

## Appliance Standards Awareness Project

### 2019 State Appliance Standards Recommendations

#### Savings estimates for: North Carolina

	Potential annual savings in 2025						Potential annual savings in 2035					
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)
Air compressors	5.5	--	--	0.5	0.6	1.4	15.9	--	--	1.1	1.1	5.1
Air purifiers	48.3	--	--	4.3	5.1	16.1	96.7	--	--	6.8	6.9	29.3
Commercial dishwashers	5.2	123	172	6.1	0.5	7.9	15.3	363	505	17.6	1.1	24.1
Commercial fryers	0.8	465	--	21.3	0.1	24.9	2.3	1,240	--	56.6	0.2	66.6
Commercial hot-food holding cabinets	5.5	--	--	0.5	0.6	1.4	14.6	--	--	1.0	1.0	4.6
Commercial steam cookers	9.2	49	156	3.0	1.0	5.0	24.4	130	415	7.6	1.7	14.7
Computers and computer monitors	238.4	--	--	21.1	25.0	68.8	299.5	--	--	21.1	21.5	93.5
Faucets	163.1	235	2,526	25.1	17.1	66.9	362.4	502	5,564	48.4	26.0	136.5
High CRI fluorescent lamps	101.0	--	--	8.9	10.6	26.7	29.2	--	--	2.1	2.1	9.1
Portable air conditioners	12.5	--	--	1.1	1.3	4.2	37.4	--	--	2.6	2.7	11.3
Portable electric spas	7.1	--	--	0.6	0.7	2.4	15.8	--	--	1.1	1.1	4.8
Residential ventilating fans	5.9	--	--	0.5	0.6	2.0	13.2	--	--	0.9	0.9	4.0
Showerheads	115.3	154	1,202	17.2	12.1	46.7	256.1	343	2,670	33.6	18.3	95.9
Spray sprinkler bodies	--	--	1,123	--	--	--	--	--	2,247	--	--	--
Toilets (water closets)	--	--	676	--	--	--	--	--	2,113	--	--	--
Uninterruptible power supplies	48.6	--	--	4.3	5.1	12.9	65.9	--	--	4.6	4.7	20.9
Urinals	--	--	92	--	--	--	--	--	245	--	--	--
Water coolers	12.2	--	--	1.1	1.3	3.1	27.0	--	--	1.9	1.9	8.6
<b>Total</b>	<b>779</b>	<b>1,027</b>	<b>5,946</b>	<b>116</b>	<b>82</b>	<b>290</b>	<b>1,276</b>	<b>2,578</b>	<b>13,758</b>	<b>207</b>	<b>91</b>	<b>529</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 (million 2017\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Air compressors	0.4	1.0	4.6	2.7	3.3
Air purifiers	5.8	11.4	48.0	2.2	3.2
Commercial dishwashers	3.6	11.6	70.6	9.4	1.2
Commercial fryers	4.5	12.2	45.0	2.2	4.3
Commercial hot-food holding cabinets	0.5	1.2	5.4	2.6	3.2
Commercial steam cookers	3.1	8.8	55.9	10.3	1.0
Computers and computer monitors	23.9	28.9	111.8	1.9	2.5
Faucets	52.1	124.2	902.4	no cost	0.0
High CRI fluorescent lamps	9.0	2.8	37.2	2.6	2.6
Portable air conditioners	1.5	4.4	18.8	2.8	2.9
Portable electric spas	0.9	1.9	13.9	no cost	0.0
Residential ventilating fans	0.7	1.6	11.6	no cost	0.0
Showerheads	29.9	70.7	515.9	no cost	0.0
Spray sprinkler bodies	13.1	30.1	192.1	8.3	1.0
Toilets (water closets)	7.9	28.3	253.2	no cost	0.0
Uninterruptible power supplies	4.4	5.7	24.7	2.1	2.3
Urinals	1.1	3.3	22.6	no cost	0.0
Water coolers	1.1	2.2	16.9	no cost	0.0
<b>Total</b>	<b>163</b>	<b>350</b>	<b>2,350</b>	<b>8.6</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: North Carolina

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thous. MT)
Air compressors	135	--	--	10.4	11.0	42.8
Air purifiers	1,015	--	--	79.0	83.6	321.8
Commercial dishwashers	128	3.0	4.2	148.4	10.4	202.2
Commercial fryers	20	11.2	--	510.0	1.6	599.4
Commercial hot-food holding cabinets	131	--	--	10.1	10.7	41.6
Commercial steam cookers	220	1.2	3.7	70.1	17.9	131.7
Computers and computer monitors	3,625	--	--	285.8	306.0	1,143.2
Faucets	3,624	5.1	55.8	512.4	297.0	1,418.0
High CRI fluorescent lamps	1,001	--	--	81.8	90.2	308.5
Portable air conditioners	328	--	--	25.2	26.4	103.9
Portable electric spas	158	--	--	12.3	12.9	50.0
Residential ventilating fans	132	--	--	10.2	10.8	41.8
Showerheads	2,561	3.4	26.7	354.7	209.9	993.6
Spray sprinkler bodies	--	--	23.6	--	--	--
Toilets (water closets)	--	--	16.8	--	--	--
Uninterruptible power supplies	787	--	--	62.0	66.3	247.9
Urinals	--	--	2.2	--	--	--
Water coolers	270	--	--	21.0	22.2	85.7
<b>Total</b>	<b>14,136</b>	<b>24</b>	<b>133</b>	<b>2,193</b>	<b>1,177</b>	<b>5,732</b>

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