

Appliance Standards Awareness Project
2025 State Clean Lighting
Savings estimates for: Virginia

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)		
Virginia	35.1	0.62	224	908	72

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)		
Virginia	303	8.1	2,344	13,554	1,141

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	6.37	31	0.4
4-foot T12 – 34 W	3.56	4.57	25	0.8
4-foot T8	0.12	3.10	20	0.04
4-foot T5	1.55	4.10	28	0.4
4-foot T5 high output	4.23	8.14	53	0.5
Pin-based CFL	2.29	5.23	17	0.5