

## State-Level Benefits from Potential State Appliance Standards

### West Virginia

| Products                           | Annual Savings per Unit |         | Incremental Cost per Unit | Annual Savings in 2025 |             |                 |                           |                       | Annual Savings in 2035 |             |                 |                           |                       | Economics       |                    |                   | Cumulative Energy Savings Through 2035 |
|------------------------------------|-------------------------|---------|---------------------------|------------------------|-------------|-----------------|---------------------------|-----------------------|------------------------|-------------|-----------------|---------------------------|-----------------------|-----------------|--------------------|-------------------|----------------------------------------|
|                                    |                         |         |                           | Electricity            | Natural Gas | Water           | CO <sub>2</sub> Emissions | Value of Bill Savings | Electricity            | Natural Gas | Water           | CO <sub>2</sub> Emissions | Value of Bill Savings | Pay Back Period | Benefit/Cost Ratio | Net Present Value |                                        |
|                                    | Amount                  | Unit    | \$                        | GWh                    | BBtu        | Million Gallons | 1000 MT                   | Million 2012\$        | GWh                    | BBtu        | Million Gallons | 1000 MT                   | Million 2012\$        | Years           |                    | Million 2012\$    | TBtu                                   |
| Battery Chargers                   | -                       | -       | -                         | 82.9                   | -           | -               | 53.9                      | 8.1                   | 84.3                   | -           | -               | 52.6                      | 8.2                   | -               | -                  | 46.7              | 14.3                                   |
| <i>Small Consumer Chargers</i>     | 10                      | kWh     | \$1.53                    | 80.3                   | -           | -               | 52.2                      | 7.9                   | 80.3                   | -           | -               | 50.1                      | 7.9                   | 1.5             | 2.3                | 44.6              | 13.8                                   |
| <i>Small Non-Consumer Chargers</i> | 9                       | kWh     | \$2.93                    | 0.9                    | -           | -               | 0.6                       | 0.1                   | 1.1                    | -           | -               | 0.7                       | 0.1                   | 4.0             | 2.0                | 0.4               | 0.1                                    |
| <i>Large Chargers</i>              | 3,294                   | kWh     | \$343                     | 1.7                    | -           | -               | 1.1                       | 0.1                   | 2.9                    | -           | -               | 1.8                       | 0.2                   | 1.2             | 8.6                | 1.7               | 0.3                                    |
| Commercial Dishwashers             | -                       | -       | \$357                     | 2.6                    | 12.8        | 28.4            | 2.3                       | 0.6                   | 4.0                    | 19.8        | 44.0            | 3.5                       | 0.9                   | 0.5             | 18.6               | 6.6               | 0.7                                    |
| <i>electricity</i>                 | 3,109                   | kWh     | -                         | 2.6                    | -           | -               | 1.7                       | 0.2                   | 4.0                    | -           | -               | 2.5                       | 0.3                   | -               | -                  | -                 | 0.5                                    |
| <i>natural gas</i>                 | 156                     | therms  | -                         | -                      | 12.8        | -               | 0.7                       | 0.1                   | -                      | 19.8        | -               | 1.0                       | 0.2                   | -               | -                  | -                 | 0.2                                    |
| <i>water</i>                       | 34,643                  | gallons | -                         | -                      | -           | 28.4            | -                         | 0.2                   | -                      | -           | 44.0            | -                         | 0.4                   | -               | -                  | -                 | -                                      |
| Double-Ended Quartz Halogen Lamps  | 329                     | kWh     | \$34                      | 5.6                    | -           | -               | 3.7                       | 0.5                   | 0.0                    | -           | -               | 0.0                       | 0.0                   | 1.2             | 1.4                | 1.7               | 1.0                                    |
| Faucets (lavatory)                 | -                       | -       | \$0                       | 5.8                    | 40.0        | 114.7           | 5.9                       | 1.9                   | 6.8                    | 47.0        | 134.9           | 6.8                       | 2.3                   | no cost         | no cost            | 19.6              | 1.6                                    |
| <i>electricity</i>                 | 14                      | kWh     | -                         | 5.8                    | -           | -               | 3.8                       | 0.6                   | 6.8                    | -           | -               | 4.3                       | 0.7                   | -               | -                  | -                 | 1.0                                    |
| <i>natural gas</i>                 | 1                       | therms  | -                         | -                      | 40.0        | -               | 2.1                       | 0.4                   | -                      | 47.0        | -               | 2.5                       | 0.5                   | -               | -                  | -                 | 0.7                                    |
| <i>water</i>                       | 285                     | gallons | -                         | -                      | -           | 114.7           | -                         | 0.9                   | -                      | -           | 134.9           | -                         | 1.1                   | -               | -                  | -                 | -                                      |
| Hot Food Holding Cabinets          | 2,197                   | kWh     | \$609                     | 1.6                    | -           | -               | 1.0                       | 0.1                   | 2.2                    | -           | -               | 1.4                       | 0.2                   | 3.3             | 2.8                | 1.0               | 0.3                                    |
| Portable Electric Spas             | 614                     | kWh     | \$346                     | 1.0                    | -           | -               | 0.6                       | 0.1                   | 1.1                    | -           | -               | 0.7                       | 0.1                   | 5.7             | 1.3                | 0.2               | 0.2                                    |
| Room Air Cleaners                  | 340                     | kWh     | \$0                       | 39.1                   | -           | -               | 25.4                      | 3.9                   | 41.4                   | -           | -               | 25.9                      | 4.1                   | no cost         | no cost            | 36.2              | 6.0                                    |
| Toilets                            | 745                     | gallons | \$0                       | -                      | -           | 247.4           | -                         | 2.0                   | -                      | -           | 538.6           | -                         | 4.3                   | no cost         | no cost            | 30.9              | -                                      |
| Urinals                            | 4,095                   | gallons | \$0                       | -                      | -           | 127.0           | -                         | 1.0                   | -                      | -           | 186.8           | -                         | 1.5                   | no cost         | no cost            | 12.2              | -                                      |
| Water Dispensers                   | 236                     | kWh     | \$12                      | 3.0                    | -           | -               | 2.0                       | 0.3                   | 3.6                    | -           | -               | 2.2                       | 0.3                   | 0.6             | 13.3               | 2.4               | 0.5                                    |
| <b>Total</b>                       | -                       | -       | -                         | <b>142</b>             | <b>53</b>   | <b>518</b>      | <b>95</b>                 | <b>18</b>             | <b>143</b>             | <b>67</b>   | <b>904</b>      | <b>93</b>                 | <b>22</b>             | -               | -                  | <b>158</b>        | <b>25</b>                              |

\*Assuming an effective date of 2017 for all standards.