

## Appliance Standards Awareness Project

### 2019 State Appliance Standards Recommendations

#### Savings estimates for: United States

	Potential annual savings in 2025						Potential annual savings in 2035					
	Electricity (billion kWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (thous. tons)	SO <sub>2</sub> (thous. tons)	CO <sub>2</sub> (MMT)	Electricity (billion kWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (thous. tons)	SO <sub>2</sub> (thous. tons)	CO <sub>2</sub> (MMT)
Air compressors	0.2	--	--	0.05	0.1	0.1	0.6	--	--	0.1	0.2	0.3
Air purifiers	1.5	--	--	0.4	0.4	0.6	3.0	--	--	0.7	0.9	1.2
Commercial dishwashers	0.2	4	5	0.2	0.05	0.3	0.5	12	16	0.6	0.1	0.8
Commercial fryers	0.03	15	--	0.7	0.01	0.8	0.1	39	--	1.8	0.02	2.1
Commercial hot-food holding cabinets	0.2	--	--	0.04	0.05	0.1	0.5	--	--	0.1	0.1	0.2
Commercial steam cookers	0.3	2	5	0.1	0.1	0.2	0.8	4	13	0.4	0.2	0.5
Computers and computer monitors	7.2	--	--	1.7	2.0	2.9	9.0	--	--	2.1	2.6	3.5
Faucets	2.7	20	81	1.6	0.7	2.2	6.0	45	178	3.5	1.6	4.8
High CRI fluorescent lamps	3.1	--	--	0.7	0.9	1.3	0.9	--	--	0.2	0.3	0.4
Portable air conditioners	0.7	--	--	0.2	0.2	0.3	2.0	--	--	0.5	0.6	0.8
Portable electric spas	0.3	--	--	0.1	0.1	0.1	0.6	--	--	0.1	0.2	0.2
Residential ventilating fans	0.2	--	--	0.04	0.1	0.1	0.4	--	--	0.1	0.1	0.2
Showerheads	1.9	14	38	1.1	0.5	1.6	4.2	31	86	2.5	1.2	3.4
Spray sprinkler bodies	--	--	87	--	--	--	--	--	174	--	--	--
Toilets (water closets)	--	--	22	--	--	--	--	--	68	--	--	--
Uninterruptible power supplies	1.4	--	--	0.3	0.4	0.6	2.0	--	--	0.5	0.6	0.8
Urinals	--	--	3	--	--	--	--	--	8	--	--	--
Water coolers	0.3	--	--	0.1	0.1	0.1	0.8	--	--	0.2	0.2	0.3
<b>Total</b>	<b>20</b>	<b>55</b>	<b>241</b>	<b>7</b>	<b>6</b>	<b>11</b>	<b>31</b>	<b>131</b>	<b>542</b>	<b>13</b>	<b>9</b>	<b>19</b>

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 (billion 2017\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Air compressors	14	41	0.2	3.0	3.2
Air purifiers	229	481	2.4	3.0	2.6
Commercial dishwashers	121	387	2.4	9.9	1.1
Commercial fryers	153	417	1.6	2.4	4.2
Commercial hot-food holding cabinets	20	55	0.3	3.7	2.6
Commercial steam cookers	106	307	2.0	11.3	0.9
Computers and computer monitors	951	1,231	6.1	2.6	2.0
Faucets	1,555	3,786	27.4	no cost	0.0
High CRI fluorescent lamps	367	120	1.8	3.4	2.1
Portable air conditioners	115	365	1.8	4.1	2.2
Portable electric spas	39	90	0.7	no cost	0.0
Residential ventilating fans	28	66	0.5	no cost	0.0
Showerheads	883	2,143	15.5	no cost	0.0
Spray sprinkler bodies	984	2,268	14.4	8.1	1.1
Toilets (water closets)	246	885	7.9	no cost	0.0
Uninterruptible power supplies	175	242	1.3	2.9	1.9
Urinals	33	102	0.7	no cost	0.0
Water coolers	39	87	0.6	no cost	0.0
<b>Total</b>	<b>6,058</b>	<b>13,073</b>	<b>87</b>	<b>9.0</b>	<b>-</b>

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: United States

	Potential cumulative savings through 2035					
	Electricity (billion kWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (thous. tons)	SO <sub>2</sub> (thous. tons)	CO <sub>2</sub> (MMT)
Air compressors	5	--	--	1.2	1.7	2.2
Air purifiers	31	--	--	7.6	9.7	12.8
Commercial dishwashers	4	96	134	5.4	1.2	6.8
Commercial fryers	1	354	--	16.3	0.2	19.1
Commercial hot-food holding cabinets	4	--	--	1.0	1.2	1.7
Commercial steam cookers	7	37	118	3.4	2.1	4.8
Computers and computer monitors	109	--	--	26.0	31.9	44.1
Faucets	60	450	1,787	35.5	16.4	49.0
High CRI fluorescent lamps	31	--	--	7.2	9.2	12.9
Portable air conditioners	18	--	--	4.1	5.7	7.1
Portable electric spas	6	--	--	1.5	1.9	2.3
Residential ventilating fans	4	--	--	1.0	1.3	1.7
Showerheads	42	313	856	24.9	11.6	34.4
Spray sprinkler bodies	--	--	1,823	--	--	--
Toilets (water closets)	--	--	537	--	--	--
Uninterruptible power supplies	23	--	--	5.5	6.7	9.4
Urinals	--	--	70	--	--	--
Water coolers	8	--	--	1.8	2.2	3.2
<b>Total</b>	<b>353</b>	<b>1,249</b>	<b>5,324</b>	<b>142</b>	<b>103</b>	<b>211</b>

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