**
- 65,000 – <135,000 Btu/h
- 135,000 – <240,000 Btu/h
- ≥ 240,000 Btu/h

**Incentive**
- 11 EER, 14.6 IEER, 3.3 COP: $500/Ton
- 11 EER, 23 IEER, 3.5 COP*: $1,000/Ton*
- 10.6 EER, 13.9 IEER, 3.2 COP: $500/Ton
- 10.6 EER, 21 IEER, 3.5 COP: $1,000/Ton*
- 9.5 EER, 12.7 IEER, 3.2 COP: $500/Ton
- 9.5 EER, 20 IEER, 3.5 COP: $1,000/Ton*

* Units capable of simultaneous heating and cooling through heat recovery. Retrofits must serve spaces previously served with gas heat.

### Custom Go Electric options

SMUD can support more complex electrification of space heating systems including water-source heat pumps, heat recovery, and customized solutions.

Contact the Custom Energy Efficiency Incentive Program at CustomEnergyEfficiency@smud.org
Do you have questions on SMUD’s rebates and incentives? Good news! You don’t have to figure it out yourself – please don’t hesitate to call the program line at 916-732-5095 or email one of the programs below.

**Express Energy Solutions (EES) Commercial Rebates**
EES electrification projects use a fillable rebate application available at smud.org/EES. Note that projects eligible for combined rebates greater than $5,000 require SMUD approval prior to starting work. Projects expecting to exceed the EES maximum rebate of $20,000/yr can apply through the Custom Energy Efficiency program. In no situation can the rebates exceed the installed cost of the project. A complete EES procedures manual is available at smud.org/EES. Please feel free to contact us at 916-732-5095 or Express.EnergySolutions@smud.org.

**Integrated Design Solutions (IDS)**
Integrated Design Solutions (IDS), SMUD’s new construction program, requires a paper application available upon request at IntegratedDesign@smud.org. A cornerstone of IDS is early involvement so please contact SMUD before decisions are made. If you have questions on the Integrated Design Solutions program, please call 916-732-5095. A complete procedures manual is available at smud.org/IDS.

**Custom Energy Efficiency**
Incentive applications for the Custom program are available from CustomEnergyEfficiency@smud.org or 916-732-5095. The Custom program can accommodate large incentives or incentives for complex equipment. Incentives are calculated on a case by case basis and require SMUD approval before purchasing equipment. If you aren’t sure what qualifies, please do not hesitate to reach out to the program. A complete procedures manual is available at smud.org/Custom.

**Complete Energy Solutions (CES)**
Complete Energy Solutions is available to small and mid-sized customers and delivers a turnkey process from audit to installation. Details on the Complete Energy Solutions program can be found at smud.org/CES.

**Multifamily Program**
SMUD’s Multifamily program can support the conversion of a single unit or an entire complex. Electrification and energy efficiency incentives are available. Details are available at smud.org/Multifamily.

To learn more about SMUD’s commercial programs, call 916-732-5095, or email one of the programs listed above. To locate a Strategic Account Advisor (SAA) to help you with your energy needs, call 1-877-622-7683, email StrategicAccounts@smud.org, or use the online tool at smud.org/MyAdvisor.