

Appliance Standards Awareness Project

2024 State Appliance Standards Recommendations

Savings estimates for: South Carolina

	Potential annual savings in 2030						Potential annual savings in 2040					
	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)
Commercial battery chargers	3.5	--	--	0.1	0.1	0.5	10.5	--	--	0.3	0.4	1.4
Commercial dishwashers	4.4	108	150	5.0	0.1	6.3	12.8	315	439	14.6	0.4	18.4
Commercial fryers	1.2	403	--	18.3	0.03	21.6	3.2	1,076	--	48.8	0.1	57.6
Commercial ovens	3.2	51	--	2.4	0.1	3.2	8.5	136	--	6.4	0.3	8.3
Commercial steam cookers	2.0	16	45	0.8	0.1	1.1	5.4	43	120	2.1	0.2	3.0
Faucets	31.6	51	541	3.5	0.8	7.1	70.1	111	1,197	6.8	2.4	15.0
Gas fireplaces	--	132	--	6.0	--	7.0	--	425	--	19.2	--	22.6
High CRI fluorescent lamps	19.4	--	--	0.7	0.5	2.7	7.6	--	--	0.2	0.3	1.0
Irrigation controllers	--	--	2,040	--	--	--	--	--	6,572	--	--	--
Portable electric spas	5.8	--	--	0.2	0.1	0.8	11.4	--	--	0.3	0.4	1.5
Residential ventilating fans	1.7	--	--	0.1	0.04	0.2	5.4	--	--	0.1	0.2	0.7
Showerheads	40.0	62	465	4.3	1.0	8.9	88.9	138	1,033	8.5	3.0	18.9
Spray sprinkler bodies	--	--	3,753	--	--	--	--	--	8,339	--	--	--
Toilets (water closets)	--	--	197	--	--	--	--	--	600	--	--	--
Urinals	--	--	45	--	--	--	--	--	119	--	--	--
Water coolers	14.9	--	--	0.6	0.4	2.1	33.2	--	--	0.8	1.1	4.3
Total	128	823	6,859	42	3	62	257	2,243	15,958	108	9	153

Assuming a compliance date of 2026 for all the recommended standards. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market. We accounted for the interaction effects among irrigation controllers and spray sprinkler bodies in calculating the total water savings. The total potential water savings are thus smaller than the sum of the individual products.

Savings estimates for: South Carolina

	Potential annual utility bill savings (million 2022\$)		Net present value savings (million 2022\$)	Payback period (years)
	In 2030	In 2040		
Commercial battery chargers	0.2	0.7	5.2	2.2
Commercial dishwashers	3.5	11.5	97.3	1.2
Commercial fryers	4.2	12.2	84.1	2.7
Commercial ovens	0.8	2.4	7.0	6.5
Commercial steam cookers	1.0	2.8	24.9	1.0
Faucets	11.9	29.7	297.9	0.0
Gas fireplaces	1.9	6.8	59.3	0.8
High CRI fluorescent lamps	2.0	0.9	9.7	2.0
Irrigation controllers	26.8	99.8	902.2	0.8
Portable electric spas	0.7	1.6	13.0	1.2
Residential ventilating fans	0.2	0.7	6.9	0.0
Showerheads	12.1	30.2	302.8	0.0
Spray sprinkler bodies	49.3	126.6	1,160.2	0.9
Toilets (water closets)	2.6	9.1	113.5	0.0
Urinals	0.6	1.8	17.7	0.0
Water coolers	1.5	3.5	34.2	0.0
Total	114	303	3,010	-

Assuming a compliance date of 2026 for all the recommended standards. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2026 and 2050. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market. We accounted for the interaction effects among irrigation controllers and spray sprinkler bodies in calculating the total savings. The totals are thus smaller than the sum of the individual products.

Cumulative savings estimates for: South Carolina

	Potential cumulative savings through 2050						
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)	Utility bill savings (million 2022\$)
Commercial battery chargers	194	--	--	4.9	5.0	22.7	13.1
Commercial dishwashers	236	5.8	8.1	269.0	6.2	335.9	211.5
Commercial fryers	61	20.4	--	928.0	1.6	1,093.1	229.2
Commercial ovens	161	2.6	--	121.4	4.2	156.5	44.7
Commercial steam cookers	102	0.8	2.3	39.5	2.7	55.3	54.1
Faucets	1,403	2.2	23.9	137.5	37.3	285.6	590.9
Gas fireplaces	--	7.7	--	348.4	--	408.4	123.2
High CRI fluorescent lamps	239	--	--	8.2	7.6	33.4	25.4
Irrigation controllers	--	--	119.0	--	--	--	1,835.2
Portable electric spas	232	--	--	6.2	6.2	27.9	31.5
Residential ventilating fans	97	--	--	2.4	2.5	11.3	13.3
Showerheads	1,777	2.8	20.7	171.9	47.3	359.1	600.6
Spray sprinkler bodies	--	--	166.8	--	--	--	2,541.5
Toilets (water closets)	--	--	12.5	--	--	--	194.2
Urinals	--	--	2.3	--	--	--	34.6
Water coolers	664	--	--	17.5	17.7	79.5	67.8
Total	5,167	42	314	2,055	138	2,869	5,964

Assuming a compliance date of 2026 for all the recommended standards. While we continue to recommend the adoption of state-level standards for commercial hot-food holding cabinets and computers and computer monitors, we have not estimated savings for these products due to insufficient data on the current market. We accounted for the interaction effects among irrigation controllers and spray sprinkler bodies in calculating the total water and utility bill savings. The total potential water and utility bill savings are thus smaller than the sum of the individual products.