

Appliance Standards Awareness Project

2019 State Appliance Standards Recommendations

Savings estimates for: Virginia

	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	3.5	--	--	0.3	0.4	0.9	10.2	--	--	0.7	0.7	3.3
Air purifiers	39.1	--	--	3.5	4.1	13.1	78.3	--	--	5.5	5.6	23.7
Commercial dishwashers	4.3	102	142	5.0	0.4	6.5	12.6	299	417	14.5	0.9	19.9
Commercial fryers	0.7	383	--	17.5	0.1	20.6	1.9	1,023	--	46.7	0.1	54.9
Commercial hot-food holding cabinets	4.5	--	--	0.4	0.5	1.2	12.0	--	--	0.8	0.9	3.8
Commercial steam cookers	7.5	40	128	2.5	0.8	4.1	20.1	107	342	6.3	1.4	12.1
Computers and computer monitors	227.1	--	--	20.1	23.8	64.6	285.4	--	--	20.1	20.4	89.4
Faucets	101.9	370	2,102	25.8	10.7	53.6	226.4	804	4,630	52.6	16.2	111.4
High CRI fluorescent lamps	104.1	--	--	9.2	10.9	27.4	28.0	--	--	2.0	2.0	8.8
Portable air conditioners	12.0	--	--	1.1	1.3	4.0	36.0	--	--	2.5	2.6	10.9
Portable electric spas	5.8	--	--	0.5	0.6	1.9	12.9	--	--	0.9	0.9	3.9
Residential ventilating fans	4.8	--	--	0.4	0.5	1.6	10.7	--	--	0.8	0.8	3.2
Showerheads	72.0	251	1,000	17.8	7.6	37.4	160.0	558	2,222	36.7	11.5	78.2
Spray sprinkler bodies	--	--	1,285	--	--	--	--	--	2,570	--	--	--
Toilets (water closets)	--	--	562	--	--	--	--	--	1,756	--	--	--
Uninterruptible power supplies	49.9	--	--	4.4	5.2	13.2	67.5	--	--	4.8	4.8	21.4
Urinals	--	--	76	--	--	--	--	--	202	--	--	--
Water coolers	12.8	--	--	1.1	1.3	3.3	28.3	--	--	2.0	2.0	9.0
Total	650	1,146	5,294	110	68	253	990	2,792	12,138	197	71	454

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	0.7	3.2	2.9	3.1
Air purifiers	4.9	9.7	42.8	2.4	3.0
Commercial dishwashers	3.0	9.4	57.5	9.2	1.2
Commercial fryers	3.7	9.9	35.9	2.2	4.4
Commercial hot-food holding cabinets	0.4	0.9	4.1	2.5	3.3
Commercial steam cookers	2.5	7.2	45.3	10.2	1.0
Computers and computer monitors	22.2	26.8	100.5	1.8	2.5
Faucets	42.0	100.6	730.2	no cost	0.0
High CRI fluorescent lamps	8.9	2.6	35.7	2.5	2.7
Portable air conditioners	1.5	4.5	19.7	2.9	2.7
Portable electric spas	0.7	1.6	12.0	no cost	0.0
Residential ventilating fans	0.6	1.3	9.9	no cost	0.0
Showerheads	23.9	56.9	414.7	no cost	0.0
Spray sprinkler bodies	15.0	34.5	219.7	8.3	1.0
Toilets (water closets)	6.5	23.6	210.5	no cost	0.0
Uninterruptible power supplies	4.3	5.5	23.1	2.0	2.4
Urinals	0.9	2.7	18.6	no cost	0.0
Water coolers	1.1	2.2	16.8	no cost	0.0
Total	142	301	2,000	7.9	-

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: Virginia

	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	87	--	--	6.7	7.1	27.6
Air purifiers	822	--	--	64.0	67.7	260.7
Commercial dishwashers	106	2.5	3.5	122.3	8.6	166.7
Commercial fryers	17	9.2	--	420.4	1.4	494.2
Commercial hot-food holding cabinets	108	--	--	8.3	8.8	34.3
Commercial steam cookers	181	1.0	3.1	57.8	14.7	108.6
Computers and computer monitors	3,455	--	--	272.3	291.6	1,088.6
Faucets	2,264	8.1	46.4	544.1	185.5	1,147.1
High CRI fluorescent lamps	1,020	--	--	83.5	92.1	314.0
Portable air conditioners	316	--	--	24.3	25.5	100.1
Portable electric spas	129	--	--	10.0	10.6	40.9
Residential ventilating fans	107	--	--	8.3	8.8	33.9
Showerheads	1,600	5.6	22.2	378.4	131.1	803.6
Spray sprinkler bodies	--	--	27.0	--	--	--
Toilets (water closets)	--	--	13.9	--	--	--
Uninterruptible power supplies	807	--	--	63.5	67.9	254.1
Urinals	--	--	1.8	--	--	--
Water coolers	283	--	--	22.0	23.2	89.9
Total	11,301	26	118	2,086	945	4,964

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