

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)
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
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	232.8	1,499	4,562	83.1	39.9	145.9	423.2	2,725	8,295	148.8	60.1	254.4
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	610	3,916	9,578	217	105	384	1,001	7,909	18,281	418	142	680

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			
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
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	131.8	263.9	1,983.4	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	294	600	4,421	31.4	–

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: [Pennsylvania](#)

	Potential cumulative savings through 2040					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
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
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	4,655	30.0	91.2	1,647.9	702.0	2,834.4
Spray sprinkler bodies	--	--	8.0	--	--	--
Toilets (water closets)	--	--	17.0	--	--	--
Urinals	--	--	3.1	--	--	--
Water coolers	418	--	--	26.0	63.1	117.1
Total	11,440	82	195	4,422	1,734	7,435

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.