

# City of Pinole *Proposed* Reach Codes

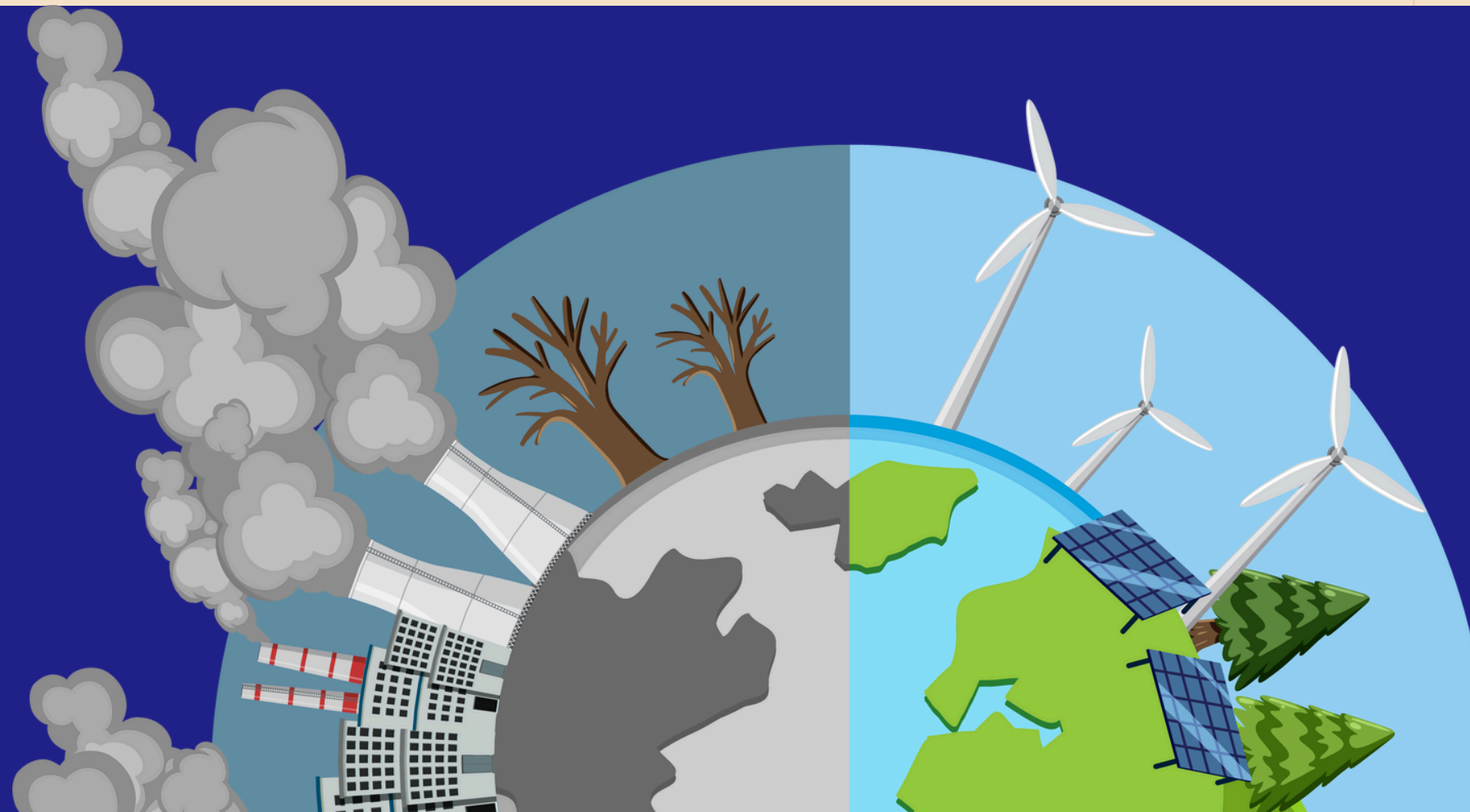


## Multifamily



**Table 2 City of Pinole Community GHG Emissions (2017)**

| Sector and Subsector       | GHG Emissions (MT CO <sub>2</sub> e) | Percent of Emissions |
|----------------------------|--------------------------------------|----------------------|
| <b>Energy</b>              | <b>33,088</b>                        | <b>46%</b>           |
| Residential Electricity    | 3,738                                | 5%                   |
| Nonresidential Electricity | 5,918                                | 8%                   |
| Residential Natural Gas    | 18,140                               | 25%                  |
| Nonresidential Natural Gas | 5,291                                | 7%                   |



## Building Energy

BE-1

Electrify 100% of new construction in the City in 2024.



