Appendix A: Minimum and maximum loads of building types across the different LGAs

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **LGA** | **Hour of the day (hourly load data in kWh) – MINIMUM LOADS** | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| **Building type: Single Family Bungalow** | | | | | | | | | | | | | | | | | | | | | | | | |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.255 | 1.056 | 1.341 | 1.341 | 0.833 | 0.926 | 0.667 | 0.573 | 0.573 | 0.542 | 0.000 |
| Oshodi | 0.160 | 0.160 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.299 | 0.331 | 0.597 | 0.397 | 0.499 | 0.466 | 0.000 | 0.361 | 0.594 | 0.594 | 0.594 | 0.160 |
| Kosofe | 0.020 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.231 | 0.053 | 0.118 | 0.084 | 0.085 | 0.043 | 0.021 |
| **Building type: Flat Apartment** | | | | | | | | | | | | | | | | | | | | | | | | |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.369 | 0.792 | 0.621 | 0.221 | 0.152 | 0.152 | 0.129 | 0.000 | 0.000 | 0.388 | 0.646 | 0.699 | 0.806 | 0.685 | 0.129 |
| Oshodi | 0.144 | 0.143 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.026 | 0.026 | 0.026 | 0.014 | 0.002 | 0.002 | 0.002 | 0.000 | 0.000 | 0.000 | 0.156 | 0.156 | 0.144 | 0.144 |
| Kosofe | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.043 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.034 | 0.269 | 0.069 | 0.069 | 0.046 | 0.061 | 0.064 | 0.089 | 0.074 | 0.014 |
| **Building type: *‘Face -me -I -Face –you’*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.431 | 2.331 | 3.424 | 3.424 | 2.729 | 1.404 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Oshodi | 0.221 | 0.209 | 0.209 | 0.209 | 0.209 | 0.209 | 0.132 | 0.132 | 0.154 | 0.154 | 0.150 | 0.021 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.317 | 0.321 | 0.328 | 0.328 | 0.248 | 0.221 |
| Kosofe | 0.000 | 0.000 | 0.012 | 0.012 | 0.012 | 0.000 | 0.029 | 0.029 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.029 | 0.029 | 0.029 | 0.000 | 0.000 | 0.000 | 0.043 | 0.043 | 0.043 | 0.000 | 0.000 |
| **Building type: Duplex** | | | | | | | | | | | | | | | | | | | | | | | | |
| Alimosho | 1.198 | 0.560 | 0.649 | 0.649 | 0.649 | 0.552 | 2.102 | 2.626 | 2.147 | 1.666 | 0.240 | 0.071 | 0.000 | 0.001 | 0.065 | 0.082 | 0.435 | 0.507 | 0.455 | 0.698 | 1.269 | 1.440 | 1.466 | 1.325 |
| Oshodi | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.903 | 1.580 | 0.769 | 0.131 | 0.041 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Kosofe | 0.033 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 | 0.316 | 0.273 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.011 | 0.023 | 0.014 | 0.026 | 0.031 | 0.116 | 0.126 | 0.126 | 0.084 |
| **Building type: Traditional Court** | | | | | | | | | | | | | | | | | | | | | | | | |
| Alimosho | 0.000 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 | 0.000 | 0.107 | 0.148 | 0.096 | 0.136 | 0.119 | 0.135 | 0.148 | 0.107 | 0.107 | 0.032 | 0.079 | 0.066 | 0.135 | 0.081 | 0.041 | 0.029 | 0.000 |
