

## Appliance Standards Awareness Project

### 2023 State Appliance Standards Recommendations

#### Savings estimates for: California

	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	446.6	--	--	48.2	4.0	89.1	730.9	--	--	61.1	7.4	82.5
Commercial dishwashers	24.6	605	842	30.1	0.2	37.1	59.0	1,449	2,018	70.6	0.6	83.8
Commercial fryers	9.3	3,121	--	142.5	0.1	167.7	20.4	6,810	--	310.4	0.2	364.1
Commercial ovens	25.1	403	--	21.0	0.2	26.4	54.8	879	--	44.4	0.6	53.1
Commercial steam cookers	15.9	127	354	7.5	0.1	9.9	34.7	277	773	15.5	0.4	18.8
Electric vehicle supply equipment	42.4	--	--	4.6	0.4	8.5	281.5	--	--	23.5	2.9	31.8
Gas fireplaces	--	451	--	20.5	--	24.0	--	1,231	--	55.8	--	65.4
High CRI fluorescent lamps	190.6	--	--	20.6	1.7	38.1	48.0	--	--	4.0	0.5	5.5
Residential ventilating fans	36.7	--	--	4.0	0.3	7.3	100.2	--	--	8.4	1.0	11.3
Water coolers	63.3	--	--	6.8	0.6	12.7	115.0	--	--	9.6	1.2	13.4
<b>Total</b>	<b>855</b>	<b>4,707</b>	<b>1,197</b>	<b>306</b>	<b>8</b>	<b>421</b>	<b>1,444</b>	<b>10,646</b>	<b>2,791</b>	<b>603</b>	<b>15</b>	<b>730</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, we have not estimated savings for these products due to insufficient data on the current market.

## Savings estimates for: California

	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	111.6	196.8	1394.8	12.3	0.6
Commercial dishwashers	24.8	68.6	445.1	12.9	0.9
Commercial fryers	33.5	90.5	504.8	4.5	2.5
Commercial ovens	8.9	21.9	86.8	2.2	4.7
Commercial steam cookers	10.2	25.1	168.7	14.7	0.7
Electric vehicle supply equipment	10.6	75.8	466.0	no cost	0.0
Gas fireplaces	5.1	18.0	112.7	13.7	0.8
High CRI fluorescent lamps	37.5	10.8	204.9	5.8	1.1
Residential ventilating fans	9.2	27.0	184.5	no cost	0.0
Water coolers	12.2	22.5	174.2	no cost	0.0
<b>Total</b>	<b>264</b>	<b>557</b>	<b>3,742</b>	<b>9.5</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, we have not estimated savings for these products due to insufficient data on the current market.

## Cumulative savings estimates for: California

	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	8,405	--	--	774.8	78.0	1,210.6
Commercial dishwashers	555	13.6	19.0	668.7	5.2	816.0
Commercial fryers	204	68.1	--	3,105.0	1.9	3,651.3
Commercial ovens	548	8.8	--	448.1	5.1	557.9
Commercial steam cookers	347	2.8	7.7	157.1	3.2	204.8
Electric vehicle supply equipment	1,598	--	--	139.3	14.8	206.5
Gas fireplaces	--	10.5	--	474.3	--	555.9
High CRI fluorescent lamps	1,892	--	--	189.8	17.7	373.1
Residential ventilating fans	851	--	--	77.0	7.9	118.1
Water coolers	1,265	--	--	116.0	11.7	215.0
<b>Total</b>	<b>15,665</b>	<b>104</b>	<b>27</b>	<b>6,150</b>	<b>146</b>	<b>7,909</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, we have not estimated savings for these products due to insufficient data on the current market.