BE-1a

Adopt a single margin source energy score or more stringent ordinance in 2024 to avoid new natural gas construction.



# adopted 2024



# New construction of 5-story multi-family



Table 1: Measure Costs

| Measure              | Climate Zones | Performance Level  | Incremental Cost per Dwelling Unit | Source & Notes   |
|----------------------|---------------|--|------------------------------------|--|
| HPWH                 | 1-9           | 2 Large-capacity CO <sub>2</sub> refrigerant Mitsubishi Heat2O | \$809                              | 2025 Multifamily Domestic Hot Water CASE study (Statewide CASE Team, 2023)   |
|                      | 10-16         |  | \$421                              |  |
| Solar Thermal System | 1-9           | 0.35 SSF   | \$774                              | Storage tank size design aligns with the 2022 Multifamily Domestic Hot Water CASE study (Statewide CASE Team, 2020). Solar thermal system cost methodology aligns with the original 2022 Multifamily Reach Code Report but is scaled up for the upsized solar thermal system (Statewide Reach Codes Team, 2023). |
|                      | 10-16         | 0.50 SSF   | \$942                              |  |





# Cost-effectiveness

## Heat pump water heater

Table 3: All-Electric 5-Story Multifamily Cost-Effectiveness Results per Dwelling Unit

| Climate Zone | Electric/<br>Gas Utility | Efficiency<br>TDV<br>Comp<br>Margin | Source<br>Comp<br>Margin | Annual<br>Elec<br>Savings<br>(kWh) | Annual<br>Gas<br>Savings<br>(therms) | Incremental Cost |                       | TDV          |         |
|--------------|--------------------------|-------------------------------------|--------------------------|------------------------------------|--------------------------------------|------------------|-----------------------|--------------|---------|
|              |                          |                                     |                          |                                    |                                      | First Year       | Lifecycle<br>(2022\$) | B/C<br>Ratio | NPV     |
| CZ01         | PGE                      | 15%                                 | 21%                      | -1,024                             | 139                                  | (\$5,820)        | (\$6,292)             | >1           | \$9,525 |
| CZ02         | PGE                      | 10%                                 | 14%                      | -799                               | 112                                  | (\$573)          | \$681                 | 4.0          | \$1,917 |
| CZ03         | PGE                      | 11%                                 | 16%                      | -787                               | 111                                  | (\$573)          | \$681                 | 3.9          | \$1,903 |
| CZ04         | PGE                      | 9%                                  | 15%                      | -754                               | 105                                  | (\$573)          | \$681                 | 3.6          | \$1,678 |
| CZ04         | CPAU                     | 9%                                  | 15%                      | -754                               | 105                                  | (\$546)          | \$707                 | 3.4          | \$1,651 |
| CZ05         | PGE                      | 11%                                 | 15%                      | -785                               | 109                                  | (\$573)          | \$681                 | 3.7          | \$1,759 |
| CZ05         | PGE/SCG                  | 11%                                 | 15%                      | -785                               | 109                                  | (\$573)          | \$681                 | 3.7          | \$1,759 |
| CZ06         | SCE/SCG                  | 8%                                  | 17%                      | -695                               | 96                                   | (\$573)          | \$681                 | 2.8          | \$1,155 |
| CZ07         | SDGE                     | 10%                                 | 23%                      | -689                               | 99                                   | (\$573)          | \$681                 | 3.1          | \$1,392 |
| CZ08         | SCE/SCG                  | 7%                                  | 12%                      | -672                               | 92                                   | (\$573)          | \$681                 | 2.7          | \$1,115 |
| CZ09         | SCE/SCG                  | 6%                                  | 10%                      | -683                               | 92                                   | (\$573)          | \$681                 | 2.7          | \$1,117 |
| CZ10         | SCE/SCG                  | 6%                                  | 10%                      | -683                               | 77                                   | (\$843)          | \$293                 | 6.5          | \$1,440 |
| CZ10         | SDGE                     | 6%                                  | 10%                      | -683                               | 77                                   | (\$843)          | \$293                 | 6.5          | \$1,440 |
| CZ11         | PGE                      | 7%                                  | 12%                      | -723                               | 85                                   | (\$843)          | \$293                 | 7.9          | \$1,793 |
| CZ12         | PGE                      | 8%                                  | 16%                      | -743                               | 89                                   | (\$843)          | \$293                 | 8.8          | \$2,030 |
| CZ12         | SMUD/PGE                 | 8%                                  | 16%                      | -743                               | 89                                   | (\$843)          | \$293                 | 8.8          | \$2,030 |
| CZ13         | PGE                      | 6%                                  | 11%                      | -697                               | 81                                   | (\$843)          | \$293                 | 7.2          | \$1,623 |
| CZ14         | SCE/SCG                  | 5%                                  | 7%                       | -735                               | 77                                   | (\$843)          | \$293                 | 5.6          | \$1,192 |
| CZ14         | SDGE                     | 5%                                  | 7%                       | -735                               | 77                                   | (\$843)          | \$293                 | 5.6          | \$1,192 |
| CZ15         | SCE/SCG                  | 2%                                  | 1%                       | -576                               | 59                                   | (\$843)          | \$293                 | 3.3          | \$601   |
| CZ16         | PGE                      | 9%                                  | 25%                      | -1,322                             | 141                                  | (\$6,090)        | (\$6,679)             | >1           | \$8,886 |