| Oshodi | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.226 | 0.000 | 0.251 | 0.226 | 0.226 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Kosofe | 0.011 | 0.023 | 0.034 | 0.046 | 0.046 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.057 | 0.057 | 0.057 | 0.000 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **LGA** | **Hour of the day (hourly load data in kWh) – MAXIMUM LOADS** | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| **Building type: Single Family Bungalow** | | | | | | | | | | | | | | | | | | | | | | | | |
| Kosofe | 0.230 | 0.230 | 0.230 | 0.216 | 0.216 | 0.000 | 0.000 | 0.000 | 0.337 | 0.030 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.024 | 0.786 | 0.794 | 0.781 | 0.779 |
| Oshodi | 0.514 | 0.502 | 0.502 | 0.502 | 0.416 | 0.416 | 1.221 | 1.266 | 1.514 | 1.347 | 0.957 | 0.546 | 0.327 | 0.137 | 0.997 | 1.138 | 1.875 | 2.409 | 3.765 | 2.921 | 2.130 | 2.118 | 1.558 | 0.741 |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.180 | 4.340 | 4.346 | 3.760 | 3.654 | 2.880 | 0.569 |
| **Building type: Flat Apartment** | | | | | | | | | | | | | | | | | | | | | | | | |
| Kosofe | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.247 | 1.574 | 0.429 | 0.402 | 0.000 |
| Oshodi | 0.310 | 0.310 | 0.310 | 0.310 | 0.310 | 0.310 | 3.000 | 3.000 | 0.114 | 0.114 | 0.000 | 0.000 | 0.000 | 0.200 | 0.200 | 0.000 | 0.000 | 2.661 | 3.655 | 0.711 | 0.955 | 1.069 | 0.748 | 0.310 |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 7.567 | 7.938 | 3.472 | 3.459 | 3.344 |
| **Building type: *‘Face -me –I- Face -you’*** | | | | | | | | | | | | | | | | | | | | | | | | |
| Kosofe | 0.100 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.023 | 0.884 | 0.485 | 0.485 | 0.249 | 0.225 |
| Oshodi | 0.220 | 0.220 | 0.220 | 0.209 | 0.129 | 0.129 | 0.033 | 0.033 | 32.890 | 0.033 | 0.044 | 0.044 | 0.044 | 0.034 | 0.034 | 0.034 | 0.034 | 0.000 | 0.150 | 0.344 | 0.344 | 0.344 | 0.327 | 0.310 |
| Alimosho | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.143 | 0.431 | 2.508 | 5.705 | 10.282 | 10.288 | 11.888 | 10.734 | 7.876 | 7.876 | 2.848 | 2.052 | 0.853 | 0.000 |
| **Building type: Duplex** | | | | | | | | | | | | | | | | | | | | | | | | |
| Kosofe | 0.203 | 0.159 | 0.159 | 0.069 | 0.046 | 0.046 | 0.741 | 0.699 | 0.604 | 0.000 | 0.000 | 0.000 | 0.119 | 0.119 | 0.119 | 0.049 | 0.049 | 0.000 | 0.000 | 0.481 | 1.151 | 0.994 | 0.791 | 0.283 |
| Oshodi | 0.581 | 0.539 | 0.474 | 0.350 | 0.243 | 0.243 | 0.436 | 1.333 | 3.960 | 3.925 | 3.028 | 3.085 | 3.085 | 3.085 | 3.085 | 3.085 | 0.740 | 0.738 | 0.740 | 1.697 | 1.811 | 1.062 | 0.759 | 0.648 |
| Alimosho | 1.342 | 0.043 | 0.043 | 0.043 | 0.043 | 0.043 | 3.875 | 4.086 | 1.210 | 0.650 | 0.393 | 0.400 | 0.019 | 0.019 | 0.292 | 0.292 | 0.931 | 0.811 | 1.899 | 4.041 | 5.383 | 4.995 | 4.138 | 1.702 |
| **Building type: Traditional Court** | | | | | | | | | | | | | | | | | | | | | | | | |
| Kosofe | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.014 | 0.277 | 0.302 | 0.113 | 0.051 | 0.000 |
| Oshodi | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.580 | 1.580 | 0.180 | 0.880 | 1.580 | 1.580 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Alimosho | 0.263 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.441 | 0.591 | 0.591 | 0.806 | 1.594 | 1.709 | 1.807 | 1.954 | 2.011 | 1.943 | 1.874 | 1.616 | 0.838 |

