

## Appliance Standards Awareness Project

### 2023 State Appliance Standards Recommendations

#### Savings estimates for: [Missouri](#)

	Potential annual savings in 2030						Potential annual savings in 2040					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)
Air purifiers	83.2	--	--	17.7	30.9	45.3	136.1	--	--	27.8	49.1	76.5
Commercial dishwashers	3.8	94	131	5.1	1.4	7.3	9.2	226	314	12.1	3.3	17.5
Commercial fryers	1.5	486	--	22.3	0.5	26.7	3.2	1,060	--	48.7	1.1	58.2
Commercial ovens	3.9	63	--	3.7	1.5	5.7	8.5	137	--	7.9	3.1	12.4
Commercial steam cookers	2.5	20	55	1.4	0.9	2.6	5.4	43	120	3.1	1.9	5.5
Electric vehicle supply equipment	7.9	--	--	1.7	2.9	4.3	52.4	--	--	10.7	18.9	29.5
Faucets	62.3	327	1,609	28.1	23.1	51.3	113.2	593	2,922	50.0	40.9	95.2
Gas fireplaces	--	119	--	5.4	--	6.3	--	325	--	14.7	--	17.3
High CRI fluorescent lamps	37.3	--	--	7.9	13.8	22.6	9.2	--	--	1.9	3.3	5.4
Portable electric spas	37.3	--	--	7.9	13.9	20.3	62.7	--	--	12.8	22.6	35.3
Residential ventilating fans	6.8	--	--	1.5	2.5	3.7	18.7	--	--	3.8	6.7	10.5
Showerheads	53.8	281	948	24.2	20.0	44.3	97.9	511	1,724	43.1	35.3	82.2
Spray sprinkler bodies	--	--	4,079	--	--	--	--	--	7,416	--	--	--
Toilets (water closets)	--	--	355	--	--	--	--	--	945	--	--	--
Urinals	--	--	67	--	--	--	--	--	146	--	--	--
Water coolers	16.5	--	--	3.5	6.1	10.1	30.0	--	--	6.1	10.8	17.9
<b>Total</b>	<b>317</b>	<b>1,390</b>	<b>7,245</b>	<b>130</b>	<b>118</b>	<b>251</b>	<b>547</b>	<b>2,895</b>	<b>13,587</b>	<b>243</b>	<b>197</b>	<b>463</b>

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: [Missouri](#)

	Potential annual utility bill savings (million 2021\$)		Net present value savings (million 2021\$)	Benefit-cost ratio	Payback period (years)
	In 2030	In 2040			
Air purifiers	9.1	14.4	94.2	5.1	1.4
Commercial dishwashers	3.3	8.7	55.3	10.5	1.1
Commercial fryers	4.8	11.0	57.6	3.6	2.8
Commercial ovens	0.9	2.1	4.0	1.4	7.0
Commercial steam cookers	1.3	3.0	20.0	11.4	0.9
Electric vehicle supply equipment	0.9	5.6	34.3	no cost	0.0
Faucets	36.2	72.6	544.2	no cost	0.0
Gas fireplaces	1.6	4.4	28.1	13.0	0.9
High CRI fluorescent lamps	3.2	0.8	12.6	2.5	2.3
Portable electric spas	4.1	6.6	44.4	5.8	1.1
Residential ventilating fans	0.8	2.0	13.9	no cost	0.0
Showerheads	24.4	48.3	364.0	no cost	0.0
Spray sprinkler bodies	63.5	133.3	909.0	13.4	0.7
Toilets (water closets)	5.5	17.0	145.5	no cost	0.0
Urinals	1.0	2.6	18.7	no cost	0.0
Water coolers	1.4	2.4	19.2	no cost	0.0
<b>Total</b>	<b>162</b>	<b>335</b>	<b>2,365</b>	<b>16.0</b>	<b>-</b>

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: [Missouri](#)

	Potential cumulative savings through 2040					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)
Air purifiers	1,565	--	--	325.3	578.0	890.6
Commercial dishwashers	86	2.1	3.0	114.2	31.9	163.0
Commercial fryers	32	10.6	--	487.1	11.7	581.6
Commercial ovens	85	1.4	--	79.7	31.5	122.2
Commercial steam cookers	54	0.4	1.2	30.8	19.9	54.3
Electric vehicle supply equipment	298	--	--	61.8	109.1	169.7
Faucets	1,246	6.5	32.2	555.1	459.7	1,056.4
Gas fireplaces	--	2.8	--	125.3	--	146.9
High CRI fluorescent lamps	369	--	--	77.1	138.9	221.0
Portable electric spas	712	--	--	148.1	263.3	405.4
Residential ventilating fans	159	--	--	33.0	58.5	90.4
Showerheads	1,077	5.6	19.0	478.6	397.4	911.7
Spray sprinkler bodies	--	--	81.6	--	--	--
Toilets (water closets)	--	--	8.1	--	--	--
Urinals	--	--	1.5	--	--	--
Water coolers	330	--	--	68.6	121.9	191.9
<b>Total</b>	<b>6,012</b>	<b>29</b>	<b>146</b>	<b>2,585</b>	<b>2,222</b>	<b>5,005</b>

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.