

**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: Colorado**

	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	26.5	742	2,066	55.6	3.3	56.5	48.1	1,330	3,712	94.7	5.0	98.7
Showerheads	18.9	513	982	38.9	2.4	39.4	34.3	932	1,785	66.8	3.6	69.5
Lawn spray sprinklers	--	--	3,080	--	--	--	--	--	5,040	--	--	--
Toilets	--	--	510	--	--	--	--	--	1,382	--	--	--
Computers and monitors	127.7	--	--	105.3	16.0	82.8	143.0	--	--	101.5	14.8	84.6
High CRI fluorescent lamps	141.2	--	--	116.5	17.6	92.0	49.6	--	--	35.2	5.1	29.6
Air purifiers	37.3	--	--	30.8	4.7	24.0	61.0	--	--	43.3	6.3	35.6
Pool pump replacement motors	10.5	--	--	8.7	1.3	6.8	0.0	--	--	0.0	0.0	0.0
Commercial fryers	0.8	356	--	16.9	0.1	19.4	1.7	777	--	36.6	0.2	42.3
Commercial dishwashers	3.3	78	109	6.3	0.4	6.3	7.9	188	262	14.2	0.8	14.8
Commercial steam cookers	6.0	32	102	6.4	0.7	5.6	13.1	69	222	12.4	1.4	11.5
Portable air conditioners	10.2	--	--	8.4	1.3	6.6	19.5	--	--	13.8	2.0	11.3
Urinals	--	--	165	--	--	--	--	--	361	--	--	--
Audio/video equipment	21.9	--	--	18.1	2.7	14.1	21.9	--	--	15.6	2.3	12.8
Uninterruptible power supplies	22.2	--	--	18.3	2.8	14.5	24.6	--	--	17.5	2.6	14.7
Telephones	12.1	--	--	10.0	1.5	7.8	12.1	--	--	8.6	1.3	7.2
Water coolers	7.3	--	--	6.1	0.9	4.8	13.3	--	--	9.5	1.4	8.0
Ventilation fans	5.5	--	--	4.6	0.7	3.6	12.1	--	--	8.6	1.3	7.1
Portable electric spas	7.0	--	--	5.8	0.9	4.5	12.8	--	--	9.1	1.3	7.4
Hot food holding cabinets	4.0	--	--	3.3	0.5	2.6	8.7	--	--	6.2	0.9	5.2
Compressors	3.6	--	--	3.0	0.5	2.4	8.6	--	--	6.1	0.9	5.2
<b>Total</b>	<b>466</b>	<b>1,721</b>	<b>7,014</b>	<b>463</b>	<b>58</b>	<b>394</b>	<b>492</b>	<b>3,297</b>	<b>12,764</b>	<b>500</b>	<b>51</b>	<b>465</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	32.7	66.1	493.1	no cost	0.0
Showerheads	17.8	36.1	269.5	no cost	0.0
Lawn spray sprinklers	33.8	63.7	417.5	7.9	1.1
Toilets	5.6	17.5	153.1	no cost	0.0
Computers and monitors	13.4	15.0	63.2	2.0	2.5
High CRI fluorescent lamps	13.3	4.8	31.0	1.5	3.3
Air purifiers	4.4	7.3	32.4	2.3	3.3
Pool pump replacement motors	1.2	0.0	6.6	6.8	0.9
Commercial fryers	3.1	7.2	28.4	2.2	4.7
Commercial dishwashers	2.2	5.7	36.1	9.0	1.2
Commercial steam cookers	1.9	4.6	30.2	10.2	1.0
Portable air conditioners	1.2	2.3	11.5	2.8	3.0
Urinals	1.8	4.6	32.6	no cost	0.0
Audio/video equipment	2.6	2.6	22.4	no cost	0.0
Uninterruptible power supplies	2.1	2.3	11.4	2.3	2.3
Telephones	1.2	1.2	10.5	no cost	0.0
Water coolers	0.7	1.2	9.5	no cost	0.0
Ventilation fans	0.6	1.4	10.7	no cost	0.0
Portable electric spas	0.8	1.5	11.8	no cost	0.0
Hot food holding cabinets	0.4	0.8	3.9	2.9	3.1
Compressors	0.3	0.6	3.0	3.1	3.3
<b>Total</b>	<b>141</b>	<b>247</b>	<b>1,688</b>	<b>7.4</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: **Colorado**

	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	529	14.7	41.0	1,077.2	60.2	1,106.1
Showerheads	378	10.3	19.6	757.6	42.9	776.4
Lawn spray sprinklers	--	--	58.0	--	--	--
Toilets	--	--	11.7	--	--	--
Computers and monitors	1,850	--	--	1,438.0	213.5	1,164.7
High CRI fluorescent lamps	1,490	--	--	1,196.5	181.4	987.6
Air purifiers	702	--	--	541.1	80.0	431.0
Pool pump replacement motors	106	--	--	84.4	12.6	66.5
Commercial fryers	17	7.8	--	367.0	1.9	423.5
Commercial dishwashers	74	1.8	2.5	137.2	8.4	140.7
Commercial steam cookers	131	0.7	2.2	131.6	14.8	119.4
Portable air conditioners	210	--	--	161.0	23.8	128.4
Urinals	--	--	3.6	--	--	--
Audio/video equipment	292	--	--	227.3	33.8	180.4
Uninterruptible power supplies	319	--	--	248.2	36.9	203.7
Telephones	161	--	--	125.8	18.7	102.6
Water coolers	147	--	--	112.9	16.7	93.2
Ventilation fans	121	--	--	92.5	13.6	73.8
Portable electric spas	140	--	--	107.9	15.9	86.0
Hot food holding cabinets	87	--	--	66.5	9.8	54.9
Compressors	82	--	--	62.4	9.2	51.5
<b>Total</b>	<b>6,835</b>	<b>35</b>	<b>139</b>	<b>6,935</b>	<b>794</b>	<b>6,190</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.