

**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: Arizona**

	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	111.4	531	2,596	71.0	12.4	67.5	202.5	941	4,664	123.0	22.0	118.9
Showerheads	79.5	358	1,234	49.7	8.8	47.1	144.5	651	2,243	86.8	15.7	83.7
Lawn spray sprinklers	--	--	6,413	--	--	--	--	--	10,494	--	--	--
Toilets	--	--	640	--	--	--	--	--	1,736	--	--	--
Computers and monitors	168.1	--	--	70.6	18.7	63.2	188.2	--	--	74.5	20.4	64.0
High CRI fluorescent lamps	200.6	--	--	84.3	22.3	78.6	68.3	--	--	27.0	7.4	23.2
Air purifiers	44.4	--	--	18.7	4.9	15.7	72.7	--	--	28.8	7.9	24.7
Pool pump replacement motors	173.8	--	--	73.0	19.3	61.4	0.0	--	--	0.0	0.0	0.0
Commercial fryers	1.0	445	--	20.7	0.1	24.0	2.2	972	--	45.1	0.2	52.4
Commercial dishwashers	4.1	98	136	6.2	0.5	6.8	9.9	235	328	14.6	1.1	15.9
Commercial steam cookers	7.5	40	127	5.0	0.8	5.1	16.3	87	277	10.4	1.8	10.2
Portable air conditioners	7.6	--	--	3.2	0.8	2.7	14.5	--	--	5.7	1.6	4.9
Urinals	--	--	207	--	--	--	--	--	451	--	--	--
Audio/video equipment	26.1	--	--	11.0	2.9	9.2	26.1	--	--	10.3	2.8	8.9
Uninterruptible power supplies	31.2	--	--	13.1	3.5	12.1	34.6	--	--	13.7	3.8	11.7
Telephones	16.4	--	--	6.9	1.8	6.3	16.4	--	--	6.5	1.8	5.6
Water coolers	10.5	--	--	4.4	1.2	4.1	19.1	--	--	7.6	2.1	6.5
Ventilation fans	6.6	--	--	2.8	0.7	2.3	14.4	--	--	5.7	1.6	4.9
Portable electric spas	6.3	--	--	2.7	0.7	2.2	11.5	--	--	4.6	1.3	3.9
Hot food holding cabinets	5.0	--	--	2.1	0.6	2.0	10.9	--	--	4.3	1.2	3.7
Compressors	3.6	--	--	1.5	0.4	1.4	8.5	--	--	3.4	0.9	2.9
<b>Total</b>	<b>904</b>	<b>1,472</b>	<b>11,353</b>	<b>447</b>	<b>101</b>	<b>412</b>	<b>861</b>	<b>2,886</b>	<b>20,193</b>	<b>472</b>	<b>94</b>	<b>446</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	52.2	104.8	784.2	no cost	0.0
Showerheads	30.2	60.8	455.4	no cost	0.0
Lawn spray sprinklers	70.4	132.7	869.3	7.9	1.1
Toilets	7.0	22.0	192.3	no cost	0.0
Computers and monitors	18.9	21.7	97.1	2.2	2.4
High CRI fluorescent lamps	21.0	7.4	59.1	1.7	3.0
Air purifiers	5.5	9.5	43.7	2.5	3.3
Pool pump replacement motors	21.5	0.0	116.1	7.2	0.9
Commercial fryers	5.4	12.6	62.1	3.0	3.3
Commercial dishwashers	3.1	8.2	52.3	10.3	1.1
Commercial steam cookers	2.6	6.3	41.6	11.1	0.9
Portable air conditioners	0.9	1.9	9.6	3.1	3.0
Urinals	2.3	5.7	40.7	no cost	0.0
Audio/video equipment	3.2	3.4	28.5	no cost	0.0
Uninterruptible power supplies	3.3	3.7	19.0	2.6	2.2
Telephones	1.8	1.8	15.6	no cost	0.0
Water coolers	1.1	2.0	15.4	no cost	0.0
Ventilation fans	0.8	1.9	13.8	no cost	0.0
Portable electric spas	0.8	1.5	11.5	no cost	0.0
Hot food holding cabinets	0.5	1.1	5.8	3.3	2.9
Compressors	0.2	0.6	2.7	2.8	3.7
<b>Total</b>	<b>253</b>	<b>410</b>	<b>2,936</b>	<b>8.2</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: **Arizona**

	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	2,228	10.5	51.5	1,377.9	243.6	1,329.7
Showerheads	1,590	7.2	24.7	969.4	173.8	932.7
Lawn spray sprinklers	--	--	120.7	--	--	--
Toilets	--	--	14.7	--	--	--
Computers and monitors	2,435	--	--	996.1	269.2	877.8
High CRI fluorescent lamps	2,102	--	--	897.1	242.4	823.5
Air purifiers	836	--	--	339.1	91.6	291.0
Pool pump replacement motors	1,758	--	--	726.1	196.8	619.0
Commercial fryers	22	9.7	--	451.3	2.3	524.0
Commercial dishwashers	93	2.2	3.1	138.0	10.1	150.7
Commercial steam cookers	163	0.9	2.8	105.4	17.8	105.0
Portable air conditioners	156	--	--	63.1	17.1	54.2
Urinals	--	--	4.5	--	--	--
Audio/video equipment	348	--	--	142.7	38.5	121.9
Uninterruptible power supplies	448	--	--	183.2	49.5	164.2
Telephones	219	--	--	90.0	24.3	80.1
Water coolers	211	--	--	85.2	23.0	76.3
Ventilation fans	144	--	--	58.1	15.7	49.9
Portable electric spas	127	--	--	51.4	13.9	44.1
Hot food holding cabinets	109	--	--	43.8	11.8	39.2
Compressors	81	--	--	32.6	8.8	29.1
<b>Total</b>	<b>13,067</b>	<b>30</b>	<b>222</b>	<b>6,751</b>	<b>1,450</b>	<b>6,312</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.