

Appliance Standards Awareness Project

2023 State Appliance Standards Recommendations

Savings estimates for: North Dakota

	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)
Air purifiers	10.9	--	--	4.7	2.9	4.2	17.9	--	--	6.7	3.5	6.7
Commercial dishwashers	0.5	12	17	0.7	0.1	0.8	1.2	29	40	1.7	0.2	1.9
Commercial fryers	0.2	62	--	2.9	0.05	3.3	0.4	134	--	6.2	0.1	7.3
Commercial ovens	0.5	8	--	0.6	0.1	0.6	1.1	17	--	1.2	0.2	1.3
Commercial steam cookers	0.3	3	7	0.2	0.1	0.2	0.7	5	15	0.5	0.1	0.5
Electric vehicle supply equipment	1.0	--	--	0.4	0.3	0.4	6.9	--	--	2.6	1.3	2.6
Faucets	8.6	35	199	5.3	2.3	5.2	15.7	64	361	8.8	3.1	9.3
Gas fireplaces	--	20	--	0.9	--	1.1	--	54	--	2.4	--	2.9
High CRI fluorescent lamps	8.6	--	--	3.7	2.3	2.8	1.8	--	--	0.7	0.4	0.7
Portable electric spas	5.4	--	--	2.3	1.4	2.1	9.1	--	--	3.4	1.8	3.4
Residential ventilating fans	0.9	--	--	0.4	0.2	0.3	2.5	--	--	0.9	0.5	0.9
Showerheads	7.5	30	117	4.6	2.0	4.5	13.6	55	213	7.6	2.6	8.0
Spray sprinkler bodies	--	--	354	--	--	--	--	--	644	--	--	--
Toilets (water closets)	--	--	44	--	--	--	--	--	117	--	--	--
Urinals	--	--	8	--	--	--	--	--	18	--	--	--
Water coolers	3.9	--	--	1.7	1.0	1.3	7.1	--	--	2.7	1.4	2.7
Total	48	169	746	28	13	27	78	358	1,408	46	15	48

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding. 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.

Savings estimates for: North Dakota

	Potential annual utility bill savings (million 2021\$)		Net present value savings (million 2021\$)	Benefit-cost ratio	Payback period (years)
	In 2030	In 2040			
Air purifiers	1.1	2.0	12.1	5.0	1.6
Commercial dishwashers	0.4	1.0	6.5	9.8	1.2
Commercial fryers	0.4	1.0	4.5	2.6	3.9
Commercial ovens	0.1	0.2	0.2	1.1	8.8
Commercial steam cookers	0.2	0.4	2.4	11.0	1.0
Electric vehicle supply equipment	0.1	0.8	4.6	no cost	0.0
Faucets	4.3	8.8	65.1	no cost	0.0
Gas fireplaces	0.2	0.5	2.9	8.5	1.4
High CRI fluorescent lamps	0.7	0.2	2.9	2.6	2.3
Portable electric spas	0.5	1.0	6.6	7.3	1.0
Residential ventilating fans	0.1	0.3	1.8	no cost	0.0
Showerheads	2.8	5.8	43.2	no cost	0.0
Spray sprinkler bodies	5.5	11.6	78.9	13.4	0.7
Toilets (water closets)	0.7	2.1	18.0	no cost	0.0
Urinals	0.1	0.3	2.4	no cost	0.0
Water coolers	0.3	0.6	4.9	no cost	0.0
Total	18	36	257	15.4	-

Assuming a compliance date of 2025 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 2025 and 2040. Totals may not sum due to rounding. The total benefit-cost ratio is calculated as the present value of the total utility bill savings from products sold through 2040 for the package of recommended standards divided by the present value of the total additional costs. 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.

Cumulative savings estimates for: North Dakota

	Potential cumulative savings through 2040					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Air purifiers	206	--	--	80.5	43.2	76.7
Commercial dishwashers	11	0.3	0.4	16.4	2.3	18.4
Commercial fryers	4	1.3	--	62.4	0.8	72.8
Commercial ovens	11	0.2	--	12.1	2.3	13.2
Commercial steam cookers	7	0.05	0.2	5.1	1.4	5.4
Electric vehicle supply equipment	39	--	--	15.2	8.0	14.6
Faucets	173	0.7	4.0	99.2	36.1	101.6
Gas fireplaces	--	0.5	--	20.8	--	24.4
High CRI fluorescent lamps	83	--	--	32.5	18.2	30.8
Portable electric spas	103	--	--	40.4	21.7	38.5
Residential ventilating fans	21	--	--	8.1	4.3	7.8
Showerheads	149	0.6	2.3	85.6	31.2	87.6
Spray sprinkler bodies	--	--	7.1	--	--	--
Toilets (water closets)	--	--	1.0	--	--	--
Urinals	--	--	0.2	--	--	--
Water coolers	79	--	--	30.7	16.4	29.3
Total	885	4	15	509	186	521

Assuming a compliance date of 2025 for all the recommended standards. Totals may not sum due to rounding. 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.