

Appliance Standards Awareness Project

2019 State Appliance Standards Recommendations

Savings estimates for: Minnesota

	Potential annual savings in 2025						Potential annual savings in 2035					
	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 compressors	4.4	--	--	2.5	1.2	2.1	12.7	--	--	7.4	3.5	6.5
Air purifiers	27.1	--	--	15.1	7.3	13.8	54.1	--	--	31.6	14.8	27.7
Commercial dishwashers	2.8	67	93	4.6	0.8	4.9	8.3	197	274	13.8	2.3	14.7
Commercial fryers	0.5	252	--	11.8	0.1	13.6	1.2	673	--	31.4	0.3	36.4
Commercial hot-food holding cabinets	3.0	--	--	1.7	0.8	1.4	7.9	--	--	4.6	2.2	4.0
Commercial steam cookers	5.0	26	84	4.0	1.3	3.8	13.3	70	225	10.9	3.6	10.5
Computers and computer monitors	110.3	--	--	61.5	29.8	54.2	138.6	--	--	80.8	37.8	70.8
Faucets	39.7	385	1,386	39.7	10.7	40.7	88.1	844	3,052	89.8	24.0	90.0
High CRI fluorescent lamps	47.2	--	--	26.3	12.8	22.5	14.5	--	--	8.5	4.0	7.4
Portable air conditioners	13.3	--	--	7.4	3.6	6.8	39.9	--	--	23.3	10.9	20.5
Portable electric spas	5.9	--	--	3.3	1.6	3.0	13.1	--	--	7.6	3.6	6.7
Residential ventilating fans	3.3	--	--	1.9	0.9	1.7	7.4	--	--	4.3	2.0	3.8
Showerheads	28.0	266	659	27.7	7.6	28.4	62.3	590	1,465	63.2	17.0	63.3
Spray sprinkler bodies	--	--	208	--	--	--	--	--	416	--	--	--
Toilets (water closets)	--	--	370	--	--	--	--	--	1,157	--	--	--
Uninterruptible power supplies	20.1	--	--	11.2	5.4	9.6	27.2	--	--	15.9	7.4	13.9
Urinals	--	--	50	--	--	--	--	--	133	--	--	--
Water coolers	5.9	--	--	3.3	1.6	2.8	13.1	--	--	7.7	3.6	6.7
Total	316	996	2,850	222	86	209	502	2,375	6,722	401	137	383

Assuming a compliance date of 2021 for almost all the recommended standards. Totals may not sum due to rounding.

	Potential annual utility bill savings (million 2017\$)		Net present value savings (million 2017\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Air compressors	0.3	0.9	4.4	3.1	3.1
Air purifiers	3.7	7.9	37.0	2.7	2.8
Commercial dishwashers	1.9	6.1	36.8	9.0	1.2
Commercial fryers	2.2	6.1	20.5	2.0	4.7
Commercial hot-food holding cabinets	0.3	0.8	4.1	3.3	2.7
Commercial steam cookers	1.7	4.9	30.6	10.4	1.0
Computers and computer monitors	13.2	17.4	79.2	2.3	2.1
Faucets	24.2	59.6	428.8	no cost	0.0
High CRI fluorescent lamps	5.0	1.8	23.4	3.0	2.3
Portable air conditioners	1.8	5.9	26.9	3.4	2.5
Portable electric spas	0.8	1.9	13.9	no cost	0.0
Residential ventilating fans	0.5	1.1	7.9	no cost	0.0
Showerheads	13.6	33.3	240.1	no cost	0.0
Spray sprinkler bodies	2.3	5.2	33.1	7.8	1.1
Toilets (water closets)	4.1	14.6	130.5	no cost	0.0
Uninterruptible power supplies	2.2	3.0	14.9	2.6	2.0
Urinals	0.5	1.7	11.6	no cost	0.0
Water coolers	0.6	1.4	10.2	no cost	0.0
Total	79	174	1,154	8.6	-

Assuming a compliance date of 2021 for almost 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 2021 and 2035. 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 2035 for the package of recommended standards divided by the present value of the total additional costs.

Cumulative savings estimates for: [Minnesota](#)

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Air compressors	108	--	--	61.8	29.7	55.0
Air purifiers	568	--	--	324.8	156.2	289.9
Commercial dishwashers	70	1.7	2.3	115.0	19.1	123.2
Commercial fryers	11	6.1	--	282.3	3.0	327.5
Commercial hot-food holding cabinets	71	--	--	40.8	19.6	36.3
Commercial steam cookers	119	0.6	2.0	97.2	32.8	94.5
Computers and computer monitors	1,677	--	--	956.1	460.9	853.7
Faucets	881	8.5	30.6	890.1	242.3	899.9
High CRI fluorescent lamps	472	--	--	266.7	129.6	240.3
Portable air conditioners	350	--	--	200.7	96.3	178.8
Portable electric spas	131	--	--	74.9	36.0	66.8
Residential ventilating fans	74	--	--	42.2	20.3	37.7
Showerheads	623	5.9	14.7	625.1	171.3	631.3
Spray sprinkler bodies	--	--	4.4	--	--	--
Toilets (water closets)	--	--	9.2	--	--	--
Uninterruptible power supplies	326	--	--	185.7	89.5	165.6
Urinals	--	--	1.2	--	--	--
Water coolers	131	--	--	75.2	36.1	67.0
Total	5,612	23	64	4,239	1,543	4,067

Assuming a compliance date of 2021 for almost all the recommended standards. Totals may not sum due to rounding.