### Air purifiers
- **Potential annual savings in 2030**
  - Electricity: 38.9 GWh
  - Natural gas: --
  - Water: --
  - NOx: 4.9 tons
  - SO2: 1.9 tons
  - CO2: 11.7 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 63.7 GWh
  - Natural gas: --
  - Water: --
  - NOx: 5.9 tons
  - SO2: 1.8 tons
  - CO2: 14.9 thous. MT

### Commercial dishwashers
- **Potential annual savings in 2030**
  - Electricity: 1.8 GWh
  - Natural gas: 45 BBTu
  - Water: 63 million gallons
  - NOx: 2.3 tons
  - SO2: 0.1 tons
  - CO2: 12.6 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 4.4 GWh
  - Natural gas: 108 BBTu
  - Water: 150 million gallons
  - NOx: 5.3 tons
  - SO2: 0.1 tons
  - CO2: 23.1 thous. MT

### Commercial fryers
- **Potential annual savings in 2030**
  - Electricity: 0.7 GWh
  - Natural gas: 232 BBTu
  - Water: --
  - NOx: 10.6 tons
  - SO2: 0.03 tons
  - CO2: 12.6 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 1.5 GWh
  - Natural gas: 506 BBTu
  - Water: --
  - NOx: 23.1 tons
  - SO2: 0.0 tons
  - CO2: 23.1 thous. MT

### Commercial ovens
- **Potential annual savings in 2030**
  - Electricity: 1.9 GWh
  - Natural gas: 30 BBTu
  - Water: --
  - NOx: 1.6 tons
  - SO2: 0.1 tons
  - CO2: 3.2 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 4.1 GWh
  - Natural gas: 65 BBTu
  - Water: --
  - NOx: 3.3 tons
  - SO2: 0.1 tons
  - CO2: 5.7 thous. MT

### Commercial steam cookers
- **Potential annual savings in 2030**
  - Electricity: 1.2 GWh
  - Natural gas: 9 BBTu
  - Water: 26 million gallons
  - NOx: 0.6 tons
  - SO2: 0.06 tons
  - CO2: 1.0 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 2.6 GWh
  - Natural gas: 21 BBTu
  - Water: 57 million gallons
  - NOx: 1.2 tons
  - SO2: 0.1 tons
  - CO2: 1.8 thous. MT

### Electric vehicle supply equipment
- **Potential annual savings in 2030**
  - Electricity: 3.7 GWh
  - Natural gas: --
  - Water: --
  - NOx: 0.5 tons
  - SO2: 0.2 tons
  - CO2: 1.1 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 24.5 GWh
  - Natural gas: --
  - Water: --
  - NOx: 2.3 tons
  - SO2: 0.7 tons
  - CO2: 5.7 thous. MT

### Faucets
- **Potential annual savings in 2030**
  - Electricity: 20.8 GWh
  - Natural gas: 205 BBTu
  - Water: 765 million gallons
  - NOx: 11.9 tons
  - SO2: 1.0 tons
  - CO2: 17.1 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 37.8 GWh
  - Natural gas: 372 BBTu
  - Water: 1,390 million gallons
  - NOx: 21.9 tons
  - SO2: 1.0 tons
  - CO2: 28.6 thous. MT

### Gas fireplaces
- **Potential annual savings in 2030**
  - Electricity: --
  - Natural gas: 44 BBTu
  - Water: --
  - NOx: 2.0 tons
  - SO2: --
  - CO2: 2.4 thous. MT
- **Potential annual savings in 2040**
  - Electricity: --
  - Natural gas: 121 BBTu
  - Water: --
  - NOx: 5.5 tons
  - SO2: --
  - CO2: 6.4 thous. MT

### High CRI fluorescent lamps
- **Potential annual savings in 2030**
  - Electricity: 19.6 GWh
  - Natural gas: --
  - Water: --
  - NOx: 2.4 tons
  - SO2: 1.0 tons
  - CO2: 7.6 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 18.0 GWh
  - Natural gas: --
  - Water: --
  - NOx: 1.7 tons
  - SO2: --
  - CO2: 4.2 thous. MT

