

Policy Summary | Outdoor Lighting Efficiency Requirements

Policy Overview

- Applies to specific commercial outdoor lighting applications
- Adjusts outdoor lighting power allowances (LPAs) downward to levels that can now be achieved at the same level of lighting output because of progress in LED lighting technology
- Updates are based on a 2017 study prepared for the CEC in development of 2019 energy codes that found market availability of lighting fixtures, performance and cost competitiveness has rapidly improved
- Expected to reduce GHG emissions by roughly 3,300 metric tons over the useful life of the products.
- Shown to be cost-effective. In 7 out of 10 lighting categories, the higher efficiency lighting actually costs less, in the other two cases, lifecycle benefits are more than 7 times the extra cost

Proposed Requirements

- Applicable to new non-residential construction and retrofits where at least 50% of lights are replaced
- Affects 10 commercial outdoor lighting application categories
- Reduces maximum outdoor LPAs by 32-81%
- Adjusted allowances are shown in table below:

| Outdoor Lighting Application | Lighting Zone 0 | Lighting Zone 1 | Lighting Zone 2 | Lighting Zone 3 | Lighting Zone 4 |
|---|-----------------|-----------------|-----------------|-----------------|------------------|
| Building Entrances or Exits (watts) | NA | 15 → 9 | 25 → 15 | 35 → 19 | 45 → 21 |
| Primary Entrances to Senior Care, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities (watts) | NA | 45 → 20 | 80 → 40 | 120 → 57 | 130 → 60 |
| Drive-Up Windows (watts) | NA | 40 → 16 | 75 → 30 | 125 → 50 | 200 → 75 |
| Outdoor Sales Frontage (W/ft) | NA | None | 22.5 → 11 | 36 → 19 | 45 → 25 |
| Building Facades (W/ft ²) | NA | None | 0.18 → 0.1 | 0.35 → 0.17 | 0.50 → 0.225 |
| Outdoor Sales Lots | NA | 0.164 → 0.06 | 0.555 → 0.21 | 0.758 → 0.28 | 1.285 → 0.485 |
| Vehicle Service Station Hardscape (W/ft ²) | NA | 0.014 → | 0.155 → | 0.308 → | 0.485 → |

| | | 0.006 | 0.068 | 0.138 | 0.200 |
|---|----|------------------|------------------|-----------------|------------------|
| Vehicle Service Station Canopies (W/ft ²) | NA | 0.514 → 0.22 | 1.005 → 0.43 | 1.3 → 0.580 | 2.2 → 1.010 |
| Non-Sales Canopies (W/ft ²) | NA | 0.084 → 0.057 | 0.205 → 0.137 | 0.408 → 0.27 | 0.585 → 0.37 |
| Outdoor Dining (W/ft ²) | NA | 0.014 → 0.004 | 0.135 → 0.03 | 0.24 → 0.05 | 0.400 → 0.075 |