Table 4: Mixed Fuel + Efficiency + Solar Thermal 5-Story Multifamily Cost-Effectiveness Results per Dwelling Unit

| Climate Zone | Electric/<br>Gas Utility | Efficiency<br>TDV<br>Comp<br>Margin | Source<br>Comp<br>Margin | Annual<br>Elec<br>Savings<br>(kWh) | Annual<br>Gas<br>Savings<br>(therms) | Incremental Cost |                       | TDV          |         |
|--------------|--------------------------|-------------------------------------|--------------------------|------------------------------------|--------------------------------------|------------------|-----------------------|--------------|---------|
|              |                          |                                     |                          |                                    |                                      | First Year       | Lifecycle<br>(2022\$) | B/C<br>Ratio | NPV     |
| CZ01         | PGE                      | 4%                                  | 8%                       | 2                                  | 16                                   | \$712            | \$899                 | 1.0          | \$13    |
| CZ02         | PGE                      | 4%                                  | 8%                       | 10                                 | 14                                   | \$669            | \$855                 | 1.2          | \$159   |
| CZ03         | PGE                      | 5%                                  | 10%                      | 4                                  | 16                                   | \$669            | \$855                 | 1.2          | \$142   |
| CZ04         | PGE                      | 4%                                  | 11%                      | 10                                 | 16                                   | \$669            | \$855                 | 1.3          | \$263   |
| CZ04         | CPAU                     | 4%                                  | 11%                      | 10                                 | 16                                   | \$669            | \$855                 | 1.3          | \$263   |
| CZ05         | PGE                      | 5%                                  | 11%                      | 3                                  | 17                                   | \$669            | \$855                 | 1.2          | \$164   |
| CZ05         | PGE/SCG                  | 5%                                  | 11%                      | 3                                  | 17                                   | \$669            | \$855                 | 1.2          | \$164   |
| CZ06         | SCE/SCG                  | 4%                                  | 13%                      | 9                                  | 15                                   | \$669            | \$855                 | 1.2          | \$138   |
| CZ07         | SDGE                     | 5%                                  | 13%                      | 6                                  | 16                                   | \$669            | \$855                 | 1.1          | \$135   |
| CZ08         | SCE/SCG                  | 4%                                  | 11%                      | 21                                 | 14                                   | \$669            | \$855                 | 1.2          | \$156   |
| CZ09         | SCE/SCG                  | 4%                                  | 12%                      | 25                                 | 14                                   | \$679            | \$872                 | 1.2          | \$196   |
| CZ10         | SCE/SCG                  | 6%                                  | 16%                      | 81                                 | 18                                   | \$839            | \$1,073               | 1.5          | \$598   |
| CZ10         | SDGE                     | 6%                                  | 16%                      | 81                                 | 18                                   | \$839            | \$1,073               | 1.5          | \$598   |
| CZ11         | PGE                      | 6%                                  | 12%                      | 103                                | 16                                   | \$839            | \$1,073               | 1.6          | \$716   |
| CZ12         | PGE                      | 6%                                  | 13%                      | 97                                 | 16                                   | \$974            | \$1,294               | 1.5          | \$681   |
| CZ12         | SMUD/PGE                 | 6%                                  | 13%                      | 97                                 | 16                                   | \$974            | \$1,294               | 1.5          | \$681   |
| CZ13         | PGE                      | 6%                                  | 13%                      | 117                                | 16                                   | \$839            | \$1,073               | 1.7          | \$822   |
| CZ14         | SCE/SCG                  | 7%                                  | 17%                      | 94                                 | 18                                   | \$839            | \$1,073               | 1.7          | \$763   |
| CZ14         | SDGE                     | 7%                                  | 17%                      | 94                                 | 18                                   | \$839            | \$1,073               | 1.7          | \$763   |
| CZ15         | SCE/SCG                  | 7%                                  | 20%                      | 211                                | 17                                   | \$839            | \$1,073               | 2.1          | \$1,292 |
| CZ16         | PGE                      | 7%                                  | 11%                      | 72                                 | 21                                   | \$1,318          | \$1,545               | 1.1          | \$135   |

