

Appliance Standards Awareness Project 2021 State Appliance Standards Recommendations

Assumptions for national annual shipments, average lifetime, per-unit savings, per-unit incremental cost, and percentage of shipments already meeting standard level

Product	National annual shipments in 2023 (million)	Average lifetime (years)	Per-unit annual savings*	Units	% savings relative to baseline products	Per-unit incremental cost (2019\$)	Adjusted market share of products already meeting standard level**
Air purifiers	5.7	9.0	214	kWh	40%	0	43%
Commercial dishwashers	0.1	13.2	--	--	--	1,124	59%
<i>electricity</i>	--	--	1,385	kWh	20%	--	--
<i>natural gas</i>	--	--	33	MMBtu	38%	--	--
<i>water</i>	--	--	45,808	gallons	38%	--	--
Commercial fryers	0.1	12.0	--	--	--	1,892	21%
<i>electricity</i>	--	--	163	kWh	17%	--	--
<i>natural gas</i>	--	--	46	MMBtu	31%	--	--
Commercial hot-food holding cabinets	0.08	12.0	1,730	kWh	53%	958	13%
Commercial ovens	0.09	12.0	--	--	--	237	51%
<i>electricity</i>	--	--	945	kWh	18%	--	--
<i>gas</i>	--	--	9	MMBtu	19%	--	--
Commercial steam cookers	0.02	12.0	--	--	--	3,215	41%
<i>electricity</i>	--	--	10,927	kWh	55%	--	--
<i>natural gas</i>	--	--	40	MMBtu	54%	--	--
<i>water</i>	--	--	162,060	gallons	93%	--	--
Electric vehicle supply equipment	1.0	16.0	30	kWh	40%	0	7%
Faucets	50.3	--	--	--	--	--	--
<i>residential lavatory</i>	31.0	10.0	--	--	--	0	93%
<i>electricity</i>	--	--	19	kWh	24%	--	--
<i>natural gas</i>	--	--	0.14	MMBtu	24%	--	--
<i>water</i>	--	--	566	gallons	24%	--	--
<i>kitchen</i>	15.8	10.0	--	--	--	0	62%
<i>electricity</i>	--	--	75	kWh	17%	--	--
<i>natural gas</i>	--	--	0.55	MMBtu	17%	--	--
<i>water</i>	--	--	2,214	gallons	17%	--	--
<i>public</i>	3.5	3.0	--	--	--	0	99%
<i>electricity</i>	--	--	--	--	--	--	--
<i>natural gas</i>	--	--	2.63	MMBtu	77%	--	--
<i>water</i>	--	--	6,153	gallons	77%	--	--
Gas fireplaces	0.5	--	--	--	--	--	--
<i>heating fireplaces</i>	0.4	15.0	3.2	MMBtu	68%	33	38%
<i>decorative fireplaces</i>	0.04	15.0	3.5	MMBtu	85%	33	68%
High CRI fluorescent lamps	11.4	--	--	--	--	--	--
<i>residential</i>	3.5	15.0	13	kWh	52%	10	**

Product	National annual shipments in 2023 (million)	Average lifetime (years)	Per-unit annual savings*	Units	% savings relative to baseline products	Per-unit incremental cost (2019\$)	Adjusted market share of products already meeting standard**
<i>commercial</i>	7.9	6.7	69	kWh	56%	16	**
Portable electric spas	1.1	--	--	--	--	--	--
<i>standard/exercise/combination</i>	1.0	10.0	464	kWh	10%	115	76%
<i>inflatable</i>	0.1	3.0	1,311	kWh	47%	103	0%
Residential ventilating fans	13.0	15.0	16	kWh	77%	0	57%
Showerheads	16.6	10.0	--	--	--	0	75%
<i>electricity</i>	--	--	108	kWh	19%	--	--
<i>natural gas</i>	--	--	0.80	MMBtu	19%	--	--
<i>water</i>	--	--	2,179	gallons	19%	--	--
Spray sprinkler bodies	85.5	--	--	--	--	--	--
<i>residential</i>	65.2	10.0	523	gallons	18%	5	10%
<i>commercial</i>	20.4	10.0	523	gallons	18%	5	10%
Toilets (water closets)	16.7	--	--	--	--	--	--
<i>residential</i>	13.2	25.0	861	gallons	20%	0	72%
<i>commercial</i>	3.5	12.0	488	gallons	20%	0	44%
Urinals	0.9	12.0	2,340	gallons	50%	0	61%
Water coolers	3.5	10.0	92	kWh	30%	0	51%

*For portable electric spas (standard/exercise/combination), the per-unit savings take into account sales that already meet the standard.

**We used the estimated current market share of compliant products in the calculation of total savings and costs with the following exceptions: For high CRI fluorescent lamps, the estimated shipments include only T12 lamps (i.e., they do not include shipments of compliant replacement options such as widely-available LED tube lamps), so accounting for the current market share of compliant products is also not needed. For the plumbing products (faucets, showerheads, toilets, and urinals), we adjusted the estimates of the current market shares of compliant products to take into account that a significant portion of current models have efficiency levels that fall in between the baseline levels and the recommended standard levels. Adjusting the market shares avoids overestimating potential savings.