## **Appliance Standards Awareness Project**

## **2025 State Appliance Standards Recommendations**

Savings estimates for: Virginia

	Potential annual savings in 2030					Potential annual savings in 2040						
	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)	Electricity (GWh)	Natural gas (BBtu)	Water (million gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)
Commercial battery chargers	2.1	-	-	0.1	0.1	0.5	7.3	-	-	0.3	0.3	0.9
Commercial dishwashers	8.1	104	145	5.3	0.4	7.6	23.3	298	415	14.3	1.0	18.8
Commercial fryers	0.5	336		15.3	0.02	17.9	1.6	1,153		52.3	0.1	61.2
Commercial ovens	4.8	35	-	1.9	0.2	3.1	16.4	118	-	5.9	0.7	8.4
Commercial steam cookers	1.5	15	38	0.8	0.1	1.2	5.3	50	129	2.5	0.2	3.3
Faucets	55.3	146	1,203	10.4	2.7	22.1	157.9	416	3,432	24.3	6.7	42.6
Gas fireplaces	-	157	-	7.1		8.3		604	-	27.4		32.0
High CRI fluorescent lamps	36.5			2.5	1.8	9.5	17.1			0.6	0.7	2.2
Portable electric spas	40.7		-	2.8	2.0	10.6	101.8	-	-	3.5	4.3	13.3
Residential ventilating fans	2.3			0.2	0.1	0.6	9.0			0.3	0.4	1.2
Server power supplies	52.9			3.6	2.6	13.7	75.6			2.6	3.2	9.9
Showerheads	41.2	108	613	7.7	2.0	16.4	117.8	310	1,751	18.1	5.0	31.7
Spray sprinkler bodies	-	-	2,035	_				-	5,815	_		
Toilets (water closets)			300						1,121			
Urinals			56						191			
Water coolers	37.8			2.6	1.8	9.8	107.9			3.8	4.5	14.1
Total	284	901	4,390	60	14	121	641	2,949	12,854	156	27	240

Assuming a compliance date of 2027 for all the recommended standards. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.

## Savings estimates for: Virginia

	Potential ann savings (mil	•	Net present	Payback	
	In 2030	In 2040	value savings (million 2023\$)	period (years)	
Commercial battery chargers	0.2	0.6	2.1	5.9	
Commercial dishwashers	4.0	12.7	111.7	1.0	
Commercial fryers	3.4	12.7	88.8	2.5	
Commercial ovens	0.8	2.8	8.9	6.3	
Commercial steam cookers	0.9	3.3	29.1	0.8	
Faucets	27.6	89.4	881.4	0.0	
Gas fireplaces	2.3	9.7	88.2	0.8	
High CRI fluorescent lamps	3.2	1.7	18.5	2.0	
Portable electric spas	5.1	14.1	125.9	0.8	
Residential ventilating fans	0.3	1.2	12.1	0.0	
Server power supplies	4.5	6.9	56.3	1.1	
Showerheads	16.2	52.3	515.1	0.0	
Spray sprinkler bodies	31.3	103.2	937.4	0.8	
Toilets (water closets)	4.6	19.9	249.3	0.0	
Urinals	0.9	3.4	32.5	0.0	
Water coolers	3.2	9.9	96.1	0.0	
Total	108	344	3,253		

Assuming a compliance date of 2027 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 2027 and 2050. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.

## Cumulative savings estimates for: Virginia

	Potential cumulative savings through 2050								
	Electricity (GWh)	Natural gas (TBtu)	Water (billion gallons)	NO <sub>x</sub> (tons)	SO <sub>2</sub> (tons)	CO <sub>2</sub> (thousand metric tons)	Utility bill savings (million 2023\$)		
Commercial battery chargers	135	-		5.0	5.7	19.4	10.4		
Commercial dishwashers	442	5.7	7.9	273.3	18.7	364.5	241.9		
Commercial fryers	30	20.8		941.9	1.2	1102.5	225.7		
Commercial ovens	295	2.1		107.6	12.5	155.6	49.6		
Commercial steam cookers	95	0.9	2.3	44.4	4.0	61.4	60.1		
Faucets	2,999	7.9	65.2	471.4	127.0	858.5	1703.1		
Gas fireplaces	-	11.1		502.2	_	586.3	176.9		
High CRI fluorescent lamps	508			24.7	23.4	94.5	47.4		
Portable electric spas	1,996	-		76.3	84.7	296.3	271.7		
Residential ventilating fans	164			6.0	7.0	23.5	22.5		
Server power supplies	1,626	_		65.4	70.4	253.7	146.0		
Showerheads	2,239	5.9	33.3	351.3	94.8	640.1	994.9		
Spray sprinkler bodies	-		110.5				1980.1		
Toilets (water closets)			22.9				417.8		
Urinals	_		3.4			-	62.1		
Water coolers	2,050			77.5	86.8	301.0	185.0		
Total	12,578	54	246	2,947	536	4,757	6,595		

Assuming a compliance date of 2027 for all the recommended standards. While we are recommending the adoption of state-level standards for commercial hot-food holding cabinets, computers and computer monitors, and water softeners, we have not estimated savings for these products due to insufficient data on the current market.