# Solar Thermal

# Proposed reach code

Install HPWH

or

.35 SSF water heater  
(35% of water heating by solar)

# Existing MF buildings

## 6.4.3 Climate Zone 3:

Note: Values in **red** and grey rows indicate option is not cost-effective with B/C ratio less than 1. Cells with "n/a" reflect lighting and water heating efficiency measures and packages that did not look at TDV cost effectiveness or GHG impacts.

**Table 37: CZ 3 - Multifamily Efficiency Upgrade Cost-Effectiveness Results**

| Measure               | Vintage   | Measure Cost (\$) | Electricity Savings (kWh) | Gas Savings (therm) | GHG Savings (lb CO <sub>2</sub> e) | Utility Cost Savings |            | Customer On-Bill |          | 2019 TDV  |          | 2022 TDV  |          |
|-----------------------|-----------|-------------------|---------------------------|---------------------|------------------------------------|----------------------|------------|------------------|----------|-----------|----------|-----------|----------|
|                       |           |                   |                           |                     |                                    | Year 1               | Avg Annual | B/C Ratio        | NPV      | B/C Ratio | NPV      | B/C Ratio | NPV      |
| R-49 Attic Insulation | Pre-1978  | \$745             | 42                        | 10                  | 106                                | \$30                 | \$28       | 1.00             | -\$2     | 1.15      | \$113    | 1.25      | \$187    |
|                       | 1978-1991 | \$745             | 19                        | 4                   | 48                                 | \$13                 | \$12       | 0.44             | -\$469   | 0.62      | -\$281   | 0.62      | -\$280   |
|                       | 1992-2010 | \$625             | 6                         | 2                   | 18                                 | \$5                  | \$4        | 0.18             | -\$575   | 0.26      | -\$460   | 0.29      | -\$442   |
| Reduced Infiltration  | Pre-1978  |                   | -1                        | 7                   | 74                                 | \$12                 | \$12       | 0.73             | -\$134   | 0.92      | -\$36    | 0.98      | -\$10    |
|                       | 1978-1991 | \$448             | -2                        | 5                   | 45                                 | \$6                  | \$7        | 0.42             | -\$293   | 0.62      | -\$171   | 0.57      | -\$191   |
|                       | 1992-2010 |                   | 0                         | 3                   | 34                                 | \$5                  | \$6        | 0.34             | -\$331   | 0.48      | -\$233   | 0.47      | -\$236   |
| Duct Sealing          | Pre-1978  | \$130             | 16                        | 3                   | 37                                 | \$11                 | \$10       | 2.00             | \$146    | 2.45      | \$189    | 3.64      | \$343    |
|                       | 1978-1991 | \$130             | 8                         | 1                   | 14                                 | \$5                  | \$4        | 0.85             | -\$22    | 1.10      | \$13     | 1.82      | \$106    |
| New Ducts             | Pre-1978  |                   | 41                        | 8                   | 89                                 | \$26                 | \$24       | 0.47             | -\$798   | 0.62      | -\$513   | 0.89      | -\$146   |
|                       | 1978-1991 | \$1,353           | 29                        | 4                   | 49                                 | \$16                 | \$14       | 0.29             | -\$1,086 | 0.40      | -\$810   | 0.64      | -\$494   |
|                       | 1992-2010 |                   | 6                         | 1                   | 15                                 | \$4                  | \$4        | 0.07             | -\$1,408 | 0.11      | -\$1,201 | 0.19      | -\$1,094 |
| Cool Roof             | Pre-1978  |                   | 20                        | -1                  | -6                                 | \$5                  | \$4        | 0.44             | -\$137   | 0.37      | -\$142   | 0.59      | -\$93    |
|                       | 1978-1991 | \$225             | 13                        | -1                  | -3                                 | \$3                  | \$2        | 0.29             | -\$173   | 0.41      | -\$132   | 0.59      | -\$93    |
|                       | 1992-2010 |                   | 5                         | 0                   | -3                                 | \$1                  | \$1        | 0.07             | -\$229   | 0.17      | -\$186   | 0.30      | -\$157   |
| R-13 Wall Insulation  | Pre-1978  | \$1,006           | 13                        | 19                  | 198                                | \$35                 | \$36       | 0.96             | -\$43    | 1.23      | \$234    | 1.37      | \$373    |
| Floor Insulation      | Pre-1978  | \$822             | -22                       | 18                  | 177                                | \$22                 | \$25       | 0.82             | -\$162   | 0.95      | -\$39    | 0.79      | -\$173   |
| Windows               | Pre-1978  | \$5,873           | 82                        | 20                  | 223                                | \$60                 | \$55       | 0.25             | -\$4,934 | 0.22      | -\$4,571 | 0.44      | -\$3,279 |
|                       | 1978-1991 |                   | 57                        | 16                  | 175                                | \$44                 | \$41       | 0.19             | -\$5,362 | 0.19      | -\$4,771 | 0.35      | -\$3,811 |
| LED lamp vs CFL       | All       | \$2.26            | 1.2                       | 0                   | n/a                                | \$0.29               | \$0.22     | 2.97             | \$4.45   | n/a       | n/a      | n/a       | n/a      |
| Exterior Photosensor  | All       | \$42.58           | 12.1                      | 0                   | n/a                                | \$3.09               | \$2.38     | 1.68             | \$28.96  | n/a       | n/a      | n/a       | n/a      |



