Appliance Standards Awareness Project

2024 State Appliance Standards Recommendations

Savings estimates for: Montana

	Potential annual savings in 2030				Potential annual savings in 2040							
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NOx (tons)	SO ₂ (tons)	CO ₂ (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NOx (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Commercial battery chargers	0.6			0.03	0.01	0.04	1.9			0.1	0.03	0.1
Commercial dishwashers	0.9	23	32	1.1	0.02	1.3	2.7	67	93	3.1	0.04	3.7
Commercial fryers	0.3	86		3.9	0.004	4.6	0.7	229		10.4	0.01	12.2
Commercial ovens	0.7	11		0.5	0.01	0.6	1.8	29		1.4	0.03	1.7
Commercial steam cookers	0.4	3	10	0.2	0.01	0.2	1.1	9	25	0.5	0.02	0.6
Faucets	4.0	26	115	1.4	0.1	1.7	8.8	57	254	2.9	0.1	3.6
Gas fireplaces		20		0.9		1.1		64		2.9		3.4
High CRI fluorescent lamps	5.5			0.3	0.1	0.4	2.0			0.1	0.03	0.1
Irrigation controllers			486						1,567			
Portable electric spas	9.2			0.5	0.2	0.6	18.2			0.7	0.3	1.2
Residential ventilating fans	0.4			0.02	0.01	0.03	1.2			0.05	0.02	0.1
Showerheads	5.0	32	99	1.7	0.1	2.1	11.2	72	219	3.7	0.2	4.5
Spray sprinkler bodies			895						1,988			
Toilets (water closets)			42						127			
Urinals			9						25			
Water coolers	3.5	-		0.2	0.1	0.2	7.7		-	0.3	0.1	0.5
Total	30	201	1,598	11	1	13	57	528	3,713	26	1	32

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: Montana

		nual utility bill lion 2022\$)	Net present value savings	Payback period	
	In 2030	In 2040	(million 2022\$)	(years)	
Commercial battery chargers	0.04	0.1	0.8	2.9	
Commercial dishwashers	0.8	2.7	23.2	1.1	
Commercial fryers	0.8	2.4	15.6	3.0	
Commercial ovens	0.2	0.4	0.9	7.6	
Commercial steam cookers	0.2	0.7	6.0	0.9	
Faucets	2.5	6.4	64.5	0.0	
Gas fireplaces	0.2	0.7	5.4	1.3	
High CRI fluorescent lamps	0.5	0.2	1.9	2.5	
Irrigation controllers	8.0	29.9	274.3	0.7	
Portable electric spas	0.9	2.0	17.0	1.1	
Residential ventilating fans	0.0	0.1	1.2	0.0	
Showerheads	2.4	6.1	61.9	0.0	
Spray sprinkler bodies	14.8	38.0	355.5	0.7	
Toilets (water closets)	0.7	2.4	30.3	0.0	
Urinals	0.2	0.5	4.7	0.0	
Water coolers	0.3	0.7	6.6	0.0	
Total	31	82	832	_	

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: Montana

	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	35			1.5	0.6	2.4	2.1	
Commercial dishwashers	50	1.2	1.7	58.2	0.8	69.1	49.8	
Commercial fryers	13	4.4		197.9	0.2	232.2	44.3	
Commercial ovens	34	0.6		26.5	0.6	31.7	8.4	
Commercial steam cookers	22	0.2	0.5	8.8	0.4	10.7	12.9	
Faucets	176	1.1	5.1	59.8	2.9	73.2	128.0	
Gas fireplaces		1.2		52.5		61.5	11.8	
High CRI fluorescent lamps	66			3.3	1.3	4.8	5.7	
Irrigation controllers			28.4				550.4	
Portable electric spas	370			16.5	6.2	25.9	39.8	
Residential ventilating fans	22			0.9	0.4	1.5	2.3	
Showerheads	223	1.4	4.4	75.2	3.7	92.1	122.7	
Spray sprinkler bodies			39.8				762.2	
Toilets (water closets)			2.7			-	51.9	
Urinals			0.5				9.3	
Water coolers	154			6.8	2.6	10.8	13.1	
Total	1,165	10	73	508	20	616	1,621	

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.