Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: Pennsylvania

State	Potential annual reductions in 2030			Potential annual electricity savings in 2030 (GWh)	Potential annual electricity bill savings in 2030 (million 2023$)
	Mercury in lamps shipped (lbs)	Power plant mercury emissions (lbs)	CO_2 emissions (thous. MT)		
Pennsylvania	43.0	1.64	282	1,184	113

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

State	Potential cumulative reductions through 2050			Cumulative electricity savings through 2050 (GWh)	Cumulative electricity bill savings through 2050 (million 2023$)
	Mercury in lamps shipped (lbs)	Power plant mercury emissions (lbs)	CO_2 emissions (thous. MT)		
Pennsylvania	371	21.5	3,806	16,864	1,722

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	8.38	42	0.3
4-foot T12 – 34 W	3.56	6.02	33	0.6
4-foot T8	0.12	4.08	26	0.03
4-foot T5	1.55	5.40	37	0.3
4-foot T5 high output	4.23	10.72	70	0.4
Pin-based CFL	2.29	6.79	21	0.3