Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: Alabama

	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\$)	
Alabama	15.8	0.31	81	436	38	

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

	Potential cumulative reductions 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\$)
Alabama	136	4.0	1,038	6,187	588

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

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	8.65	42	0.3
4-foot T12 – 34 W	3.56	6.21	34	0.6
4-foot T8	0.12	4.21	26	0.03
4-foot T5	1.55	5.57	37	0.3
4-foot T5 high output	4.23	11.06	70	0.4
Pin-based CFL	2.29	7.14	21	0.3