# Existing MF buildings

**Table 38: CZ 3 - Multifamily Efficiency Packages Cost-Effectiveness Results**

| Measure                                       | Vintage      | Measure Cost (\$) | Electricity Savings (kWh) | Gas Savings (therm) | GHG Savings (lb CO <sub>2</sub> e) | Utility Cost Savings |            | Customer On-Bill |          | 2019 TDV  |          | 2022 TDV  |          |
|---|--------------|-------------------|---------------------------|---------------------|------------------------------------|----------------------|------------|------------------|----------|-----------|----------|-----------|----------|
|   |              |                   |                           |                     |                                    | Year 1               | Avg Annual | B/C Ratio        | NPV      | B/C Ratio | NPV      | B/C Ratio | NPV      |
| R49 Attic & Air Sealing Package               | Pre-1978     | \$1,193           | 42                        | 17                  | 180                                | \$42                 | \$40       | 0.91             | -\$127   | 1.07      | \$85     | 1.15      | \$178    |
|   | 1978-1991    | \$1,193           | 17                        | 9                   | 93                                 | \$20                 | \$19       | 0.43             | -\$760   | 0.62      | -\$448   | 0.61      | -\$470   |
|   | 1992-2010    | \$1,073           | 6                         | 5                   | 52                                 | \$10                 | \$10       | 0.25             | -\$905   | 0.36      | -\$691   | 0.37      | -\$677   |
| R49 Attic & Duct Sealing Package              | Pre-1978     | \$875             | 55                        | 12                  | 137                                | \$39                 | \$36       | 1.09             | \$84     | 1.29      | \$257    | 1.56      | \$492    |
|   | 1978-1991    | \$875             | 26                        | 5                   | 60                                 | \$17                 | \$16       | 0.48             | -\$511   | 0.67      | -\$285   | 0.78      | -\$189   |
| R49 Attic, Air Sealing & Duct Sealing Package | Pre-1978     | \$1,323           | 55                        | 19                  | 208                                | \$50                 | \$48       | 0.96             | -\$55    | 1.16      | \$214    | 1.35      | \$468    |
|   | 1978-1991    | \$1,323           | 24                        | 10                  | 104                                | \$24                 | \$23       | 0.46             | -\$805   | 0.65      | -\$459   | 0.71      | -\$384   |
|   | 1992-2010    | \$1,203           | 6                         | 5                   | 52                                 | \$10                 | \$10       | 0.22             | -\$1,051 | 0.32      | -\$821   | 0.33      | -\$807   |
| R49 Attic, Air Sealing & New Ducts Package    | Pre-1978     | \$2,546           | 76                        | 23                  | 249                                | \$63                 | \$59       | 0.62             | -\$1,085 | 0.78      | -\$559   | 0.98      | -\$61    |
|   | 1978-1991    | \$2,546           | 44                        | 12                  | 132                                | \$34                 | \$31       | 0.33             | -\$1,917 | 0.47      | -\$1,339 | 0.60      | -\$1,017 |
|   | 1992-2010    | \$2,427           | 12                        | 6                   | 65                                 | \$13                 | \$13       | 0.14             | -\$2,330 | 0.21      | -\$1,909 | 0.26      | -\$1,794 |
| Advanced Envelope Package                     | Pre-1978     | \$8,201           | 131                       | 53                  | 568                                | \$129                | \$124      | 0.40             | -\$5,504 | 0.48      | -\$4,262 | 0.66      | -\$2,798 |
| Water Heating Package                         | All Vintages | \$168             | 0                         | 12                  | 0                                  | \$36                 | \$19       | 1.49             | \$92     | n/a       | n/a      | n/a       | n/a      |

