

Appliance Standards Awareness Project

2024 State Appliance Standards Recommendations

Savings estimates for: Minnesota

	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	3.0	--	--	0.5	0.2	0.4	8.8	--	--	1.0	0.4	1.3
Commercial dishwashers	4.8	118	165	6.1	0.2	6.9	14.1	347	482	17.3	0.6	20.4
Commercial fryers	1.3	444	--	20.3	0.1	23.7	3.5	1,183	--	54.0	0.1	63.4
Commercial ovens	3.5	56	--	3.1	0.2	3.5	9.3	150	--	7.9	0.4	9.3
Commercial steam cookers	2.2	18	49	1.2	0.1	1.2	5.9	47	131	2.8	0.2	3.4
Faucets	18.0	153	605	9.8	0.9	10.6	40.0	338	1,339	20.0	1.6	23.7
Gas fireplaces	--	164	--	7.4	--	8.7	--	529	--	24.0	--	28.1
High CRI fluorescent lamps	24.7	--	--	4.0	1.2	3.3	9.3	--	--	1.1	0.4	1.3
Irrigation controllers	--	--	215	--	--	--	--	--	693	--	--	--
Portable electric spas	24.4	--	--	3.9	1.2	3.3	48.0	--	--	5.6	1.9	6.9
Residential ventilating fans	1.9	--	--	0.3	0.1	0.3	6.1	--	--	0.7	0.2	0.9
Showerheads	22.8	192	520	12.3	1.1	13.2	50.7	426	1,156	25.2	2.1	29.9
Spray sprinkler bodies	--	--	396	--	--	--	--	--	879	--	--	--
Toilets (water closets)	--	--	220	--	--	--	--	--	668	--	--	--
Urinals	--	--	49	--	--	--	--	--	131	--	--	--
Water coolers	15.6	--	--	2.5	0.8	2.1	34.7	--	--	4.0	1.4	5.0
Total	122	1,145	2,179	72	6	77	231	3,019	5,220	164	9	194

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: Minnesota

	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	0.8	6.2	1.8
Commercial dishwashers	3.9	12.9	109.2	1.2
Commercial fryers	3.7	11.2	70.3	3.3
Commercial ovens	0.8	2.4	5.6	7.1
Commercial steam cookers	1.1	3.3	29.1	1.0
Faucets	12.6	31.4	315.1	0.0
Gas fireplaces	1.5	5.4	43.8	1.3
High CRI fluorescent lamps	2.8	1.1	13.9	1.9
Irrigation controllers	3.1	11.6	106.0	0.8
Portable electric spas	3.2	6.5	56.9	0.8
Residential ventilating fans	0.2	0.8	7.4	0.0
Showerheads	12.3	30.6	306.8	0.0
Spray sprinkler bodies	5.8	14.8	136.9	0.8
Toilets (water closets)	3.2	11.2	140.1	0.0
Urinals	0.7	2.2	21.5	0.0
Water coolers	1.8	4.0	38.8	0.0
Total	57	146	1,393	-

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: Minnesota

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	163	--	--	21.2	7.2	24.2	14.9
Commercial dishwashers	260	6.4	8.9	323.0	11.5	377.5	237.1
Commercial fryers	67	22.5	--	1,027.7	3.0	1,204.2	208.6
Commercial ovens	177	2.8	--	152.3	8.0	177.6	45.1
Commercial steam cookers	112	0.9	2.5	55.3	5.0	64.3	62.8
Faucets	801	6.8	26.8	413.5	36.6	479.1	624.8
Gas fireplaces	--	9.6	--	433.8	0.0	508.4	95.7
High CRI fluorescent lamps	300	--	--	47.7	17.5	47.7	34.6
Irrigation controllers	--	--	12.5	--	--	--	214.3
Portable electric spas	977	--	--	131.1	45.1	146.5	128.3
Residential ventilating fans	110	--	--	14.1	4.8	16.3	14.4
Showerheads	1,014	8.5	23.1	521.2	46.4	603.9	608.3
Spray sprinkler bodies	--	--	17.6	--	--	--	296.8
Toilets (water closets)	--	--	13.9	--	--	--	239.7
Urinals	--	--	2.5	--	--	--	42.1
Water coolers	695	--	--	92.6	31.8	103.9	76.9
Total	4,677	57	103	3,233	217	3,753	2,869

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.