

**States Go First: How States Can Save Consumers Money, Reduce Energy and Water Waste, and Protect the Environment with New Appliance Standards (Full report at <https://appliance-standards.org/document/states-go-first>)**

**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)
Faucets	244.3	369	3,822	46.7	29.4	110.3	444.2	636	6,868	68.8	34.5	170.8
Showerheads	174.3	233	1,817	32.0	21.0	77.1	316.9	424	3,303	47.7	24.6	120.3
Lawn spray sprinklers	--	--	1,355	--	--	--	--	--	2,217	--	--	--
Toilets	--	--	942	--	--	--	--	--	2,554	--	--	--
Computers and monitors	290.9	--	--	35.6	35.1	107.3	325.8	--	--	29.2	25.3	102.3
High CRI fluorescent lamps	406.6	--	--	49.8	49.0	149.4	133.6	--	--	12.0	10.4	42.2
Air purifiers	69.6	--	--	8.5	8.4	25.8	113.8	--	--	10.2	8.8	35.1
Pool pump replacement motors	52.7	--	--	6.5	6.4	19.6	0.0	--	--	0.0	0.0	0.0
Commercial fryers	1.4	652	--	29.9	0.2	35.2	3.1	1,423	--	65.1	0.2	76.6
Commercial dishwashers	6.0	143	199	7.3	0.7	9.8	14.5	345	480	17.0	1.1	22.9
Commercial steam cookers	11.0	58	186	4.0	1.3	7.1	23.9	127	406	7.9	1.9	14.3
Portable air conditioners	19.2	--	--	2.4	2.3	7.1	36.7	--	--	3.3	2.8	11.3
Urinals	--	--	303	--	--	--	--	--	661	--	--	--
Audio/video equipment	40.9	--	--	5.0	4.9	15.2	40.9	--	--	3.7	3.2	12.6
Uninterruptible power supplies	57.0	--	--	7.0	6.9	21.0	63.2	--	--	5.7	4.9	20.0
Telephones	26.7	--	--	3.3	3.2	9.8	26.7	--	--	2.4	2.1	8.4
Water coolers	17.3	--	--	2.1	2.1	6.4	31.5	--	--	2.8	2.4	10.0
Ventilation fans	10.3	--	--	1.3	1.2	3.8	22.6	--	--	2.0	1.8	7.0
Portable electric spas	8.6	--	--	1.0	1.0	3.2	15.6	--	--	1.4	1.2	4.8
Hot food holding cabinets	7.3	--	--	0.9	0.9	2.7	15.9	--	--	1.4	1.2	5.1
Compressors	6.7	--	--	0.8	0.8	2.4	15.7	--	--	1.4	1.2	5.0
<b>Total</b>	<b>1,451</b>	<b>1,456</b>	<b>8,624</b>	<b>244</b>	<b>175</b>	<b>613</b>	<b>1,645</b>	<b>2,955</b>	<b>16,489</b>	<b>282</b>	<b>128</b>	<b>669</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Totals may not sum due to rounding. Potential savings for pool pump replacement motors are zero in 2035 because we assume that the recommended standard would affect just seven years of product sales beginning in 2021.

	Potential annual utility bill savings (million 2016\$)		Net present value savings (million 2016\$)	Benefit-cost ratio	Payback period (years)
	In 2025	In 2035			
Faucets	80.5	157.9	1,190.0	no cost	0.0
Showerheads	46.7	91.2	689.7	no cost	0.0
Lawn spray sprinklers	15.5	29.3	192.8	8.3	1.0
Toilets	10.8	33.7	295.3	no cost	0.0
Computers and monitors	32.6	36.4	163.1	2.1	2.3
High CRI fluorescent lamps	40.8	13.9	111.3	1.7	2.9
Air purifiers	9.2	15.0	72.1	2.5	3.0
Pool pump replacement motors	7.0	0.0	37.4	7.6	0.8
Commercial fryers	7.1	16.7	77.3	2.7	3.8
Commercial dishwashers	4.4	11.7	74.6	10.1	1.1
Commercial steam cookers	3.8	9.2	60.4	11.0	0.9
Portable air conditioners	2.5	4.8	25.3	3.1	2.7
Urinals	3.5	8.7	62.2	no cost	0.0
Audio/video equipment	5.4	5.4	46.4	no cost	0.0
Uninterruptible power supplies	5.8	6.4	32.6	2.5	2.2
Telephones	2.9	2.9	24.8	no cost	0.0
Water coolers	1.7	3.1	24.2	no cost	0.0
Ventilation fans	1.4	3.0	22.1	no cost	0.0
Portable electric spas	1.1	2.1	15.9	no cost	0.0
Hot food holding cabinets	0.7	1.6	8.0	3.1	2.9
Compressors	0.5	1.2	5.9	3.2	3.2
<b>Total</b>	<b>284</b>	<b>454</b>	<b>3,231</b>	<b>7.6</b>	<b>-</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Net present value savings take into account both utility bill savings and estimated impacts on product costs for items sold between 2020 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 21 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)
Faucets	4,886	7.1	75.9	830.5	463.7	2,011.0
Showerheads	3,486	4.7	36.3	572.5	330.8	1,411.4
Lawn spray sprinklers	--	--	25.5	--	--	--
Toilets	--	--	21.7	--	--	--
Computers and monitors	4,215	--	--	446.4	419.9	1,455.5
High CRI fluorescent lamps	4,226	--	--	477.8	491.3	1,497.4
Air purifiers	1,309	--	--	136.0	125.4	438.3
Pool pump replacement motors	533	--	--	59.8	57.0	186.2
Commercial fryers	31	14.2	--	651.2	2.9	766.6
Commercial dishwashers	136	3.2	4.5	161.0	12.7	218.6
Commercial steam cookers	239	1.3	4.1	82.3	22.4	150.1
Portable air conditioners	395	--	--	40.7	37.3	131.6
Urinals	--	--	6.6	--	--	--
Audio/video equipment	544	--	--	57.9	54.8	184.5
Uninterruptible power supplies	819	--	--	86.7	81.6	285.6
Telephones	356	--	--	37.9	36.0	123.7
Water coolers	347	--	--	35.8	32.9	120.5
Ventilation fans	225	--	--	23.0	21.1	74.8
Portable electric spas	171	--	--	17.7	16.2	57.1
Hot food holding cabinets	159	--	--	16.3	14.9	55.0
Compressors	150	--	--	15.3	13.9	51.6
<b>Total</b>	<b>22,227</b>	<b>31</b>	<b>175</b>	<b>3,749</b>	<b>2,235</b>	<b>9,219</b>

Assuming a compliance date of 2020 for almost all of the recommended standards. Products are listed in order of potential national net present value savings. Totals may not sum due to rounding.