**Appendix B: Results for the effect of minimum battery state of charge and capacity shortage on PV system components and LCOE (maximum and minimum loads)**

**Maximum loads**

| **LGA** | **Sensitivity value (%)** | **PV array (kWh)** | **1 kWh Lead acid battery** | **PV power output (kWh/year)** | **LCOE** |
| --- | --- | --- | --- | --- | --- |
| **Building Type: Single family bungalow** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 3 | 30 | 4194 | 0.508 |
| 5 | 2 | 24 | 2796 | 0.399 |
| 10 | 2 | 14 | 2796 | 0.385 |
| 15 | 2 | 12 | 2796 | 0.38 |
| Oshodi | 0 | 3 | 30 | 4194 | 0.452 |
| 5 | 13 | 86 | 18174 | 0.312 |
| 10 | 11 | 78 | 15378 | 0.297 |
| 15 | 10 | 66 | 13980 | 0.288 |
| Alimosho | 0 | 15 | 108 | 20972 | 0.513 |
| 5 | 9 | 80 | 12583 | 0.426 |
| 10 | 8 | 68 | 11185 | 0.412 |
| 15 | 7 | 64 | 9787 | 0.403 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 3 | 26 | 4194 | 0.463 |
| Oshodi | 30% | 22 | 115 | 30756 | 0.416 |
| Alimosho | 30% | 12 | 112 | 16778 | 0.482 |
| **Building Type: Duplex** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.8 | 9 | 1118 | 0.552 |
| 5 | 0.6 | 5 | 839 | 0.41 |
| 10 | 0.6 | 4 | 839 | 0.401 |
| 15 | 0.6 | 3 | 839 | 0.401 |
| Oshodi | 0 | 3 | 12 | 4194 | 0.459 |
| 5 | 2 | 7 | 2796 | 0.304 |
| 10 | 2 | 5 | 2796 | 0.28 |
| 15 | 2 | 4 | 2796 | 0.21 |
| Alimosho | 0 | 22 | 80 | 30795 | 0.502 |
| 5 | 10 | 62 | 13981 | 0.353 |
| 10 | 8 | 62 | 11185 | 0.335 |
| 15 | 8 | 44 | 16778 | 0.33 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.8 | 8 | 1392 | 0.511 |
| Oshodi | 30% | 3 | 11 | 4194 | 0.441 |
| Alimosho | 30% | 20 | 78 | 27963 | 0.474 |
| **Building Type: *‘Face ‘me ‘I ‘face ‘you’*** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | |  |
| Kosofe | 0 | 1.6 | 16 | 2237 | 0.538 |
| 5 | 1.2 | 10 | 1678 | 0.44 |
| 10 | 1 | 9 | 1398 | 0.425 |
| 15 | 1 | 7 | 1398 | 0.421 |
| Oshodi | 0 | 6 | 36 | 8388 | 0.571 |
| 5 | 3 | 24 | 4194 | 0.404 |
| 10 | 3 | 18 | 4194 | 0.4 |
| 15 | 3 | 14 | 4194 | 0.4 |
| Alimosho | 0 | 78 | 176 | 109055 | 0.429 |
| 5 | 34 | 164 | 47537 | 0.279 |
| 10 | 28 | 148 | 39148 | 0.265 |
| 15 | 28 | 98 | 39148 | 0.26 |
| Sensitivity variable: Minimum battery state of charge | | | | |  |
| Kosofe | 30% | 1.6 | 4 | 2237 | 0.497 |
| Oshodi | 30% | 4 | 40 | 5592 | 0.52 |
| Alimosho | 30% | 70 | 176 | 97870 | 0.399 |
| **Building Type: Traditional court** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.6 | 4 | 839 | 0.54 |
| 5 | 0.4 | 3 | 559 | 0.452 |
| 10 | 0.3 | 3 | 419 | 0.424 |
| 15 | 0.3 | 3 | 419 | 0.424 |
| Oshodi | 0 | 6 | 30 | 8388 | 0.453 |
| 5 | 4 | 12 | 5592 | 0.261 |
| 10 | 3 | 12 | 4194 | 0.243 |
| 15 | 3 | 8 | 4194 | 0.237 |
| Alimosho | 0 | 16 | 68 | 22370 | 0.45 |
| 5 | 8 | 56 | 11185 | 0.32 |
| 10 | 7 | 44 | 9787 | 0.304 |
| 15 | 6 | 44 | 8389 | 0.294 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.5 | 4 | 699 | 0.504 |
| Oshodi | 30% | 5 | 30 | 6990 | 0.416 |
| Alimosho | 30% | 14 | 64 | 19574 | 0.408 |
| **Building Type: Flat Appartment** | | | | | |
| **Sensitivity variable: Maximum annual capacity shortage** | | | | | |
| Kosofe | 0 | 3 | 18 | 4194 | 0.547 |
| 5 | 2 | 14 | 2796 | 0.461 |
| 10 | 2 | 10 | 2796 | 0.459 |
| 15 | 2 | 10 | 2796 | 0.459 |
| Oshodi | 0 | 16 | 88 | 22368 | 0.501 |
| 5 | 8 | 74 | 11184 | 0.387 |
| 10 | 7 | 66 | 9786 | 0.376 |
| 15 | 6 | 76 | 8388 | 0.376 |
| Alimosho | 0 | 42 | 76 | 58772 | 0.743 |
| 5 | 16 | 76 | 22370 | 0.475 |
| 10 | 12 | 74 | 16778 | 0.436 |
| 15 | 10 | 72 | 13981 | 0.421 |
| **Sensitivity variable: Minimum battery state of charge** | | | | | |
| Kosofe | 30% | 2 | 24 | 2796 | 0.529 |
| Oshodi | 30% | 144 | 86 | 19572 | 0.466 |
| Alimosho | 30% | 36 | 74 | 50333 | 0.678 |

