

Appliance Standards Awareness Project

2024 State Appliance Standards Recommendations

Savings estimates for: Michigan

	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	4.2	--	--	0.4	0.5	1.2	12.2	--	--	1.0	1.1	3.1
Commercial dishwashers	8.5	208	290	10.2	1.0	13.5	24.8	609	848	29.6	2.2	38.7
Commercial fryers	2.3	780	--	35.6	0.3	42.1	6.2	2,079	--	94.7	0.5	112.1
Commercial ovens	6.2	99	--	5.1	0.8	7.0	16.4	263	--	13.2	1.4	18.2
Commercial steam cookers	3.9	31	87	1.8	0.5	2.8	10.4	83	231	4.6	0.9	7.1
Faucets	24.2	316	1,075	16.6	3.0	23.7	53.7	698	2,379	35.9	4.7	50.9
Gas fireplaces	--	137	--	6.2	--	7.3	--	443	--	20.1	--	23.5
High CRI fluorescent lamps	52.1	--	--	4.9	6.4	14.9	18.8	--	--	1.5	1.7	4.8
Irrigation controllers	--	--	2,063	--	--	--	--	--	6,649	--	--	--
Portable electric spas	53.4	--	--	5.0	6.6	15.3	105.1	--	--	8.3	9.2	27.0
Residential ventilating fans	3.4	--	--	0.3	0.4	1.0	10.8	--	--	0.9	1.0	2.8
Showerheads	30.6	396	924	20.8	3.8	29.8	68.1	879	2,054	45.3	6.0	64.2
Spray sprinkler bodies	--	--	3,797	--	--	--	--	--	8,437	--	--	--
Toilets (water closets)	--	--	389	--	--	--	--	--	1,184	--	--	--
Urinals	--	--	86	--	--	--	--	--	230	--	--	--
Water coolers	26.1	--	--	2.5	3.2	7.5	58.0	--	--	4.6	5.1	14.9
Total	215	1,966	8,331	109	26	166	384	5,054	19,522	260	34	367

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: Michigan

	Potential annual utility bill savings (million 2022\$)		Net present value savings (million 2022\$)	Payback period (years)
	In 2030	In 2040		
Commercial battery chargers	0.4	1.1	7.8	2.0
Commercial dishwashers	6.7	22.0	186.8	1.2
Commercial fryers	5.8	17.2	100.1	3.6
Commercial ovens	1.4	4.0	7.9	7.1
Commercial steam cookers	1.9	5.8	50.9	1.0
Faucets	22.3	55.6	560.4	0.0
Gas fireplaces	1.1	3.9	31.3	1.4
High CRI fluorescent lamps	6.4	2.5	32.9	1.7
Irrigation controllers	30.1	111.8	1,017.9	0.8
Portable electric spas	9.2	18.5	169.6	0.6
Residential ventilating fans	0.6	1.9	17.6	0.0
Showerheads	21.9	54.3	545.8	0.0
Spray sprinkler bodies	55.3	141.9	1,314.1	0.8
Toilets (water closets)	5.7	19.9	248.4	0.0
Urinals	1.3	3.9	37.8	0.0
Water coolers	3.1	6.9	68.7	0.0
Total	168	429	4,257	-

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: Michigan

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	226	--	--	17.3	21.1	52.7	19.6
Commercial dishwashers	456	11.2	15.6	543.1	42.8	702.1	406.2
Commercial fryers	118	39.5	--	1,799.8	11.3	2,126.5	320.1
Commercial ovens	312	5.0	--	250.7	29.7	338.9	75.3
Commercial steam cookers	197	1.6	4.4	86.5	18.8	129.9	109.8
Faucets	1,075	14.0	47.6	716.5	104.6	997.1	1,110.8
Gas fireplaces	--	8.0	--	363.3	--	425.8	69.6
High CRI fluorescent lamps	624	--	--	57.8	83.2	176.3	78.3
Irrigation controllers	--	--	120.4	--	--	--	2,057.3
Portable electric spas	2,141	--	--	168.0	211.3	512.0	371.7
Residential ventilating fans	196	--	--	14.9	18.0	45.3	34.0
Showerheads	1,362	17.6	41.1	903.2	132.6	1,257.8	1,082.0
Spray sprinkler bodies	--	--	168.7	--	--	--	2,849.1
Toilets (water closets)	--	--	24.7	--	--	--	424.8
Urinals	--	--	4.4	--	--	--	74.0
Water coolers	1,159	--	--	90.3	112.9	275.5	136.0
Total	7,866	97	385	5,011	786	7,040	8,494

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.