

Appliance Standards Awareness Project

2019 State Appliance Standards Recommendations

Savings estimates for: **Massachusetts**

	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	1.4	--	--	0.3	0.1	0.3	4.2	--	--	0.9	0.4	1.1
Commercial dishwashers	3.5	82	115	4.4	0.3	5.1	10.2	242	338	13.2	1.0	15.4
Commercial fryers	0.6	311	--	14.2	0.05	16.6	1.5	828	--	38.0	0.1	44.4
Commercial hot-food holding cabinets	3.6	--	--	0.6	0.3	0.8	9.7	--	--	2.0	0.9	2.4
Commercial steam cookers	6.1	32	104	2.5	0.5	3.1	16.3	87	277	7.4	1.6	8.7
Computers and computer monitors	151.7	--	--	26.3	12.6	32.9	190.6	--	--	40.1	18.2	47.5
Faucets	30.1	565	1,694	31.0	2.5	36.5	66.8	1,242	3,731	70.6	6.4	82.4
High CRI fluorescent lamps	64.7	--	--	11.2	5.4	14.1	19.0	--	--	4.0	1.8	4.7
Portable air conditioners	37.6	--	--	6.5	3.1	8.1	112.9	--	--	23.7	10.8	27.8
Portable electric spas	2.5	--	--	0.4	0.2	0.5	5.5	--	--	1.1	0.5	1.3
Residential ventilating fans	4.0	--	--	0.7	0.3	0.9	8.8	--	--	1.9	0.8	2.2
Showerheads	21.2	391	806	21.5	1.8	25.4	47.2	870	1,791	49.5	4.5	57.8
Spray sprinkler bodies	--	--	435	--	--	--	--	--	870	--	--	--
Toilets (water closets)	--	--	453	--	--	--	--	--	1,416	--	--	--
Uninterruptible power supplies	30.1	--	--	5.2	2.5	6.5	40.8	--	--	8.6	3.9	10.2
Urinals	--	--	61	--	--	--	--	--	163	--	--	--
Water coolers	6.6	--	--	1.1	0.5	1.4	14.7	--	--	3.1	1.4	3.7
Total	364	1,382	3,667	126	30	152	548	3,270	8,586	264	52	310

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	0.2	0.6	3.5	6.1	1.6
Commercial dishwashers	3.0	9.5	59.4	11.5	0.9
Commercial fryers	4.0	10.8	47.9	2.9	3.1
Commercial hot-food holding cabinets	0.7	1.9	10.9	5.9	1.6
Commercial steam cookers	2.7	7.9	51.2	13.8	0.7
Computers and computer monitors	31.1	41.3	248.4	4.0	1.3
Faucets	35.2	86.0	620.8	no cost	0.0
High CRI fluorescent lamps	12.2	4.1	68.5	5.4	1.4
Portable air conditioners	8.8	28.6	155.9	5.8	1.6
Portable electric spas	0.6	1.4	10.1	no cost	0.0
Residential ventilating fans	0.9	2.2	16.3	no cost	0.0
Showerheads	20.2	49.4	357.4	no cost	0.0
Spray sprinkler bodies	5.0	11.6	73.8	8.2	1.0
Toilets (water closets)	5.2	18.9	168.5	no cost	0.0
Uninterruptible power supplies	5.7	8.0	50.5	4.6	1.2
Urinals	0.7	2.2	15.0	no cost	0.0
Water coolers	1.2	2.8	20.6	no cost	0.0
Total	138	287	1,979	11.3	-

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 divided by the present value of the total additional costs.

Cumulative savings estimates for: [Massachusetts](#)

	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	35	--	--	7.0	3.2	8.0
Commercial dishwashers	86	2.0	2.8	109.4	7.6	127.2
Commercial fryers	14	7.5	--	342.1	1.2	399.0
Commercial hot-food holding cabinets	88	--	--	17.3	7.8	19.7
Commercial steam cookers	147	0.8	2.5	64.4	13.0	74.4
Computers and computer monitors	2,307	--	--	445.4	202.3	520.5
Faucets	668	12.5	37.4	698.7	59.2	817.6
High CRI fluorescent lamps	642	--	--	119.4	55.0	141.1
Portable air conditioners	989	--	--	195.9	88.1	232.2
Portable electric spas	55	--	--	10.7	4.8	12.7
Residential ventilating fans	88	--	--	17.4	7.8	20.6
Showerheads	472	8.7	17.9	488.8	41.8	572.1
Spray sprinkler bodies	--	--	9.1	--	--	--
Toilets (water closets)	--	--	11.2	--	--	--
Uninterruptible power supplies	487	--	--	94.2	42.8	108.9
Urinals	--	--	1.5	--	--	--
Water coolers	147	--	--	28.8	13.0	32.8
Total	6,225	31	82	2,640	548	3,087

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