# Existing MF buildings

**Table 39: CZ 3 - Multifamily PV & Battery Cost-Effectiveness Results**

| Measure                | Vintage   | Measure Cost (\$) | Electricity Savings (kWh) | Gas Savings (therm) | GHG Savings (lb CO <sub>2</sub> e) | Utility Cost Savings |            | Customer On-Bill |         | 2019 TDV  |         | 2022 TDV  |         |
|------------------------|-----------|-------------------|---------------------------|---------------------|------------------------------------|----------------------|------------|------------------|---------|-----------|---------|-----------|---------|
|                        |           |                   |                           |                     |                                    | Year 1               | Avg Annual | B/C Ratio        | NPV     | B/C Ratio | NPV     | B/C Ratio | NPV     |
| Prescriptive PV System | Pre-1978  | \$4,559           | 2,660                     | 0                   | 173                                | \$559                | \$432      | 2.58             | \$7,923 | 2.27      | \$5,784 | 1.84      | \$3,847 |
|                        | 1978-1991 |                   | 2,649                     |                     | 173                                | \$548                | \$424      | 2.53             | \$7,678 | 2.25      | \$5,690 | 1.84      | \$3,811 |
|                        | 1992-2010 |                   | 2,559                     |                     | 167                                | \$522                | \$404      | 2.41             | \$7,077 | 2.21      | \$5,497 | 1.78      | \$3,534 |
| PV + Battery           | Pre-1978  | \$6,833           | 2,602                     | 0                   | 348                                | \$564                | \$436      | 1.76             | \$5,647 | 1.67      | \$4,606 | 1.35      | \$2,408 |
|                        | 1978-1991 |                   | 2,602                     |                     | 350                                | \$555                | \$429      | 1.73             | \$5,427 | 1.69      | \$4,713 | 1.36      | \$2,481 |
|                        | 1992-2010 |                   | 2,602                     |                     | 357                                | \$532                | \$411      | 1.66             | \$4,893 | 1.75      | \$5,108 | 1.44      | \$2,989 |

# Existing MF buildings

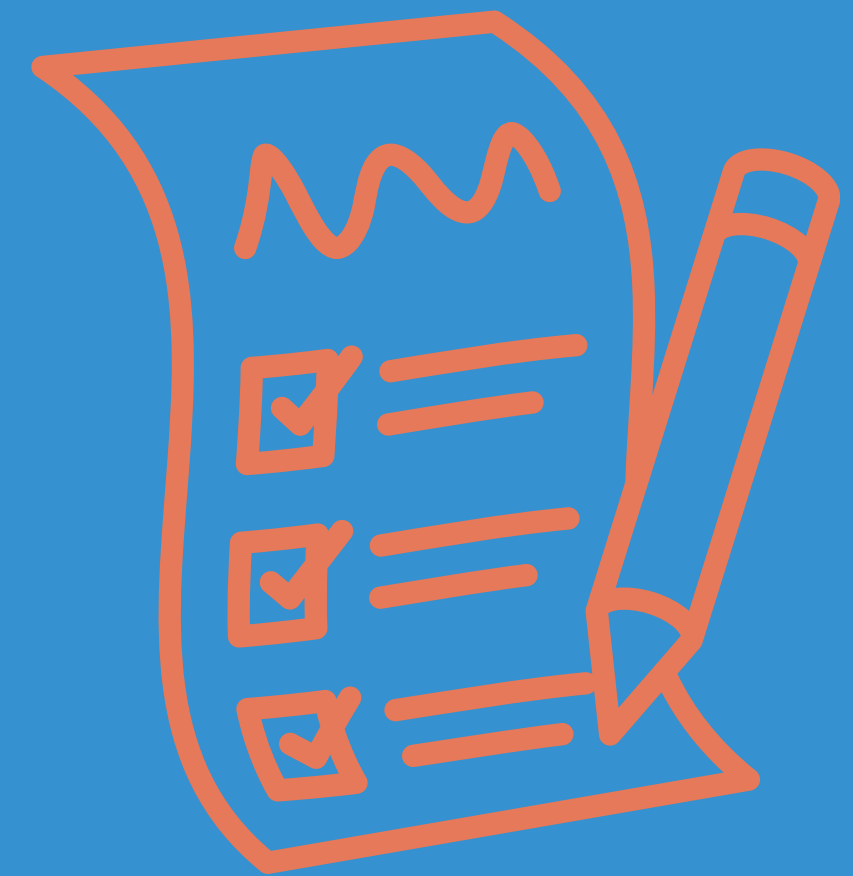
**Table 40: CZ 3 - Multifamily Equipment Fuel Substitution Cost-Effectiveness Results**

