Economic Significance of Solar Installation Industry in Alaska in 2019

This analysis was performed by the Alaska Center for Energy and Power at the University of Alaska Fairbanks and the Center for Economic Development at the University of Alaska Anchorage using IMPLAN modeling.

Assumptions

Total value of solar installed in 2019:

<table>
<thead>
<tr>
<th>Project</th>
<th>Installed Size (Watts)</th>
<th>Cost Per Watt ($)</th>
<th>Total Cost (Installed Size X Cost Per Watt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railbelt net metering</td>
<td>2,403,000¹</td>
<td>3.10²</td>
<td>$7,449,300</td>
</tr>
<tr>
<td>Egan Center</td>
<td>70,000³</td>
<td>2.60</td>
<td>$182,000</td>
</tr>
<tr>
<td>Renewable IPP Willow</td>
<td>1,198,800</td>
<td>1.27</td>
<td>$1,520,000</td>
</tr>
<tr>
<td>Total Value</td>
<td></td>
<td></td>
<td>$9,151,300</td>
</tr>
</tbody>
</table>

- Payroll as % of revenue: 22.5%⁵
- 2019 construction season full-time employees: 50⁶
- 2019 part-time employees: 8
- It should be recognized that not all spending on solar photovoltaic installations may be “new spending” in the Alaska economy since spending on solar installations might be displacing spending on something else within Alaska.

Results

- Solar installations in 2019 supported 58 jobs and 24 additional jobs through multiplier effects in Alaska.
- The solar industry directly supported an estimated $3,100,000 in income and payroll in Alaska in 2019. The industry supported an additional $1,278,000 in payroll in other industries in Alaska through multipliers.
- For every dollar spent on solar installations, an additional $0.43 of value was generated and circulated through Alaska's economy.

¹ This is the sum of new net metered solar installations in 2019 in Railbelt utilities service areas, gathered from utility annual net metering reports found on the Regulatory Commission of Alaska website.
² The cost per watt price is a best guess of the average installed costs around the Railbelt based on installer surveys. $3.10/watt may be a conservative estimate, which would result in a lower than actual economic significance.
³ Found in Anchorage municipal records for permit C18-2043.
⁴ http://uaf.edu/acep/solar.
⁵ This was an average of the payroll as a % of revenue gathered from various solar installers in Alaska.
⁶ Employee information was gathered by surveying solar installers in the state.

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http://uaf.edu/acep/solar