

Appliance Standards Awareness Project

2023 State Appliance Standards Recommendations

Savings estimates for: Pennsylvania

	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	174.1	--	--	11.4	29.8	49.6	284.8	--	--	17.0	40.4	73.8
Commercial dishwashers	8.1	199	277	9.5	1.4	13.1	19.4	477	664	22.8	2.8	30.4
Commercial fryers	3.1	1,026	--	46.7	0.5	55.5	6.7	2,240	--	101.9	1.0	120.7
Commercial ovens	8.3	132	--	6.5	1.4	9.6	18.0	289	--	14.2	2.6	20.0
Commercial steam cookers	5.2	42	117	2.2	0.9	3.8	11.4	91	254	4.8	1.6	7.8
Electric vehicle supply equipment	16.5	--	--	1.1	2.8	4.7	109.7	--	--	6.6	15.6	28.4
Faucets	116.2	752	3,340	41.7	19.9	73.1	211.3	1,365	6,065	74.5	30.0	127.2
Gas fireplaces	--	265	--	12.0	--	14.1	--	724	--	32.8	--	38.4
High CRI fluorescent lamps	72.5	--	--	4.7	12.4	22.3	18.4	--	--	1.1	2.6	4.8
Portable electric spas	128.2	--	--	8.4	22.0	36.5	215.5	--	--	12.9	30.6	55.9
Residential ventilating fans	14.3	--	--	0.9	2.5	4.1	39.0	--	--	2.3	5.5	10.1
Showerheads	100.4	647	1,969	35.9	17.2	63.0	182.6	1,176	3,579	64.2	25.9	109.8
Spray sprinkler bodies	--	--	400	--	--	--	--	--	727	--	--	--
Toilets (water closets)	--	--	740	--	--	--	--	--	1,968	--	--	--
Urinals	--	--	141	--	--	--	--	--	308	--	--	--
Water coolers	20.9	--	--	1.4	3.6	6.5	38.0	--	--	2.3	5.4	9.9
Total	668	3,064	6,984	182	114	356	1,155	6,360	13,565	357	164	637

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: Pennsylvania

	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	26.6	44.8	307.5	7.4	1.0
Commercial dishwashers	7.4	19.4	125.3	11.2	1.0
Commercial fryers	9.4	20.1	102.2	3.1	2.8
Commercial ovens	1.9	4.2	7.3	1.3	6.7
Commercial steam cookers	2.9	7.0	46.6	12.5	0.8
Electric vehicle supply equipment	2.5	17.3	107.8	no cost	0.0
Faucets	84.6	170.9	1279.3	no cost	0.0
Gas fireplaces	2.8	7.6	47.3	10.0	1.0
High CRI fluorescent lamps	7.0	2.2	30.7	2.9	2.1
Portable electric spas	19.6	33.9	239.1	9.4	0.7
Residential ventilating fans	2.2	6.1	43.0	no cost	0.0
Showerheads	56.9	113.9	855.8	no cost	0.0
Spray sprinkler bodies	7.1	14.8	101.9	15.1	0.6
Toilets (water closets)	13.1	40.1	343.2	no cost	0.0
Urinals	2.5	6.3	44.8	no cost	0.0
Water coolers	1.9	3.5	27.4	no cost	0.0
Total	248	512	3,709	20.2	-

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: Pennsylvania

	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	3,276	--	--	204.0	495.7	875.4
Commercial dishwashers	182	4.5	6.2	214.7	27.3	289.0
Commercial fryers	67	22.4	--	1,019.2	10.1	1,208.3
Commercial ovens	180	2.9	--	142.2	27.0	203.7
Commercial steam cookers	114	0.9	2.5	48.4	17.1	80.2
Electric vehicle supply equipment	623	--	--	38.1	91.0	163.7
Faucets	2,324	15.0	66.7	825.5	350.4	1,418.3
Gas fireplaces	--	6.2	--	278.7	--	326.7
High CRI fluorescent lamps	721	--	--	46.2	115.8	214.4
Portable electric spas	2,446	--	--	152.5	371.0	654.8
Residential ventilating fans	332	--	--	20.5	49.6	88.2
Showerheads	2,009	12.9	39.4	711.0	302.9	1,223.0
Spray sprinkler bodies	--	--	8.0	--	--	--
Toilets (water closets)	--	--	17.0	--	--	--
Urinals	--	--	3.1	--	--	--
Water coolers	418	--	--	26.0	63.1	117.1
Total	12,692	65	143	3,727	1,921	6,863

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.