Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: South Dakota

	Potential annual reductions in 2030			Potential		
State	Mercury in lamps shipped (lbs)	Power plant mercury emissions (lbs)	CO ₂ emissions (thous. MT)	annual electricity savings in 2030 (GWh)	Potential annual electricity bill savings in 2030 (million 2023\$)	
South Dakota	3.8	0.09	14	102	11	

Assuming a compliance date of 2027 for linear fluorescent lightbulbs and pin-based compact fluorescent lightbulbs and 2026 for screw-based compact fluorescent lightbulbs.

	Potentia	al cumulative red through 2050	Cumulative electricity	Cumulative electricity bill	
State	Mercury in lamps shipped (lbs)	Power plant mercury emissions (lbs)	CO ₂ emissions (thous. MT)	savings through 2050 (GWh)	savings through 2050 (million 2023\$)
South Dakota	33	1.3	205	1,487	173

Assuming a compliance date of 2027 for linear fluorescent lightbulbs and pin-based compact fluorescent lightbulbs and 2026 for screw-based compact fluorescent lightbulbs.

Fluorescent vs. LED: Economic analysis for most-shipped lamps (commercial sector)

Fluorescent lamp type	LED incremental cost (2023\$)	First-year electricity bill savings from LED (2023\$)	Life-cycle cost savings from LED (2023\$)	Payback period (years)
4-foot T12 – 40 W	2.32	8.30	44	0.3
4-foot T12 – 34 W	3.56	5.96	36	0.6
4-foot T8	0.12	4.04	27	0.03
4-foot T5	1.55	5.34	39	0.3
4-foot T5 high output	4.23	10.62	75	0.4
Pin-based CFL	2.29	6.58	22	0.3