

Environmental Impacts of Digital Signs and Billboards



There's no escaping the negative impacts of digital billboards and signs, especially when they can be brighter than necessary to view the sign at night.

Brighter Isn't Better – or necessary

Energy Impacts: Standard billboards and signs only use electricity at nighttime to be viewed. But digital billboards are greedy energy hogs that need constant electrical energy day and night to display the rotating messages that flip about every six or eight seconds. One digital billboard uses the same amount of electricity in a 24-hour period as 15 homes.

Wildlife Impacts: Development and noise can disrupt the cycles and patterns of wildlife, but light from various sources including digital billboards is also enough to have a negative impact. Mating behaviors, timing of migration, sleep and predation are determined by the length of nighttime darkness.

Light Pollution: Digital billboards and signs are contributors to sky glow, a form of light pollution. They've also been multiplying. In 2008 there were 800 digital billboards; in 2018 there were 7,800 digital billboards nationwide, according to the Outdoor Advertising Association of America.

Incredibly, the industry's brightness standards are three times brighter at nighttime than standard billboards and may benefit the sign industry, but not much else. We live in the era of global warming where carbon footprints matter more than ever. And we are witness to the degraded night skies from artificial light. 88% of Europe and 50% of the United States experience perpetual twilight.

Tell your public officials to turn off or turn down the brightness levels of digital signs at night. Or contact us to find out how you can help.



Footnotes:

1. <https://www.sciencemag.org/news/2016/06/nighttime-light-pollution-covers-nearly-80-globe>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2627884/>
3. <http://illinoislighting.org/billboards>
4. <http://www.flagstaffdarkskies.org/WPdev/wp-content/uploads/2013/03/Digital-Billboard-Luminance-Recommendation-ver-7.pdf>
5. <https://esajournals.onlinelibrary.wiley.com/doi/epdf/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2>
6. http://www.scenic.org/storage/documents/Digital_Signage_Final_Dec_14_2010.pdf