## **Appliance Standards Awareness Project**

## **2025 State Appliance Standards Recommendations**

Savings estimates for: South Dakota

	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	0.3	-	-	0.05	0.01	0.04	1.0			0.1	0.03	0.1
Commercial dishwashers	0.9	11	15	0.6	0.04	0.7	2.5	31	44	1.8	0.1	2.0
Commercial fryers	0.1	35		1.6	0.002	1.9	0.2	122	-	5.5	0.01	6.5
Commercial ovens	0.5	4		0.3	0.02	0.3	1.7	12	-	0.8	0.1	0.9
Commercial steam cookers	0.2	2	4	0.1	0.01	0.1	0.6	5	14	0.3	0.02	0.4
Faucets	4.5	20	123	1.7	0.2	1.7	12.9	58	351	4.4	0.5	4.8
Gas fireplaces		18	-	0.8		0.9		69	_	3.1	_	3.7
High CRI fluorescent lamps	3.7			0.6	0.2	0.5	1.7			0.2	0.1	0.2
Portable electric spas	13.2	_		2.3	0.6	1.9	33.0		-	4.4	1.2	4.3
Residential ventilating fans	0.2	-	-	0.04	0.01	0.03	1.0	-	-	0.1	0.03	0.1
Server power supplies	9.1	-		1.6	0.4	1.3	13.0		-	1.7	0.5	1.7
Showerheads	3.4	15	63	1.3	0.2	1.3	9.6	43	179	3.2	0.3	3.6
Spray sprinkler bodies		-	427	-				-	1,219		-	-
Toilets (water closets)			31						115	-		
Urinals	_		6	-	-	-	-		20	-	-	
Water coolers	2.7			0.5	0.1	0.4	7.8			1.0	0.3	1.0
Total	39	105	668	11	2	11	85	341	1,942	27	3	29

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: South Dakota

	Potential ann savings (mill	•	Net present	Payback	
	In 2030	In 2040	value savings (million 2023\$)	period (years)	
Commercial battery chargers	0.03	0.1	0.7	3.7	
Commercial dishwashers	0.4	1.4	12.4	1.0	
Commercial fryers	0.2	1.0	5.7	3.6	
Commercial ovens	0.1	0.3	1.1	6.5	
Commercial steam cookers	0.1	0.4	3.3	0.8	
Faucets	2.9	9.4	92.7	0.0	
Gas fireplaces	0.1	0.6	5.2	1.5	
High CRI fluorescent lamps	0.4	0.2	2.7	1.7	
Portable electric spas	1.8	5.1	46.3	0.6	
Residential ventilating fans	0.0	0.1	1.4	0.0	
Server power supplies	1.0	1.6	13.9	0.9	
Showerheads	1.7	5.4	53.0	0.0	
Spray sprinkler bodies	7.3	24.0	220.2	0.7	
Toilets (water closets)	0.5	2.3	28.5	0.0	
Urinals	0.1	0.4	3.8	0.0	
Water coolers	0.3	1.0	9.2	0.0	
Total	17	53	500	-	

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: South Dakota**

	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	18			2.6	0.7	2.5	1.9		
Commercial dishwashers	47	0.6	0.8	33.7	1.9	38.0	26.7		
Commercial fryers	3	2.2		99.7	0.1	116.3	16.9		
Commercial ovens	31	0.2		14.6	1.3	16.1	5.5		
Commercial steam cookers	10	0.1	0.2	5.7	0.4	6.4	6.8		
Faucets	245	1.1	6.7	84.8	10.0	91.8	179.2		
Gas fireplaces		1.3		57.3		66.9	11.2		
High CRI fluorescent lamps	51			8.3	2.4	7.4	6.2		
Portable electric spas	647	-		92.8	26.6	88.9	97.4		
Residential ventilating fans	18			2.4	0.7	2.4	2.7		
Server power supplies	279	-		40.6	11.7	38.5	33.5		
Showerheads	183	0.8	3.4	63.2	7.5	68.4	102.4		
Spray sprinkler bodies			23.2				460.9		
Toilets (water closets)			2.4				47.7		
Urinals	-		0.4	_	-		7.3		
Water coolers	148			21.0	6.0	20.2	17.9		
Total	1,678	6	37	527	69	564	1,024		

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.