

Appliance Standards Awareness Project
2024 State Clean Lighting
Savings estimates for: Missouri

| State | Potential annual reductions in 2030 | | | Potential annual electricity savings in 2030 (GWh) | Potential annual electricity bill savings in 2030 (million 2022\$) |
|----------|-------------------------------------|-------------------------------------|---------------------------------------|--|--|
| | Mercury in lamps shipped (lbs) | Power plant mercury emissions (lbs) | CO ₂ emissions (thous. MT) | | |
| Missouri | 22.5 | 1.03 | 181 | 769 | 63 |

Assuming a compliance date of 2026 for linear fluorescent lightbulbs and 2025 for compact fluorescent lightbulbs.

| State | Potential cumulative reductions through 2050 | | | Cumulative electricity savings through 2050 (GWh) | Cumulative electricity bill savings through 2050 (million 2022\$) |
|----------|--|-------------------------------------|---------------------------------------|---|---|
| | Mercury in lamps shipped (lbs) | Power plant mercury emissions (lbs) | CO ₂ emissions (thous. MT) | | |
| Missouri | 228 | 14.3 | 2,454 | 10,242 | 849 |

Assuming a compliance date of 2026 for linear fluorescent lightbulbs and 2025 for compact fluorescent lightbulbs.

Fluorescent vs. LED: Economic analysis for most-shipped lamps (commercial sector)

| Fluorescent lamp type | LED incremental cost (2022\$) | First-year electricity bill savings from LED (2022\$) | Life-cycle cost savings from LED (2022\$) | Payback period (years) |
|-----------------------|-------------------------------|---|---|------------------------|
| 4-foot T12 – 40 W | 2.16 | 7.04 | 31 | 0.3 |
| 4-foot T12 – 34 W | 3.32 | 5.05 | 24 | 0.7 |
| 4-foot T8 | 0.11 | 3.42 | 19 | 0.03 |
| 4-foot T5 | 1.45 | 4.53 | 27 | 0.3 |
| 4-foot T5 high output | 3.95 | 9.00 | 51 | 0.4 |
| Pin-based CFL | 2.14 | 5.63 | 16 | 0.4 |