

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: Oregon

	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)
Faucets	83.9	226	1,546	35.5	7.4	31.5	152.6	397	2,778	62.8	12.2	55.5
Showerheads	59.9	149	735	24.8	5.3	21.9	108.9	271	1,336	44.2	8.7	38.9
Lawn spray sprinklers	--	--	2,337	--	--	--	--	--	3,824	--	--	--
Toilets	--	--	381	--	--	--	--	--	1,033	--	--	--
Computers and monitors	133.4	--	--	40.1	11.7	31.1	149.4	--	--	43.7	12.0	33.5
High CRI fluorescent lamps	165.4	--	--	49.7	14.5	38.6	54.3	--	--	15.9	4.4	12.2
Air purifiers	28.2	--	--	8.5	2.5	6.6	46.2	--	--	13.5	3.7	10.4
Pool pump replacement motors	12.5	--	--	3.7	1.1	2.9	0.0	--	--	0.0	0.0	0.0
Commercial fryers	0.6	263	--	12.2	0.1	14.1	1.3	574	--	26.5	0.1	30.8
Commercial dishwashers	2.4	58	80	3.4	0.2	3.6	5.9	139	194	8.0	0.5	8.7
Commercial steam cookers	4.4	23	75	2.4	0.4	2.3	9.6	51	164	5.2	0.8	4.9
Portable air conditioners	15.4	--	--	4.6	1.4	3.6	29.5	--	--	8.6	2.4	6.6
Urinals	--	--	122	--	--	--	--	--	267	--	--	--
Audio/video equipment	16.6	--	--	5.0	1.5	3.9	16.6	--	--	4.9	1.3	3.7
Uninterruptible power supplies	27.6	--	--	8.3	2.4	6.5	30.6	--	--	9.0	2.5	6.9
Telephones	9.4	--	--	2.8	0.8	2.2	9.4	--	--	2.7	0.8	2.1
Water coolers	5.8	--	--	1.7	0.5	1.3	10.5	--	--	3.1	0.8	2.3
Ventilation fans	4.2	--	--	1.3	0.4	1.0	9.2	--	--	2.7	0.7	2.1
Portable electric spas	7.9	--	--	2.4	0.7	1.8	14.3	--	--	4.2	1.2	3.2
Hot food holding cabinets	2.9	--	--	0.9	0.3	0.7	6.4	--	--	1.9	0.5	1.4
Compressors	3.1	--	--	0.9	0.3	0.7	7.3	--	--	2.1	0.6	1.6
Total	584	719	5,276	208	51	174	662	1,432	9,595	259	53	225

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	29.4	60.2	446.5	no cost	0.0
Showerheads	16.7	34.5	256.3	no cost	0.0
Lawn spray sprinklers	25.6	48.4	316.7	7.9	1.1
Toilets	4.2	13.1	114.5	no cost	0.0
Computers and monitors	12.6	14.3	53.0	1.8	2.8
High CRI fluorescent lamps	14.2	4.8	28.2	1.4	3.5
Air purifiers	3.2	5.6	23.8	2.2	3.7
Pool pump replacement motors	1.4	0.0	7.4	6.5	1.0
Commercial fryers	3.7	10.0	52.6	3.9	2.9
Commercial dishwashers	1.9	5.3	33.8	11.2	1.0
Commercial steam cookers	1.5	3.7	24.5	11.1	0.9
Portable air conditioners	1.7	3.6	17.1	2.8	3.3
Urinals	1.3	3.4	24.1	no cost	0.0
Audio/video equipment	1.9	2.0	16.5	no cost	0.0
Uninterruptible power supplies	2.4	2.6	11.6	2.1	2.6
Telephones	0.9	0.9	7.5	no cost	0.0
Water coolers	0.5	0.9	6.7	no cost	0.0
Ventilation fans	0.5	1.1	8.0	no cost	0.0
Portable electric spas	0.9	1.7	13.0	no cost	0.0
Hot food holding cabinets	0.3	0.5	2.4	2.6	3.5
Compressors	0.2	0.4	1.8	2.5	4.0
Total	125	217	1,466	6.9	-

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: Oregon

	Potential cumulative savings through 2035					
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO _x (tons)	SO ₂ (tons)	CO ₂ (thous. MT)
Faucets	1,678	4.4	30.7	710.9	140.5	622.4
Showerheads	1,197	3.0	14.7	499.1	100.3	434.6
Lawn spray sprinklers	--	--	44.0	--	--	--
Toilets	--	--	8.8	--	--	--
Computers and monitors	1,932	--	--	586.1	162.9	456.6
High CRI fluorescent lamps	1,720	--	--	524.6	150.5	427.4
Air purifiers	532	--	--	161.4	44.6	122.7
Pool pump replacement motors	126	--	--	38.5	10.7	29.3
Commercial fryers	13	5.7	--	265.2	1.1	307.9
Commercial dishwashers	55	1.3	1.8	76.0	4.6	82.3
Commercial steam cookers	96	0.5	1.6	52.6	8.1	50.1
Portable air conditioners	317	--	--	96.3	26.6	73.2
Urinals	--	--	2.7	--	--	--
Audio/video equipment	221	--	--	67.0	18.7	51.1
Uninterruptible power supplies	397	--	--	120.4	33.5	94.7
Telephones	125	--	--	38.0	10.6	29.7
Water coolers	115	--	--	35.0	9.6	27.3
Ventilation fans	91	--	--	27.7	7.6	21.1
Portable electric spas	158	--	--	47.9	13.2	36.4
Hot food holding cabinets	64	--	--	19.4	5.4	15.2
Compressors	69	--	--	20.9	5.8	16.4
Total	8,907	15	104	3,387	754	2,899

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.