

Appliance Standards Awareness Project

2021 State Appliance Standards Recommendations

Savings estimates for: United States

	Potential annual savings in 2025						Potential annual savings in 2035					
	Electricity (TWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (thous. tons)	SO ₂ (thous. tons)	CO ₂ (MMT)	Electricity (TWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (thous. tons)	SO ₂ (thous. tons)	CO ₂ (MMT)
Air purifiers	1.7	--	--	0.3	0.3	0.5	6.2	--	--	0.9	1.2	1.8
Commercial dishwashers	0.1	3	4	0.2	0.02	0.2	0.7	16	22	0.8	0.1	1.0
Commercial fryers	0.03	12	--	0.6	0.005	0.7	0.1	58	--	2.7	0.02	3.1
Commercial hot-food holding cabinets	0.3	--	--	0.04	0.05	0.1	1.4	--	--	0.2	0.3	0.4
Commercial ovens	0.1	1	--	0.1	0.02	0.1	0.5	4	--	0.3	0.1	0.4
Commercial steam cookers	0.2	1	3	0.1	0.03	0.1	0.9	5	15	0.3	0.2	0.5
Electric vehicle supply equipment	0.1	--	--	0.01	0.01	0.03	1.3	--	--	0.2	0.2	0.4
Faucets	1.2	9	37	0.6	0.2	0.9	4.9	36	146	2.3	0.8	3.4
Gas fireplaces	--	2	--	0.1	--	0.1	--	11	--	0.5	--	0.6
General service lamps (state-regulated)	1.7	--	--	0.3	0.3	0.5	3.1	--	--	0.4	0.6	0.9
High CRI fluorescent lamps	1.3	--	--	0.2	0.2	0.4	0.8	--	--	0.1	0.1	0.2
Portable electric spas	0.8	--	--	0.1	0.2	0.3	2.6	--	--	0.4	0.5	0.8
Residential ventilating fans	0.2	--	--	0.03	0.04	0.07	1.1	--	--	0.2	0.2	0.3
Showerheads	1.1	8	23	0.5	0.2	0.8	4.5	33	90	2.1	0.7	3.1
Spray sprinkler bodies	--	--	101	--	--	--	--	--	402	--	--	--
Toilets (water closets)	--	--	10	--	--	--	--	--	51	--	--	--
Urinals	--	--	2	--	--	--	--	--	10	--	--	--
Water coolers	0.4	--	--	0.1	0.1	0.1	1.6	--	--	0.2	0.3	0.5
Total	9	37	180	3	2	5	30	164	736	12	5	18

Assuming a compliance date of 2023 for all the recommended standards. Totals may not sum due to rounding. While we continue to recommend the adoption of state-level standards for computers and computer monitors, we have not estimated savings for these products due to a lack of data on the current market.

Savings estimates for: United States

	Potential annual utility bill savings (million 2019\$)		Net present value savings (billion 2019\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Air purifiers	249	950	6.5	no cost	0.0
Commercial dishwashers	93	522	3.0	9.2	1.2
Commercial fryers	105	552	1.8	2.1	5.0
Commercial hot-food holding cabinets	32	156	0.5	1.9	5.1
Commercial ovens	19	94	0.5	7.1	1.4
Commercial steam cookers	64	339	2.0	10.8	0.9
Electric vehicle supply equipment	12	192	1.3	no cost	0.0
Faucets	696	3,093	20.4	no cost	0.0
Gas fireplaces	24	135	0.8	11.8	1.0
General service lamps (state-regulated)	246	474	5.0	no cost**	0.4
High CRI fluorescent lamps	141	93	0.8	2.4	2.5
Portable electric spas	113	387	2.3	8.3	0.8
Residential ventilating fans	33	175	1.2	no cost	0.0
Showerheads	502	2,235	14.7	no cost	0.0
Spray sprinkler bodies	1,188	5,475	32.8	11.5	0.8
Toilets (water closets)	123	701	6.4	no cost	0.0
Urinals	24	131	0.8	no cost	0.0
Water coolers	41	169	1.1	no cost	0.0
Total	3,703	15,875	102	15.9	-

Assuming a compliance date of 2023 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 2023 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. While we continue to recommend the adoption of state-level standards for computers and computer monitors, we have not estimated savings for these products due to a lack of data on the current market.

**While LEDs are generally more expensive to purchase than incandescent light bulbs, the significantly longer lifetime of LEDs means that over time, consumers actually save money on bulbs in addition to saving money on electricity bills.

Cumulative savings estimates for: [United States](#)

	Potential cumulative savings through 2035					
	Electricity (TWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (thous. tons)	SO ₂ (thous. tons)	CO ₂ (MMT)
Air purifiers	53	--	--	7.9	10.0	16.2
Commercial dishwashers	5	107	149	5.5	0.8	7.1
Commercial fryers	0.9	409	--	18.7	0.2	22.0
Commercial hot-food holding cabinets	10	--	--	1.4	1.8	3.0
Commercial ovens	3	30	--	1.9	0.6	2.6
Commercial steam cookers	6	32	102	2.3	1.1	3.6
Electric vehicle supply equipment	6	--	--	0.9	1.1	1.8
Faucets	40	293	1,169	19.0	6.6	27.9
Gas fireplaces	--	74	--	3.4	--	3.9
General service lamps (state- regulated)	30	--	--	4.5	5.7	9.3
High CRI fluorescent lamps	17	--	--	2.5	3.2	5.6
Portable electric spas	21	--	--	3.5	4.5	6.6
Residential ventilating fans	8	--	--	1.1	1.5	2.4
Showerheads	36	264	724	17.2	6.0	25.2
Spray sprinkler bodies	--	--	3,220	--	--	--
Toilets (water closets)	--	--	350	--	--	--
Urinals	--	--	67	--	--	--
Water coolers	12	--	--	1.8	2.2	4.0
Total	248	1,209	5,781	92	45	141

Assuming a compliance date of 2023 for all the recommended standards. Totals may not sum due to rounding. While we continue to recommend the adoption of state-level standards for computers and computer monitors, we have not estimated savings for these products due to a lack of data on the current market.