Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: Kentucky

	Potentia	annual reductio	ons 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\$)	
Kentucky	13.8	0.77	112	382	28	

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\$)
Kentucky	119	8.1	1,295	5,412	429

 $Assuming \ a \ compliance \ date \ of \ 2027 \ for \ linear \ fluorescent \ light bulbs \ and \ pin-based \ compact \ fluorescent \ light bulbs \ and \ 2026 \ for \ screw-based \ compact \ fluorescent \ light bulbs.$

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	7.06	35	0.3
4-foot T12 – 34 W	3.56	5.07	28	0.7
4-foot T8	0.12	3.43	22	0.03
4-foot T5	1.55	4.55	31	0.3
4-foot T5 high output	4.23	9.03	58	0.5
Pin-based CFL	2.29	5.78	18	0.4