**Minimum loads**

| **LGA** | **Sensitivity value (%)** | **PV array (kWh)** | **1 kWh Lead acid battery** | **PV power output (kWh/year)** | **LCOE** |
| --- | --- | --- | --- | --- | --- |
| **Building Type: Duplex** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.8 | 9 | 1118 | 0.552 |
| 5 | 0.6 | 5 | 839 | 0.41 |
| 10 | 0.6 | 4 | 839 | 0.401 |
| 15 | 0.6 | 3 | 839 | 0.401 |
| Oshodi | 0 | 3 | 12 | 4194 | 0.459 |
| 5 | 2 | 7 | 2796 | 0.304 |
| 10 | 2 | 5 | 2796 | 0.28 |
| 15 | 2 | 4 | 2796 | 0.21 |
| Alimosho | 0 | 22 | 80 | 30795 | 0.502 |
| 5 | 10 | 62 | 13981 | 0.353 |
| 10 | 8 | 62 | 11185 | 0.335 |
| 15 | 8 | 44 | 16778 | 0.33 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.8 | 8 | 1392 | 0.511 |
| Oshodi | 30% | 3 | 11 | 4194 | 0.441 |
| Alimosho | 30% | 20 | 78 | 27963 | 0.474 |
| **Building Type: *‘Face- me -I –face- you’*** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.2 | 2 | 280 | 0.531 |
| 5 | 0.2 | 1 | 280 | 0.391 |
| 10 | 0.2 | 1 | 280 | 0.391 |
| 15 | 0.1 | 1 | 140 | 0.322 |
| Oshodi | 0 | 2.5 | 22 | 3495 | 0.498 |
| 5 | 1.5 | 18 | 3495 | 0.384 |
| 10 | 1.5 | 12 | 2097 | 0.361 |
| 15 | 1.5 | 9 | 2097 | 0.357 |
| Alimosho | 0 | 7 | 42 | 9787 | 0.422 |
| 5 | 5 | 18 | 6991 | 0.253 |
| 10 | 4 | 16 | 5593 | 0.223 |
| 15 | 4 | 12 | 5593 | 0.219 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.3 | 1 | 419 | 0.472 |
| Oshodi | 30% | 5.2 | 20 | 4395 | 0.47 |
| Alimosho | 30% | 6 | 42 | 8389 | 0.395 |
| **Building Type: Traditional Court** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.3 | 2 | 419 | 0.575 |
| 5 | 0.2 | 2 | 280 | 0.477 |
| 10 | 0.2 | 1 | 280 | 0.463 |
| 15 | 0.2 | 1 | 280 | 0.463 |
| Oshodi | 0 | 0.6 | 4 | 839 | 0.43 |
| 5 | 0.5 | 2 | 699 | 0.284 |
| 10 | 0.5 | 1 | 699 | 0.24 |
| 15 | 0.4 | 1 | 559 | 0.23 |
| Alimosho | 0 | 1 | 8 | 1398 | 0.417 |
| 5 | 0.8 | 4 | 1119 | 0.264 |
| 10 | 0.8 | 2 | 1119 | 0.233 |
| 15 | 0.6 | 3 | 839 | 0.214 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.3 | 2 | 419 | 0.554 |
| Oshodi | 30% | 0.7 | 3 | 979 | 0.402 |
| Alimosho | 30% | 1 | 7 | 1398 | 0.386 |
| **Building Type: Flat Appartment** | | | | | |
| Sensitivity variable: Maximum annual capacity shortage | | | | | |
| Kosofe | 0 | 0.7 | 3 | 979 | 0.449 |
| 5 | 0.4 | 3 | 559 | 0.35 |
| 10 | 0.3 | 3 | 419 | 0.336 |
| 15 | 0.3 | 2 | 419 | 0.328 |
| Oshodi | 0 | 0.7 | 6 | 979 | 0.533 |
| 5 | 0.4 | 5 | 559 | 0.412 |
| 10 | 0.4 | 3 | 559 | 0.391 |
| 15 | 0.4 | 3 | 559 | 0.383 |
| Alimosho | 0 | 5 | 22 | 6991 | 0.488 |
| 5 | 3 | 14 | 4194 | 0.323 |
| 10 | 2 | 20 | 2796 | 0.31 |
| 15 | 2 | 12 | 2796 | 0.281 |
| Sensitivity variable: Minimum battery state of charge | | | | | |
| Kosofe | 30% | 0.7 | 3 | 979 | 0.347 |
| Oshodi | 30% | 0.7 | 5 | 979 | 0.481 |
| Alimosho | 30% | 4 | 22 | 5593 | 0.401 |

