

**States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards (Full report at <https://appliance-standards.org/document/states-go-first>)**

**Savings estimates for: California**

	Potential annual savings in 2025						Potential annual savings in 2035					
	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)
Faucets	130.9	5,698	14,990	270.0	2.9	318.4	238.0	10,225	26,940	486.9	4.9	570.8
Showerheads	93.4	3,948	7,128	187.3	2.1	220.9	169.8	7,178	12,959	342.1	3.5	401.0
Lawn spray sprinklers	--	--	21,013	--	--	--	--	--	34,385	--	--	--
Toilets	--	--	3,688	--	--	--	--	--	10,002	--	--	--
Computers and monitors	1,028.1	--	--	82.5	22.8	170.9	1,151.4	--	--	102.9	23.9	134.8
High CRI fluorescent lamps	1,228.2	--	--	98.6	27.2	235.0	409.3	--	--	36.6	8.5	48.0
Air purifiers	234.3	--	--	18.8	5.2	28.1	383.4	--	--	34.3	8.0	44.6
Pool pump replacement motors	476.4	--	--	38.2	10.5	57.2	0.0	--	--	0.0	0.0	0.0
Commercial fryers	5.6	2,522	--	115.3	0.1	135.1	12.2	5,503	--	251.7	0.3	293.8
Commercial dishwashers	23.3	553	770	27.1	0.5	33.9	56.1	1,333	1,856	65.7	1.2	77.4
Commercial steam cookers	42.4	225	720	13.7	0.9	20.2	92.5	491	1,571	30.6	1.9	37.0
Portable air conditioners	81.0	--	--	6.5	1.8	9.7	154.7	--	--	13.8	3.2	18.0
Urinals	--	--	1,172	--	--	--	--	--	2,556	--	--	--
Audio/video equipment	137.7	--	--	11.1	3.0	16.5	137.7	--	--	12.3	2.9	16.0
Uninterruptible power supplies	206.2	--	--	16.5	4.6	38.7	228.6	--	--	20.4	4.8	26.8
Telephones	71.9	--	--	5.8	1.6	12.2	71.9	--	--	6.4	1.5	8.4
Water coolers	42.6	--	--	3.4	0.9	8.3	77.4	--	--	6.9	1.6	9.1
Ventilation fans	34.7	--	--	2.8	0.8	4.2	76.1	--	--	6.8	1.6	8.9
Portable electric spas	27.5	--	--	2.2	0.6	3.3	50.0	--	--	4.5	1.0	5.8
Hot food holding cabinets	28.2	--	--	2.3	0.6	5.5	61.5	--	--	5.5	1.3	7.2
Compressors	12.8	--	--	1.0	0.3	2.5	30.3	--	--	2.7	0.6	3.6
<b>Total</b>	<b>3,905</b>	<b>12,946</b>	<b>49,481</b>	<b>903</b>	<b>86</b>	<b>1,321</b>	<b>3,401</b>	<b>24,730</b>	<b>90,270</b>	<b>1,430</b>	<b>71</b>	<b>1,711</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Totals may not sum due to rounding. Potential savings for pool pump replacement motors are zero in 2035 because we assume that the recommended standard would affect just seven years of product sales beginning in 2021.

	Potential annual utility bill savings (million 2016\$)		Net present value savings (million 2016\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Faucets	258.2	546.8	4,036.7	no cost	0.0
Showerheads	143.8	309.3	2,279.7	no cost	0.0
Lawn spray sprinklers	230.6	434.8	2,848.3	7.9	1.1
Toilets	40.5	126.5	1,108.7	no cost	0.0
Computers and monitors	190.6	224.1	1,334.8	3.6	1.5
High CRI fluorescent lamps	219.2	76.5	984.0	2.9	1.8
Air purifiers	46.4	83.7	484.2	4.1	2.1
Pool pump replacement motors	94.4	0.0	554.4	11.8	0.6
Commercial fryers	28.5	77.7	377.5	3.2	3.6
Commercial dishwashers	18.6	51.9	331.3	11.4	1.0
Commercial steam cookers	17.9	43.3	289.2	13.4	0.8
Portable air conditioners	16.1	33.8	202.2	5.1	1.9
Urinals	12.9	32.3	230.6	no cost	0.0
Audio/video equipment	27.3	30.1	247.0	no cost	0.0
Uninterruptible power supplies	37.0	41.9	272.5	4.4	1.4
Telephones	13.3	13.9	117.1	no cost	0.0
Water coolers	7.6	13.9	107.7	no cost	0.0
Ventilation fans	6.9	16.6	120.3	no cost	0.0
Portable electric spas	5.4	10.9	82.1	no cost	0.0
Hot food holding cabinets	5.0	11.1	67.6	5.7	1.8
Compressors	1.9	4.5	27.5	6.4	1.8
<b>Total</b>	<b>1,422</b>	<b>2,184</b>	<b>16,103</b>	<b>8.9</b>	<b>-</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2020 and 2035. 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 2035 for the package of 21 recommended standards divided by the present value of the total additional costs.

## Cumulative savings estimates for: **California**

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)
Faucets	2,618	113.0	297.7	5,399.9	58.1	6,330.3
Showerheads	1,867	79.0	142.6	3,775.1	41.4	4,426.0
Lawn spray sprinklers	--	--	395.4	--	--	--
Toilets	--	--	84.9	--	--	--
Computers and monitors	14,893	--	--	1,451.5	335.3	2,049.9
High CRI fluorescent lamps	12,808	--	--	1,373.5	308.9	2,141.7
Air purifiers	4,409	--	--	424.7	98.0	549.5
Pool pump replacement motors	4,818	--	--	472.4	110.0	617.0
Commercial fryers	122	55.0	--	2,518.0	2.7	2,940.1
Commercial dishwashers	526	12.5	17.4	619.5	11.6	735.8
Commercial steam cookers	925	4.9	15.7	312.2	20.4	387.7
Portable air conditioners	1,665	--	--	159.7	36.9	206.6
Urinals	--	--	25.6	--	--	--
Audio/video equipment	1,832	--	--	179.7	41.5	232.1
Uninterruptible power supplies	2,961	--	--	288.8	66.7	423.6
Telephones	961	--	--	94.3	21.8	134.8
Water coolers	851	--	--	81.8	18.9	117.9
Ventilation fans	758	--	--	72.5	16.7	93.7
Portable electric spas	550	--	--	52.8	12.2	68.3
Hot food holding cabinets	615	--	--	58.8	13.6	84.3
Compressors	287	--	--	27.4	6.3	39.2
<b>Total</b>	<b>53,465</b>	<b>264</b>	<b>979</b>	<b>17,363</b>	<b>1,221</b>	<b>21,578</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Totals may not sum due to rounding.