

Appliance Standards Awareness Project

2019 State Appliance Standards Recommendations

Savings estimates for: **Montana**

	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	0.9	--	--	0.2	0.1	0.2	2.6	--	--	0.7	0.2	0.6
Air purifiers	5.2	--	--	1.4	0.4	1.2	10.5	--	--	3.0	0.8	2.5
Commercial dishwashers	0.5	13	18	0.7	0.05	0.8	1.6	37	52	2.1	0.1	2.3
Commercial fryers	0.1	48	--	2.2	0.01	2.5	0.2	127	--	5.8	0.02	6.8
Commercial hot-food holding cabinets	0.6	--	--	0.1	0.05	0.1	1.5	--	--	0.4	0.1	0.3
Commercial steam cookers	0.9	5	16	0.5	0.1	0.5	2.5	13	42	1.3	0.2	1.3
Computers and computer monitors	23.1	--	--	6.0	2.0	5.5	29.0	--	--	8.3	2.3	6.8
Faucets	6.5	77	259	5.2	0.6	5.6	14.5	168	571	11.8	1.2	12.4
High CRI fluorescent lamps	8.4	--	--	2.2	0.7	2.0	2.7	--	--	0.8	0.2	0.6
Portable air conditioners	1.6	--	--	0.4	0.1	0.4	4.8	--	--	1.4	0.4	1.2
Portable electric spas	1.4	--	--	0.4	0.1	0.3	3.1	--	--	0.9	0.2	0.8
Residential ventilating fans	0.6	--	--	0.2	0.1	0.1	1.4	--	--	0.4	0.1	0.3
Showerheads	4.6	53	123	3.6	0.4	3.9	10.2	118	274	8.3	0.8	8.7
Spray sprinkler bodies	--	--	429	--	--	--	--	--	859	--	--	--
Toilets (water closets)	--	--	69	--	--	--	--	--	217	--	--	--
Uninterruptible power supplies	4.4	--	--	1.2	0.4	1.1	6.0	--	--	1.7	0.5	1.4
Urinals	--	--	9	--	--	--	--	--	25	--	--	--
Water coolers	1.3	--	--	0.3	0.1	0.3	2.8	--	--	0.8	0.2	0.6
Total	60	195	924	25	5	25	93	463	2,040	48	7	47

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	0.04	0.1	0.4	1.9	5.1
Air purifiers	0.6	1.3	5.4	2.3	3.6
Commercial dishwashers	0.4	1.2	7.3	9.4	1.2
Commercial fryers	0.5	1.3	5.1	2.3	4.1
Commercial hot-food holding cabinets	0.1	0.1	0.6	2.9	3.2
Commercial steam cookers	0.3	0.9	5.7	10.4	1.0
Computers and computer monitors	2.3	3.1	12.2	2.0	2.6
Faucets	4.3	10.8	77.0	no cost	0.0
High CRI fluorescent lamps	0.8	0.3	3.4	2.6	2.8
Portable air conditioners	0.2	0.6	2.6	2.9	3.3
Portable electric spas	0.2	0.4	2.8	no cost	0.0
Residential ventilating fans	0.1	0.2	1.3	no cost	0.0
Showerheads	2.4	5.9	42.4	no cost	0.0
Spray sprinkler bodies	4.8	11.0	69.9	8.0	1.1
Toilets (water closets)	0.8	2.8	24.9	no cost	0.0
Uninterruptible power supplies	0.4	0.6	2.6	2.3	2.4
Urinals	0.1	0.3	2.2	no cost	0.0
Water coolers	0.1	0.3	1.9	no cost	0.0
Total	18	41	268	8.0	-

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: [Montana](#)

	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	22	--	--	6.2	1.8	5.2
Air purifiers	110	--	--	30.8	8.9	25.7
Commercial dishwashers	13	0.3	0.4	17.8	1.1	19.6
Commercial fryers	2	1.1	--	52.6	0.2	61.1
Commercial hot-food holding cabinets	13	--	--	3.8	1.1	3.2
Commercial steam cookers	22	0.1	0.4	11.8	1.8	11.7
Computers and computer monitors	351	--	--	98.2	28.6	83.2
Faucets	145	1.7	5.7	117.5	11.7	123.6
High CRI fluorescent lamps	84	--	--	23.4	7.0	20.7
Portable air conditioners	42	--	--	11.8	3.4	9.8
Portable electric spas	31	--	--	8.8	2.5	7.3
Residential ventilating fans	14	--	--	4.0	1.2	3.3
Showerheads	102	1.2	2.7	82.3	8.3	86.5
Spray sprinkler bodies	--	--	9.0	--	--	--
Toilets (water closets)	--	--	1.7	--	--	--
Uninterruptible power supplies	72	--	--	20.1	5.8	17.1
Urinals	--	--	0.2	--	--	--
Water coolers	28	--	--	7.9	2.3	6.7
Total	1,052	4	20	497	86	485

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