## **Appliance Standards Awareness Project**

## **2020 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 purifiers	2.5			0.5	0.6	1.0	6.5			1.2	1.4	2.3
Commercial dishwashers	0.2	4	6	0.2	0.04	0.3	0.7	15	22	0.8	0.1	1.1
Commercial fryers	0.02	11		0.5	0.004	0.6	0.1	36		1.7	0.01	1.9
Commercial hot-food holding cabinets	0.2			0.05	0.05	0.1	0.8			0.1	0.2	0.3
Commercial ovens	0.1	1		0.1	0.02	0.1	0.3	3		0.2	0.1	0.3
Commercial steam cookers	0.2	1	4	0.1	0.1	0.2	0.8	4	14	0.3	0.2	0.5
Computers and computer monitors	5.7			1.1	1.3	2.2	9.0			1.6	1.9	3.2
Electric vehicle supply equipment	0.1			0.02	0.02	0.04	1.3			0.2	0.3	0.5
Faucets	2.2	17	65	1.2	0.5	1.7	6.2	46	184	3.3	1.3	4.7
High CRI fluorescent lamps	2.0			0.4	0.5	0.8	0.8	-		0.1	0.2	0.3
Portable electric spas	1.0			0.2	0.3	0.4	2.5	-		0.5	0.6	0.9
Residential ventilating fans	0.05			0.01	0.01	0.02	0.1			0.02	0.03	0.05
Showerheads	1.7	12	34	0.9	0.4	1.3	4.8	35	97	2.5	1.0	3.7
Spray sprinkler bodies			141						403			
Toilets (water closets)			14						52			
Urinals			2						7			
Water coolers	0.3			0.1	0.1	0.1	0.9			0.2	0.2	0.3
Total	16	46	266	5	4	9	35	141	778	13	7	20

Assuming a compliance date of 2022 for all the recommended standards. Totals may not sum due to rounding.

		nual utility bill llion 2018\$)	Net present value savings	Benefit-cost	Payback period
	In 2025	In 2035	(billion 2018\$)	ratio	(years)
Air purifiers	361	983	7.0	no cost	0.0
Commercial dishwashers	123	518	3.0	9.6	1.2
Commercial fryers	100	372	1.4	2.3	4.5
Commercial hot-food holding cabinets	24	84	0.3	1.9	5.1
Commercial ovens	19	67	0.4	7.4	1.3
Commercial steam cookers	83	316	1.9	10.9	0.9
Computers and computer monitors	695	1,161	5.1	2.3	2.2
Electric vehicle supply equipment	15	192	1.3	no cost	0.0
Faucets	1,234	3,902	26.9	no cost	0.0
High CRI fluorescent lamps	219	100	1.3	3.6	1.9
Portable electric spas	147	373	2.3	8.3	0.8
Residential ventilating fans	7	20	0.1	no cost	0.0
Showerheads	758	2,406	16.6	no cost	0.0
Spray sprinkler bodies	1,635	5,383	33.6	11.4	0.8
Toilets (water closets)	159	690	6.2	no cost	0.0
Urinals	22	89	0.6	no cost	0.0
Water coolers	32	93	0.7	no cost	0.0
Total	5,633	16,750	109	12.1	-

Assuming a compliance date of 2022 for 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 2022 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 purifiers	62			12.0	13.9	23.0		
Commercial dishwashers	5	114	159	6.1	1.0	7.9		
Commercial fryers	0.5	289		13.3	0.1	15.5		
Commercial hot-food holding cabinets	6			1.2	1.3	2.3		
Commercial ovens	3	24		1.6	0.6	2.3		
Commercial steam cookers	6	34	109	2.8	1.4	4.2		
Computers and computer monitors	100			19.1	21.4	37.0		
Electric vehicle supply equipment	6			1.2	1.4	2.3		
Faucets	56	418	1,664	30.5	12.1	43.6		
High CRI fluorescent lamps	22			4.3	5.0	8.6		
Portable electric spas	23			5.0	5.7	8.7		
Residential ventilating fans	1			0.2	0.3	0.4		
Showerheads	43	319	873	23.4	9.4	33.5		
Spray sprinkler bodies			3,628					
Toilets (water closets)			382					
Urinals			53					
Water coolers	8			1.5	1.7	3.0		
Total	343	1,198	6,868	122	75	192		

Assuming a compliance date of 2022 for all the recommended standards. Totals may not sum due to rounding.