**Appendix C: Effects of sensitivity variables on LCOE of PV systems**

**Maximum Loads**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LGA** | **LCOE (5%DR & 2%IR, 25 years PV, 40% SOC)** | **LCOE (10% DR)** | **LCOE (5% IR)** | **LCOE (20 yrs PV lifetime** | **LCOE (30 yrs PV lifetime)** | **LCOE (30% SOC)** |
| **Duplex** | | | | | | |
| Kosofe | 0.497 | 0.706 | 0.388 | 0.542 | 0.478 | 0.457 |
| Oshodi | 0.398 | 0.578 | 0.307 | 0.44 | 0.381 | 0.371 |
| Alimosho | 0.411 | 0.765 | 0.411 | 0.463 | 0.376 | 0.353 |
| Single Family Bungalow | | | | | | |
| Kosofe | 0.508 | 0.702 | 0.407 | 0.541 | 0.495 | 0.463 |
| Oshodi | 0.452 | 0.648 | 0.349 | 0.495 | 0.434 | 0.416 |
| Alimosho | 0.513 | 0.718 | 0.406 | 0.553 | 0.497 | 0.495 |
| *‘Face –me- I -face -you’* | | | | | | |
| Kosofe | 0.538 | 0.742 | 0.427 | 0.572 | 0.523 | 0.497 |
| Oshodi | 0.571 | 0.799 | 0.448 | 0.616 | 0.551 | 0.52 |
| Alimosho | 0.429 | 0.645 | 0.322 | 0.486 | 0.406 | 0.399 |
| Traditional Court | | | | | | |
| Kosofe | 0.54 | 0.758 | 0.428 | 0.582 | 0.523 | 0.504 |
| Oshodi | 0.453 | 0.651 | 0.344 | 0.497 | 0.432 | 0.416 |
| Alimosho | 0.45 | 0.653 | 0.346 | 0.497 | 0.43 | 0.408 |
| Flat Appartment | | | | | | |
| Kosofe | 0.547 | 0.763 | 0.435 | 0.591 | 0.529 | 0.529 |
| Oshodi | 0.501 | 0.717 | 0.391 | 0.547 | 0.482 | 0.466 |
| Alimosho | 0.743 | $1.07 | 0.583 | 0.83 | 0.707 | 0.678 |

**Note**: $ = USD

**Minimum Loads**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LGA** | **LCOE (5%DR & 2%IR, 25 years PV, 40% SOC)** | **LCOE (10% DR)** | **LCOE (5% IR)** | **LCOE (20 yrs PV lifetime** | **LCOE (30 yrs PV lifetime)** | **LCOE (30% SOC)** |
| Duplex | | | | | | |
| Kosofe | 0.552 | 0.757 | 0.434 | 0.584 | 0.535 | 0.511 |
| Oshodi | 0.459 | 0.416 | 0.354 | 0.506 | 0.44 | 0.441 |
| Alimosho | 0.502 | 0.736 | 0.384 | 0.558 | 0.479 | 0.474 |
| Single Family Bungalow | | | | | | |
| Kosofe | 0.529 | 0.755 | 0.414 | 0.578 | 0.509 | 0.493 |
| Oshodi | 0.439 | 0.639 | 0.339 | 0.486 | 0.42 | 0.413 |
| Alimosho | 0.432 | 0.634 | 0.332 | 0.477 | 0.413 | 0.406 |
| *‘Face- me -I -face –you’* | | | | | | |
| Kosofe | 0.531 | 0.733 | 0.425 | 0.565 | 0.517 | 0.472 |
| Oshodi | 0.498 | 0.693 | 0.397 | 0.534 | 0.484 | 0.47 |
| Alimosho | 0.422 | 0.6 | 0.33 | 0.458 | 0.407 | 0.395 |
| Traditional Court | | | | | | |
| Kosofe | 0.575 | 0.811 | 0.453 | 0.599 | 0.535 | 0.554 |
| Oshodi | 0.43 | 0.607 | 0.331 | 0.464 | 0.413 | 0.402 |
| Alimosho | 0.417 | 0.584 | 0.316 | 0.449 | 0.399 | 0.386 |
| Flat Appartment | | | | | | |
| Kosofe | 0.449 | 0.651 | 0.347 | 0.494 | 0.431 | 0.347 |
| Oshodi | 0.533 | 0.743 | 0.419 | 0.571 | 0.517 | 0.481 |
| Alimosho | 0.488 | 0.649 | 0.346 | 0.494 | 0.429 | 0.401 |