### Portable electric spas
- **Potential annual savings in 2030**
  - Electricity: 10.7 GWh
  - Natural gas: --
  - Water: --
  - NOx: 1.3 tons
  - SO2: 0.5 tons
  - CO2: 3.2 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 18.0 GWh
  - Natural gas: --
  - Water: --
  - NOx: 1.7 tons
  - SO2: --
  - CO2: 4.2 thous. MT

### Residential ventilating fans
- **Potential annual savings in 2030**
  - Electricity: 3.2 GWh
  - Natural gas: --
  - Water: --
  - NOx: 0.4 tons
  - SO2: 0.2 tons
  - CO2: 1.0 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 8.7 GWh
  - Natural gas: --
  - Water: --
  - NOx: 0.8 tons
  - SO2: 0.2 tons
  - CO2: 2.0 thous. MT

### Showerheads
- **Potential annual savings in 2030**
  - Electricity: 18.0 GWh
  - Natural gas: 176 BBTu
  - Water: 451 million gallons
  - NOx: 10.2 tons
  - SO2: 0.9 tons
  - CO2: 14.8 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 32.7 GWh
  - Natural gas: 321 BBTu
  - Water: 820 million gallons
  - NOx: 17.6 tons
  - SO2: 0.9 tons
  - CO2: 24.7 thous. MT

### Spray sprinkler bodies
- **Potential annual savings in 2030**
  - Electricity: --
  - Natural gas: --
  - Water: 1,001 million gallons
  - NOx: --
  - SO2: --
  - CO2: 1,819 thous. MT
- **Potential annual savings in 2040**
  - Electricity: --
  - Natural gas: --
  - Water: --
  - NOx: --
  - SO2: --
  - CO2: --

### Toilets (water closets)
- **Potential annual savings in 2030**
  - Electricity: --
  - Natural gas: --
  - Water: 169 million gallons
  - NOx: --
  - SO2: --
  - CO2: --
- **Potential annual savings in 2040**
  - Electricity: --
  - Natural gas: --
  - Water: 450 million gallons
  - NOx: --
  - SO2: --
  - CO2: --

### Urinals
- **Potential annual savings in 2030**
  - Electricity: --
  - Natural gas: --
  - Water: 32 million gallons
  - NOx: --
  - SO2: --
  - CO2: --
- **Potential annual savings in 2040**
  - Electricity: --
  - Natural gas: --
  - Water: 70 million gallons
  - NOx: --
  - SO2: --
  - CO2: --

### Water coolers
- **Potential annual savings in 2030**
  - Electricity: 8.8 GWh
  - Natural gas: --
  - Water: --
  - NOx: 1.1 tons
  - SO2: 0.4 tons
  - CO2: 3.5 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 16.0 GWh
  - Natural gas: --
  - Water: --
  - NOx: 1.5 tons
  - SO2: 0.4 tons
  - CO2: 4.3 thous. MT

### Total
- **Potential annual savings in 2030**
  - Electricity: 129 GWh
  - Natural gas: 742 BBTu
  - Water: 2,507 million gallons
  - NOx: 50 tons
  - SO2: 6 thous. MT
  - CO2: 81 thous. MT
- **Potential annual savings in 2040**
  - Electricity: 219 GWh
  - Natural gas: 1,514 BBTu
  - Water: 4,756 million gallons
  - NOx: 89 tons
  - SO2: 6 thous. MT
  - CO2: 133 thous. MT

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market.
## Savings estimates for: Kansas