| Measure                                   | Vintage   | Measure Cost (\$) | Electricity Savings (kWh) | Gas Savings (therm) | GHG Savings (lb CO <sub>2</sub> e) | Utility Cost Savings |            | Customer On-Bill |          | 2019 TDV  |          | 2022 TDV  |          |
|---|-----------|-------------------|---------------------------|---------------------|------------------------------------|----------------------|------------|------------------|----------|-----------|----------|-----------|----------|
|   |           |                   |                           |                     |                                    | Year 1               | Avg Annual | B/C Ratio        | NPV      | B/C Ratio | NPV      | B/C Ratio | NPV      |
| Heat Pump at HVAC Replacement             | Pre-1978  | \$227             | -714                      | 70                  | 350                                | -\$53                | -\$9       | 0.00             | -\$525   | 0.00      | -\$933   | 2.67      | \$380    |
|   | 1978-1991 |                   | -438                      | 42                  | 205                                | -\$30                | -\$4       | 0.00             | -\$365   | 0.00      | -\$708   | 1.41      | \$94     |
|   | 1992-2010 |                   | -327                      | 32                  | 154                                | -\$23                | -\$3       | 0.00             | -\$352   | 0.00      | -\$591   | 1.08      | \$17     |
| High-Effic. Heat Pump at HVAC Replacement | Pre-1978  | \$3,245           | -583                      | 70                  | 410                                | -\$16                | \$19       | 0.16             | -\$2,937 | 0.08      | -\$3,000 | 0.52      | -\$1,557 |
|   | 1978-1991 |                   | -355                      | 42                  | 243                                | -\$9                 | \$12       | 0.10             | -\$3,160 | 0.04      | -\$3,102 | 0.34      | -\$2,141 |
|   | 1992-2010 |                   | -274                      | 32                  | 180                                | -\$10                | \$7        | 0.06             | -\$3,317 | 0.02      | -\$3,193 | 0.23      | -\$2,511 |
| Heat Pump at HVAC Replacement + PV        | Pre-1978  | \$4,785           | 1,945                     | 70                  | 523                                | \$592                | \$489      | 2.78             | \$9,396  | 2.02      | \$4,876  | 1.88      | \$4,235  |
|   | 1978-1991 |                   | 2,221                     | 42                  | 378                                | \$568                | \$458      | 2.60             | \$8,467  | 2.06      | \$5,088  | 1.82      | \$3,941  |
|   | 1992-2010 |                   | 2,332                     | 32                  | 328                                | \$552                | \$441      | 2.51             | \$7,949  | 2.09      | \$5,204  | 1.81      | \$3,860  |
| HVAC HP Replacement, PV, + Panel Upgrade  | Pre-1978  | \$7,966           | 1,945                     | 70                  | 523                                | \$592                | \$489      | 1.66             | \$5,824  | 1.21      | \$1,695  | 1.13      | \$1,054  |
|   | 1978-1991 |                   | 2,221                     | 42                  | 378                                | \$568                | \$458      | 1.55             | \$4,895  | 1.24      | \$1,907  | 1.10      | \$760    |
|   | 1992-2010 |                   | 2,332                     | 32                  | 328                                | \$552                | \$441      | 1.49             | \$4,377  | 1.25      | \$2,023  | 1.09      | \$679    |
| HPWH at Water Heater Replacement          | Pre-1978  | \$2,594           | -1,037                    | 141                 | 1,108                              | -\$101               | -\$18      | 0.00             | -\$3,425 | 0.00      | -\$3,053 | 1.29      | \$753    |
|   | 1978-1991 |                   | -1,037                    | 141                 | 1,108                              | -\$100               | -\$16      | 0.00             | -\$3,385 | 0.00      | -\$3,053 | 1.29      | \$753    |
|   | 1992-2010 |                   | -1,037                    | 141                 | 1,108                              | -\$95                | -\$13      | 0.00             | -\$3,275 | 0.00      | -\$3,053 | 1.29      | \$753    |
| NEEA Tier 3 HPWH at Replacement           | Pre-1978  | \$2,775           | -842                      | 141                 | 1,195                              | -\$37                | \$32       | 0.31             | -\$2,140 | 0.26      | -\$2,055 | 1.57      | \$1,591  |
|   | 1978-1991 |                   | -842                      | 141                 | 1,195                              | -\$36                | \$33       | 0.32             | -\$2,100 | 0.26      | -\$2,055 | 1.57      | \$1,591  |
|   | 1992-2010 |                   | -842                      | 141                 | 1,195                              | -\$31                | \$37       | 0.36             | -\$1,991 | 0.26      | -\$2,055 | 1.57      | \$1,591  |
| HPWH at Water Heater Replacement + PV     | Pre-1978  | \$7,152           | 1,623                     | 141                 | 1,282                              | \$614                | \$535      | 2.03             | \$8,123  | 1.41      | \$2,936  | 1.67      | \$4,801  |
|   | 1978-1991 |                   | 1,623                     | 141                 | 1,282                              | \$611                | \$533      | 2.02             | \$8,068  | 1.41      | \$2,935  | 1.67      | \$4,798  |
|   | 1992-2010 |                   | 1,623                     | 141                 | 1,282                              | \$609                | \$531      | 2.01             | \$8,014  | 1.41      | \$2,932  | 1.67      | \$4,792  |
| HPWH Replacement, PV, + Panel Upgrade     | Pre-1978  | \$10,333          | 1,623                     | 141                 | 1,282                              | \$614                | \$535      | 1.40             | \$4,551  | 0.98      | -\$245   | 1.16      | \$1,620  |
|   | 1978-1991 |                   | 1,623                     | 141                 | 1,282                              | \$611                | \$533      | 1.39             | \$4,496  | 0.98      | -\$246   | 1.16      | \$1,617  |
|   | 1992-2010 |                   | 1,623                     | 141                 | 1,282                              | \$609                | \$531      | 1.39             | \$4,442  | 0.98      | -\$249   | 1.16      | \$1,611  |
| PV + Electric Ready Pre-Wire              | Pre-1978  | \$8,650           | 2,660                     | 0                   | 1,059                              | \$559                | \$432      | 1.35             | \$3,330  | 1.20      | \$1,693  | 0.97      | -\$244   |
|   | 1978-1991 |                   | 2,649                     | 0                   | 1,093                              | \$548                | \$424      | 1.32             | \$3,084  | 0.95      | -\$454   | 0.97      | -\$280   |
|   | 1992-2010 |                   | 2,559                     | 0                   | 1,091                              | \$522                | \$404      | 1.26             | \$2,483  | 0.77      | -\$1,970 | 0.94      | -\$557   |



