

Funding Calculation Form

Air-to-Air Heat Pumps

Facility Name _____

Form Completed by _____

Date _____

Manufacturer & Model Number of Heat Pump(s) _____

Total Floor Area Served (Sqft) _____

See the "Heat Pump Instruction Sheet" for directions on how to use this form and for additional requirements.

I. Proposed and Baseline Performance

| Fill out the row which corresponds to the type and cooling capacity of your heat pump unit(s), then continue with section II. | | Baseline Performance | | | | Proposed Performance | | | | | |
|---|---|-------------------------------|-------------|-------------------------------|-------------|-------------------------------------|------------------------|------------------|-------------------------------------|------------------------|------------------|
| | | Cooling | | Heating | | Cooling | | | Heating | | |
| Type | Rated Cooling Capacity per Unit (Btu/h) | from Seattle Energy Code a | Wh/Btu b | from Seattle Energy Code c | Wh/Btu d | From manufacturer's literature e | Conversion factor f | Wh/Btu g= f/e | From manufacturer's literature h | Conversion factor i | Wh/Btu j= i/h |
| Split System | 65,000 or less | 10.0 SEER | 0.1000 | 6.8 HSPF | 0.1471 | SEER | 1 | | HSPF | 1 | |
| Single Package/ Unitary | 65,000 or less | 9.7 SEER | 0.1031 | 6.6 HSPF | 0.1515 | SEER | 1 | | HSPF | 1 | |
| | 65,001 to 135,000 | 8.3 IPLV | 0.1205 | 2.0 COP | 0.1465 | IPLV | 1 | | COP | 0.293 | |
| | greater than 135,000 | 7.5 IPLV | 0.1333 | 2.0 COP | 0.1465 | IPLV | 1 | | COP | 0.293 | |

II. Energy Savings, Project Costs, Estimated Funding

| | | | |
|---|--|-----------------------------------|-------------|
| A | Cooling performance improvement | col. b - col. g | Wh/Btu |
| B | Cooling capacity per unit | from manufacturer's literature | Btu/h |
| C | Cooling equivalent full load hours | ----- | 600 hr/yr |
| D | Cooling energy savings per unit | (line A x line B x line C) / 1000 | kWh/yr |
| E | Heating performance improvement | col. d - col. j | Wh/Btu |
| F | Heating capacity per unit | from manufacturer's literature | Btu/h |
| G | Heating equivalent full load hours | ----- | 1,400 Hr/yr |
| H | Heating energy savings per unit | (line E x line F x line G) / 1000 | kWh/yr |
| I | Total energy savings per unit | line D + line H | kWh/yr |
| J | Number of units | ----- | |
| K | Total energy savings | line I x line J | kWh/yr |
| L | Estimated Seattle City Light funding * | line K x (0.233/kWh) | |
| M | Project cost | Cost related to this measure | |
| N | Total cooling capacity (tons) | (line B x line J) / 12000 | Tons |

| Seattle City Light use Only |
|-----------------------------|
| Approved Funding Amount: \$ |
| Approved by: |
| Date: |

* This form is not a guarantee of funding from Seattle City Light (SCL). The estimated funding (line L) will be reviewed by SCL in relation to project cost, system performance, suitability of the equipment, control strategy, etc. Funding can only be guaranteed through written legal documents signed by SCL.