Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: North Dakota

	Potentia	Potential annual reductions in 2030				
State	Mercury in lamps shipped (lbs)	Power plant mercury emissions (lbs)	CO₂ emissions (thous. MT)	Potential annual electricity savings in 2030 (GWh)	Potential annual electricity bill savings in 2030 (million 2023\$)	
North Dakota	6.0	0.15	24	184	16	

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\$)
North Dakota	51	2.1	341	2,543	223

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	6.05	33	0.4
4-foot T12 – 34 W	3.56	4.35	26	0.8
4-foot T8	0.12	2.94	20	0.04
4-foot T5	1.55	3.90	29	0.4
4-foot T5 high output	4.23	7.74	55	0.5
Pin-based CFL	2.29	4.81	17	0.5