Appliance Standards Awareness Project

2025 State Clean Lighting

Savings estimates for: lowa

	Potentia	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\$)	
lowa	12.4	0.29	49	371	33	

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	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\$)
lowa	107	4.4	751	5,105	480

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

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	7.88	41	0.3
4-foot T12 – 34 W	3.56	5.66	33	0.6
4-foot T8	0.12	3.83	25	0.03
4-foot T5	1.55	5.07	36	0.3
4-foot T5 high output	4.23	10.07	68	0.4
Pin-based CFL	2.29	6.35	20	0.4