

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: Tennessee

	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	153.6	288	2,535	40.6	48.8	102.3	279.2	501	4,555	66.4	157.3	159.1
Showerheads	109.6	186	1,205	28.1	34.8	71.9	199.2	338	2,191	46.5	112.2	112.5
Lawn spray sprinklers	--	--	1,575	--	--	--	--	--	2,577	--	--	--
Toilets	--	--	624	--	--	--	--	--	1,692	--	--	--
Computers and monitors	159.3	--	--	28.5	50.6	92.0	178.4	--	--	27.8	100.5	85.6
High CRI fluorescent lamps	265.4	--	--	47.5	84.3	156.0	87.4	--	--	13.6	49.2	42.2
Air purifiers	46.1	--	--	8.3	14.7	26.1	75.5	--	--	11.8	42.5	35.8
Pool pump replacement motors	42.9	--	--	7.7	13.6	24.3	0.0	--	--	0.0	0.0	0.0
Commercial fryers	0.9	427	--	19.6	0.3	23.3	2.1	933	--	42.8	1.2	50.5
Commercial dishwashers	3.9	94	131	5.0	1.3	7.3	9.5	226	314	11.8	5.4	16.6
Commercial steam cookers	7.2	38	122	3.0	2.3	6.3	15.7	83	266	6.2	8.8	12.0
Portable air conditioners	14.7	--	--	2.6	4.7	8.3	28.1	--	--	4.4	15.8	13.3
Urinals	--	--	199	--	--	--	--	--	433	--	--	--
Audio/video equipment	27.1	--	--	4.9	8.6	15.4	27.1	--	--	4.2	15.3	12.9
Uninterruptible power supplies	27.9	--	--	5.0	8.9	16.3	30.9	--	--	4.8	17.4	14.9
Telephones	18.9	--	--	3.4	6.0	11.0	18.9	--	--	2.9	10.6	9.1
Water coolers	12.6	--	--	2.3	4.0	7.4	22.9	--	--	3.6	12.9	11.1
Ventilation fans	6.8	--	--	1.2	2.2	3.9	15.0	--	--	2.3	8.4	7.1
Portable electric spas	6.5	--	--	1.2	2.1	3.7	11.9	--	--	1.8	6.7	5.6
Hot food holding cabinets	4.8	--	--	0.9	1.5	2.8	10.4	--	--	1.6	5.9	5.1
Compressors	5.5	--	--	1.0	1.7	3.2	13.0	--	--	2.0	7.3	6.3
Total	914	1,033	6,390	211	290	582	1,025	2,081	12,029	255	577	600

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	46.9	92.1	695.0	no cost	0.0
Showerheads	26.4	51.5	390.2	no cost	0.0
Lawn spray sprinklers	18.0	34.0	224.1	8.3	1.0
Toilets	7.1	22.3	195.7	no cost	0.0
Computers and monitors	15.5	16.9	66.3	1.8	2.6
High CRI fluorescent lamps	26.2	8.4	67.2	1.6	2.9
Air purifiers	4.4	7.0	25.7	1.8	3.9
Pool pump replacement motors	4.1	0.0	20.9	5.5	1.1
Commercial fryers	4.7	11.0	50.6	2.7	3.6
Commercial dishwashers	2.9	7.7	48.8	10.1	1.1
Commercial steam cookers	2.5	6.0	39.5	11.0	0.9
Portable air conditioners	1.4	2.6	11.4	2.3	3.5
Urinals	2.3	5.7	40.8	no cost	0.0
Audio/video equipment	2.6	2.5	22.2	no cost	0.0
Uninterruptible power supplies	2.7	3.0	14.8	2.4	2.2
Telephones	1.9	1.8	15.9	no cost	0.0
Water coolers	1.2	2.2	17.3	no cost	0.0
Ventilation fans	0.7	1.4	10.5	no cost	0.0
Portable electric spas	0.6	1.1	8.7	no cost	0.0
Hot food holding cabinets	0.5	1.0	5.1	3.1	2.9
Compressors	0.3	0.8	3.9	2.8	3.6
Total	173	279	1,975	7.2	-

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: **Tennessee**

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Faucets	3,071	5.6	50.3	762.6	1,198.7	1,864.4
Showerheads	2,191	3.7	24.1	530.9	855.2	1,314.8
Lawn spray sprinklers	--	--	29.6	--	--	--
Toilets	--	--	14.4	--	--	--
Computers and monitors	2,307	--	--	386.8	880.2	1,226.3
High CRI fluorescent lamps	2,760	--	--	490.9	1,033.7	1,555.9
Air purifiers	868	--	--	143.7	335.1	444.3
Pool pump replacement motors	434	--	--	74.0	133.8	231.4
Commercial fryers	21	9.3	--	428.1	8.3	506.4
Commercial dishwashers	89	2.1	2.9	111.1	36.1	159.9
Commercial steam cookers	157	0.8	2.7	63.7	62.7	127.8
Portable air conditioners	302	--	--	49.8	118.7	153.8
Urinals	--	--	4.3	--	--	--
Audio/video equipment	361	--	--	60.8	137.9	187.5
Uninterruptible power supplies	400	--	--	67.1	152.8	216.5
Telephones	252	--	--	42.5	96.5	136.2
Water coolers	252	--	--	41.5	98.2	134.9
Ventilation fans	149	--	--	24.6	59.8	75.8
Portable electric spas	130	--	--	21.5	50.9	66.5
Hot food holding cabinets	104	--	--	17.1	41.7	55.6
Compressors	123	--	--	20.3	49.9	65.6
Total	13,974	22	128	3,337	5,350	8,524

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.