The GPG program enables GSA to make sound investment decisions in next generation building technologies based on their real world performance.

**GPG FINDINGS**

The GPG program enables GSA to make sound investment decisions in next generation building technologies based on their real world performance.

**INCREASES PV PANEL EFFICIENCY**

- BY LOWERING PV TEMPERATURE
- CAPTURES HEAT FOR OTHER USES SUCH AS DOMESTIC HOT WATER

**TECHNOLOGY**

What is the advantage of PV-T?

**M&V**

Where did Measurement and Verification occur?

**RESULTS**

How did PV-T perform in M&V?

**DEPLOYMENT**

Where does M&V recommend deploying PV-T?

**HIGH ELECTRIC RATES**

Small facilities, with electric rates > $0.30/kWh, in hot climates with large domestic hot water (DHW) loads and limited roof space. Incentives can lower system costs by as much as 75%.

---

**Energy Savings and Economics for PV-T**

Cost-effective when electricity rates are high.

<table>
<thead>
<tr>
<th>City</th>
<th>Electricity Rate ($/kWh)</th>
<th>City Cost Adjustment Multiplier</th>
<th>Solar Energy Production (kWh/yr)</th>
<th>Annual Cost Savings ($)</th>
<th>Installed Cost ($)</th>
<th>Simple Payback (yrs)</th>
<th>Payback with 30% Tax Credit (yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland, OR</td>
<td>0.09</td>
<td>0.992</td>
<td>6,698</td>
<td>$581</td>
<td>$56,765</td>
<td>98</td>
<td>68</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>0.15</td>
<td>1.172</td>
<td>6,331</td>
<td>$934</td>
<td>$67,065</td>
<td>72</td>
<td>50</td>
</tr>
<tr>
<td>Denver, CO</td>
<td>0.11</td>
<td>0.943</td>
<td>11,063</td>
<td>$1,198</td>
<td>$53,961</td>
<td>45</td>
<td>32</td>
</tr>
<tr>
<td>Honolulu, HI</td>
<td>0.34</td>
<td>1.173</td>
<td>10,097</td>
<td>$3,488</td>
<td>$67,123</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Daggett, CA</td>
<td>0.18</td>
<td>0.996</td>
<td>11,824</td>
<td>$2,144</td>
<td>$56,894</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td>Phoenix, AZ</td>
<td>0.10</td>
<td>0.887</td>
<td>11,783</td>
<td>$1,237</td>
<td>$50,757</td>
<td>41</td>
<td>29</td>
</tr>
</tbody>
</table>

---