# Proposed reach code

- under development
- installation of a few cost-effective measures to be selected from a menu at time of building permit application



The City of Pinole is a proud community partner for  
Marin Clean Energy, our clean energy provider





# MCE Strategic Energy Management

## Benefits

- Site walk-through by an energy coach and engineering staff
- Up to 15% energy savings with little to no capital investment
- Rebates for lighting, motor upgrades, refrigeration, and water heating
- Custom-calculated incentives for complex projects – \$0.15/kWh and \$1.50/therm
  - [Start the enrollment process](#) to confirm eligibility



## Lower Operational Costs and Utility Bills

Meet your energy management goals

To learn more visit:  
<https://mcecleanenergy.org/energy-management/>



# MCE Charging

## Benefits

- For workplaces and multifamily properties
- \$3,000 per charging port for 2-20 charging ports
- \$500 extra per charging port for charging stations that have opted up to Deep Green 100% renewable energy
- Free technical assistance for the first 40 projects
  - [Start the enrollment process](#) to confirm eligibility



**\$4,000**

Per charging  
port for 2-20  
charging ports

Free technical  
assistance for the

**40**  
projects



# Save Energy and Reduce Costs Through Energy-Efficiency Upgrades

Eligible multifamily property owners can receive up to \$6,000 per unit, comprehensive assessments, and technical assistance for electric, energy- and water-saving measures.

## What You'll Get



**Up to \$6,000 per unit** for electrification measures like HVAC, water heating heat pumps, and induction stoves



**Energy- and water-saving upgrades** like windows, insulation, water fixtures, and more



**Comprehensive assessment and technical assistance** from a multifamily energy efficiency expert

# Questions, comments, concerns?

Subscribe to the project page: <https://publicinput.com/t47742>

Email your thoughts: [98732@publicinput.com](mailto:98732@publicinput.com)

Leave your thoughts by phone: 855-925-2801 project code: 11743

Take the community survey: <https://publicinput.com/t47742>

Review and comment on the draft ordinance

Kapil Amin

Sustainability Project Manager

[kamin@pinole.gov](mailto:kamin@pinole.gov)

510-372-0989



# Thank you!

