

Appliance Standards Awareness Project

2024 State Appliance Standards Recommendations

Savings estimates for: North 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	4.7	--	--	0.2	0.1	0.7	13.3	--	--	0.3	0.4	1.7
Commercial dishwashers	8.9	219	305	10.3	0.2	12.9	26.1	641	892	29.7	0.9	37.4
Commercial fryers	2.5	821	--	37.3	0.1	44.0	6.6	2,189	--	99.4	0.2	117.1
Commercial ovens	6.5	104	--	5.0	0.2	6.4	17.3	277	--	13.0	0.6	16.9
Commercial steam cookers	4.1	33	91	1.6	0.1	2.3	10.9	87	243	4.2	0.4	6.0
Faucets	61.9	116	1,100	7.6	1.6	15.0	137.6	253	2,433	14.9	4.5	31.1
Gas fireplaces	--	281	--	12.7	--	14.9	--	904	--	41.0	--	48.0
High CRI fluorescent lamps	43.6	--	--	1.7	1.1	6.2	16.5	--	--	0.4	0.5	2.1
Irrigation controllers	--	--	1,214	--	--	--	--	--	3,911	--	--	--
Portable electric spas	29.4	--	--	1.1	0.7	4.2	57.9	--	--	1.4	1.9	7.4
Residential ventilating fans	3.4	--	--	0.1	0.1	0.5	11.0	--	--	0.3	0.4	1.4
Showerheads	78.5	142	945	9.4	2.0	18.7	174.3	315	2,101	18.6	5.7	39.1
Spray sprinkler bodies	--	--	2,233	--	--	--	--	--	4,962	--	--	--
Toilets (water closets)	--	--	401	--	--	--	--	--	1,220	--	--	--
Urinals	--	--	91	--	--	--	--	--	242	--	--	--
Water coolers	33.8	--	--	1.3	0.8	4.8	75.0	--	--	1.9	2.4	9.6
Total	277	1,714	6,156	88	7	131	547	4,666	14,541	225	18	318

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: North Carolina

	Potential annual utility bill savings (million 2022\$)		Net present value savings (million 2022\$)	Payback period (years)
	In 2030	In 2040		
Commercial battery chargers	0.3	0.9	5.9	2.8
Commercial dishwashers	6.9	22.8	192.8	1.2
Commercial fryers	8.5	24.7	169.4	2.7
Commercial ovens	1.6	4.5	10.7	7.0
Commercial steam cookers	1.9	5.6	48.5	1.1
Faucets	23.1	57.8	580.7	0.0
Gas fireplaces	4.1	14.4	124.6	0.8
High CRI fluorescent lamps	3.5	1.6	15.3	2.5
Irrigation controllers	16.0	59.4	536.8	0.8
Portable electric spas	3.3	7.1	57.8	1.2
Residential ventilating fans	0.4	1.3	12.4	0.0
Showerheads	23.3	58.3	583.9	0.0
Spray sprinkler bodies	29.4	75.3	690.4	0.9
Toilets (water closets)	5.3	18.5	230.7	0.0
Urinals	1.2	3.7	35.9	0.0
Water coolers	2.6	6.3	61.8	0.0
Total	128	340	3,283	-

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: North Carolina

	Potential cumulative savings through 2050						Utility bill savings (million 2022\$)
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)	
Commercial battery chargers	248	--	--	6.4	6.3	28.9	16.8
Commercial dishwashers	480	11.8	16.4	547.2	12.2	683.0	420.3
Commercial fryers	125	41.6	--	1,888.1	3.2	2,223.8	462.8
Commercial ovens	328	5.3	--	247.1	8.4	318.2	84.1
Commercial steam cookers	208	1.7	4.6	80.4	5.3	112.3	105.8
Faucets	2,752	5.1	48.7	302.3	71.4	596.0	1,151.6
Gas fireplaces	--	16.4	--	741.6	--	869.2	259.2
High CRI fluorescent lamps	530	--	--	18.4	16.5	74.5	45.9
Irrigation controllers	--	--	70.8	--	--	--	1,092.0
Portable electric spas	1,180	--	--	31.5	30.8	140.9	141.5
Residential ventilating fans	199	--	--	5.0	5.0	22.9	24.0
Showerheads	3,487	6.3	42.0	378.1	90.5	749.4	1,158.2
Spray sprinkler bodies	--	--	99.2	--	--	--	1,512.3
Toilets (water closets)	--	--	25.4	--	--	--	395.0
Urinals	--	--	4.6	--	--	--	70.3
Water coolers	1,501	--	--	39.7	38.9	178.3	122.6
Total	11,037	88	287	4,286	289	5,997	6,677

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.