

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: Missouri

	Potential annual savings in 2025						Potential annual savings in 2035					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Faucets	83.1	566	2,336	51.2	74.7	86.3	151.1	1,008	4,199	87.8	115.0	147.8
Showerheads	59.3	386	1,111	35.7	53.3	60.6	107.8	701	2,020	61.8	82.1	104.5
Lawn spray sprinklers	--	--	1,938	--	--	--	--	--	3,171	--	--	--
Toilets	--	--	575	--	--	--	--	--	1,558	--	--	--
Computers and monitors	164.0	--	--	50.2	147.6	112.2	183.7	--	--	50.9	139.9	115.9
High CRI fluorescent lamps	245.7	--	--	75.2	221.1	169.3	81.1	--	--	22.5	61.8	51.4
Air purifiers	43.6	--	--	13.3	39.2	29.5	71.3	--	--	19.7	54.3	44.5
Pool pump replacement motors	57.2	--	--	17.5	51.4	38.7	0.0	--	--	0.0	0.0	0.0
Commercial fryers	0.9	392	--	18.1	0.8	21.4	1.9	854	--	39.4	1.4	46.6
Commercial dishwashers	3.6	86	120	5.0	3.3	7.1	8.7	207	288	11.8	6.6	16.5
Commercial steam cookers	6.6	35	112	3.6	5.9	6.4	14.4	76	244	7.5	10.9	13.2
Portable air conditioners	10.5	--	--	3.2	9.5	7.1	20.1	--	--	5.6	15.3	12.6
Urinals	--	--	182	--	--	--	--	--	397	--	--	--
Audio/video equipment	25.6	--	--	7.8	23.0	17.3	25.6	--	--	7.1	19.5	16.0
Uninterruptible power supplies	30.4	--	--	9.3	27.3	20.9	33.6	--	--	9.3	25.6	21.4
Telephones	16.8	--	--	5.2	15.1	11.6	16.8	--	--	4.7	12.8	10.7
Water coolers	11.0	--	--	3.4	9.9	7.6	20.0	--	--	5.5	15.2	12.7
Ventilation fans	6.4	--	--	2.0	5.8	4.4	14.1	--	--	3.9	10.8	8.8
Portable electric spas	7.2	--	--	2.2	6.5	4.9	13.1	--	--	3.6	10.0	8.2
Hot food holding cabinets	4.4	--	--	1.3	3.9	3.0	9.5	--	--	2.6	7.3	6.1
Compressors	4.1	--	--	1.3	3.7	2.8	9.7	--	--	2.7	7.4	6.2
Total	780	1,464	6,373	306	702	611	783	2,847	11,878	346	596	643

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	42.0	83.2	625.3	no cost	0.0
Showerheads	23.8	47.0	354.4	no cost	0.0
Lawn spray sprinklers	20.9	39.4	257.2	7.8	1.1
Toilets	6.2	19.3	169.6	no cost	0.0
Computers and monitors	17.0	18.6	77.9	2.0	2.5
High CRI fluorescent lamps	23.1	7.7	55.4	1.5	3.1
Air purifiers	5.1	8.2	36.3	2.2	3.3
Pool pump replacement motors	6.7	0.0	35.4	6.7	0.9
Commercial fryers	4.4	10.4	49.0	2.8	3.5
Commercial dishwashers	2.6	6.8	43.4	9.8	1.1
Commercial steam cookers	2.2	5.2	34.4	10.5	1.0
Portable air conditioners	1.2	2.3	11.4	2.8	3.0
Urinals	2.0	4.9	35.2	no cost	0.0
Audio/video equipment	3.0	2.9	25.7	no cost	0.0
Uninterruptible power supplies	2.9	3.1	15.3	2.3	2.3
Telephones	1.7	1.6	14.3	no cost	0.0
Water coolers	1.0	1.8	14.2	no cost	0.0
Ventilation fans	0.8	1.6	12.1	no cost	0.0
Portable electric spas	0.8	1.5	11.8	no cost	0.0
Hot food holding cabinets	0.4	0.9	4.3	2.9	3.1
Compressors	0.3	0.6	3.0	2.8	3.5
Total	168	267	1,885	7.0	-

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: **Missouri**

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Faucets	1,662	11.2	46.4	992.6	1,291.3	1,673.0
Showerheads	1,186	7.7	22.2	696.2	921.3	1,179.6
Lawn spray sprinklers	--	--	36.5	--	--	--
Toilets	--	--	13.2	--	--	--
Computers and monitors	2,376	--	--	696.0	1,859.5	1,579.7
High CRI fluorescent lamps	2,557	--	--	766.9	2,023.2	1,768.4
Air purifiers	820	--	--	238.8	637.3	533.1
Pool pump replacement motors	578	--	--	171.4	455.3	383.1
Commercial fryers	19	8.5	--	394.6	14.7	466.4
Commercial dishwashers	82	1.9	2.7	112.1	63.4	157.4
Commercial steam cookers	144	0.8	2.4	76.4	111.5	136.2
Portable air conditioners	217	--	--	63.0	168.4	140.6
Urinals	--	--	4.0	--	--	--
Audio/video equipment	341	--	--	100.0	267.0	223.0
Uninterruptible power supplies	436	--	--	127.7	341.1	292.6
Telephones	225	--	--	66.0	176.2	150.6
Water coolers	220	--	--	63.9	170.6	146.7
Ventilation fans	141	--	--	40.9	109.5	91.3
Portable electric spas	144	--	--	41.9	111.8	93.4
Hot food holding cabinets	95	--	--	27.7	74.2	63.6
Compressors	92	--	--	26.7	71.5	61.3
Total	11,333	30	127	4,703	8,868	9,140

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.