<table>
<thead>
<tr>
<th>Product</th>
<th>Potential annual utility bill savings (million 2021$)</th>
<th>Net present value savings (million 2021$)</th>
<th>Benefit-cost ratio</th>
<th>Payback period (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In 2030</td>
<td>In 2040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air purifiers</td>
<td>4.9</td>
<td>7.7</td>
<td>51.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Commercial dishwashers</td>
<td>1.6</td>
<td>4.2</td>
<td>26.9</td>
<td>10.7</td>
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<tr>
<td>Commercial fryers</td>
<td>2.3</td>
<td>5.3</td>
<td>28.3</td>
<td>3.6</td>
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<tr>
<td>Commercial ovens</td>
<td>0.5</td>
<td>1.0</td>
<td>2.3</td>
<td>1.4</td>
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<tr>
<td>Commercial steam cookers</td>
<td>0.6</td>
<td>1.5</td>
<td>9.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Electric vehicle supply equipment</td>
<td>0.5</td>
<td>2.9</td>
<td>18.1</td>
<td>no cost</td>
</tr>
<tr>
<td>Faucets</td>
<td>16.9</td>
<td>34.1</td>
<td>255.0</td>
<td>no cost</td>
</tr>
<tr>
<td>Gas fireplaces</td>
<td>0.5</td>
<td>1.5</td>
<td>9.4</td>
<td>11.7</td>
</tr>
<tr>
<td>High CRI fluorescent lamps</td>
<td>1.9</td>
<td>0.5</td>
<td>8.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Portable electric spas</td>
<td>1.3</td>
<td>2.2</td>
<td>14.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Residential ventilating fans</td>
<td>0.4</td>
<td>1.0</td>
<td>7.4</td>
<td>no cost</td>
</tr>
<tr>
<td>Showerheads</td>
<td>11.4</td>
<td>22.6</td>
<td>169.8</td>
<td>no cost</td>
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<tr>
<td>Spray sprinkler bodies</td>
<td>15.6</td>
<td>32.7</td>
<td>223.0</td>
<td>13.4</td>
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<tr>
<td>Toilets (water closets)</td>
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<td>8.1</td>
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<td>Urinals</td>
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<td>1.3</td>
<td>8.9</td>
<td>no cost</td>
</tr>
<tr>
<td>Water coolers</td>
<td>0.9</td>
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<td>11.6</td>
<td>no cost</td>
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<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>128</strong></td>
<td><strong>914</strong></td>
<td><strong>17.2</strong></td>
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</table>

Assuming a compliance date of 2025 for all the recommended standards. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2025 and 2040. Totals may not sum due to rounding. The total benefit-cost ratio is calculated as the present value of the total utility bill savings from products sold through 2040 for the package of recommended standards divided by the present value of the total additional costs. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market.
Cumulative savings estimates for: Kansas

<table>
<thead>
<tr>
<th>Products</th>
<th>Electricity (GWh)</th>
<th>Natural gas (TBIu)</th>
<th>Water (billion gallons)</th>
<th>NO\textsubscript{x} (tons)</th>
<th>SO\textsubscript{2} (tons)</th>
<th>CO\textsubscript{2} (thous. MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air purifiers</td>
<td>733</td>
<td>--</td>
<td>--</td>
<td>77.8</td>
<td>30.2</td>
<td>204.6</td>
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<tr>
<td>Commercial dishwashers</td>
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<td>1.4</td>
<td>50.3</td>
<td>1.6</td>
<td>66.5</td>
</tr>
<tr>
<td>Commercial fryers</td>
<td>15</td>
<td>5.1</td>
<td>--</td>
<td>230.9</td>
<td>0.6</td>
<td>273.5</td>
</tr>
<tr>
<td>Commercial ovens</td>
<td>41</td>
<td>0.7</td>
<td>--</td>
<td>33.9</td>
<td>1.6</td>
<td>47.3</td>
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<td>Commercial steam cookers</td>
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<td>0.2</td>
<td>0.6</td>
<td>12.0</td>
<td>1.0</td>
<td>18.9</td>
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<tr>
<td>Electric vehicle supply equipment</td>
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<td>--</td>
<td>14.0</td>
<td>5.1</td>
<td>36.7</td>
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<tr>
<td>Faucets</td>
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<td>4.1</td>
<td>15.3</td>
<td>229.6</td>
<td>17.0</td>
<td>333.2</td>
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<td>Gas fireplaces</td>
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<td>1.0</td>
<td>--</td>
<td>46.7</td>
<td>--</td>
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<td>High CRI fluorescent lamps</td>
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<td>Portable electric spas</td>
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<td>Showerheads</td>
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<td>Toilets (water closets)</td>
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<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
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<td><strong>51</strong></td>
<td><strong>963</strong></td>
<td><strong>100</strong></td>
<td><strong>1,521</strong></td>
</tr>
</tbody>
</table>

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market.