## **Appliance Standards Awareness Project**

## 2024 State Appliance Standards Recommendations

# Savings estimates for: lowa

	Potential annual savings in 2030				Potential annual savings in 2040							
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NOx (tons)	SO2 (tons)	CO2 (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NOx (tons)	SO2 (tons)	CO2 (thous. MT)
Commercial battery chargers	3.0			0.5	0.2	0.4	9.2			1.1	0.4	1.2
Commercial dishwashers	2.7	66	92	3.4	0.1	3.9	7.9	194	270	9.7	0.3	11.4
Commercial fryers	0.7	248		11.4	0.04	13.3	2.0	662		30.3	0.1	35.5
Commercial ovens	2.0	31		1.7	0.1	1.9	5.2	84		4.4	0.2	5.2
Commercial steam cookers	1.2	10	28	0.6	0.1	0.7	3.3	26	74	1.6	0.1	1.8
Faucets	8.4	94	337	5.6	0.4	6.1	18.7	208	745	11.6	0.7	13.6
Gas fireplaces		41		1.8		2.2		131		5.9		6.9
High CRI fluorescent lamps	13.6			2.2	0.7	1.8	5.2			0.6	0.2	0.7
Irrigation controllers			221						712			
Portable electric spas	12.1			2.0	0.6	1.6	23.8			2.7	0.9	3.2
Residential ventilating fans	1.1			0.2	0.1	0.1	3.5			0.4	0.1	0.5
Showerheads	10.7	118	289	7.1	0.5	7.7	23.7	262	643	14.6	0.9	17.1
Spray sprinkler bodies			407						904			
Toilets (water closets)			122						372			
Urinals			27						73			
Water coolers	8.6			1.4	0.4	1.1	19.1			2.2	0.8	2.6
Total	64	608	1,483	38	3	41	122	1,567	3,527	85	5	100

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: Iowa

		nual utility bill lion 2022\$)	Net present value savings	Payback period	
	In 2030	In 2040	(million 2022\$)	(years)	
Commercial battery chargers	0.2	0.7	5.5	1.8	
Commercial dishwashers	2.2	7.3	62.3	1.2	
Commercial fryers	2.3	6.8	44.2	3.1	
Commercial ovens	0.5	1.4	3.6	7.1	
Commercial steam cookers	0.6	1.9	16.4	1.0	
Faucets	6.9	17.4	174.5	0.0	
Gas fireplaces	0.4	1.4	11.9	1.2	
High CRI fluorescent lamps	1.5	0.6	7.2	2.1	
Irrigation controllers	3.2	12.0	109.0	0.8	
Portable electric spas	1.6	3.2	27.8	0.9	
Residential ventilating fans	0.1	0.5	4.3	0.0	
Showerheads	6.8	16.9	169.6	0.0	
Spray sprinkler bodies	5.9	15.2	140.8	0.8	
Toilets (water closets)	1.8	6.3	78.1	0.0	
Urinals	0.4	1.2	12.1	0.0	
Water coolers	0.9	2.1	20.6	0.0	
Total	35	90	872	_	

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: lowa

	Potential cumulative savings through 2050								
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NOx (tons)	SO2 (tons)	CO2 (thous. MT)	Utility bill savings (million 2022\$)		
Commercial battery chargers	169			21.6	7.4	23.7	13.0		
Commercial dishwashers	145	3.6	5.0	180.6	6.4	210.2	135.0		
Commercial fryers	38	12.6		575.3	1.7	673.9	126.3		
Commercial ovens	99	1.6		85.1	4.4	98.6	26.1		
Commercial steam cookers	63	0.5	1.4	30.9	2.8	35.5	35.3		
Faucets	375	4.2	14.9	237.8	17.0	274.0	346.0		
Gas fireplaces		2.4		107.1		125.5	25.6		
High CRI fluorescent lamps	166			26.1	9.5	25.3	18.4		
Irrigation controllers			12.9				220.4		
Portable electric spas	484			64.1	22.2	68.9	63.9		
Residential ventilating fans	63			8.0	2.7	8.8	8.3		
Showerheads	475	5.2	12.9	299.8	21.5	345.4	336.4		
Spray sprinkler bodies			18.1				305.2		
Toilets (water closets)			7.8				133.6		
Urinals			1.4				23.6		
Water coolers	382			50.2	17.3	54.1	40.9		
Total	2,459	30	70	1,686	113	1,944	1,780		

Assuming a compliance date of 2026 for all the recommended standards. While we continue to recommend the adoption of statelevel 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.