

LIGHT POLLUTION COSTS MONEY AND WASTES RESOURCES

HOW DOES ENERGY WASTE HARM THE ENVIRONMENT?

Excess lighting pumps millions of tons of carbon into our atmosphere every year, and also causes light pollution.

Light pollution:

- Increases greenhouse gas emissions
- Contributes to climate change
- Increases our energy dependence

WHAT ABOUT OUR CARBON FOOTPRINT?

In the U.S. alone, about 15 million tons of CO₂ are emitted each year to power residential outdoor lighting. That equals the emissions of about 3 million passenger cars and adds up to 40,000 tons per day. To offset all that carbon dioxide, we'd need to plant about 600 million trees annually!



WHAT DOES LIGHT POLLUTION COST?

About \$3 billion dollars per year of energy is lost to bad lighting. This is about \$10 a year for every man, woman, and child in the U.S.



HOW MUCH ENERGY AM I WASTING?

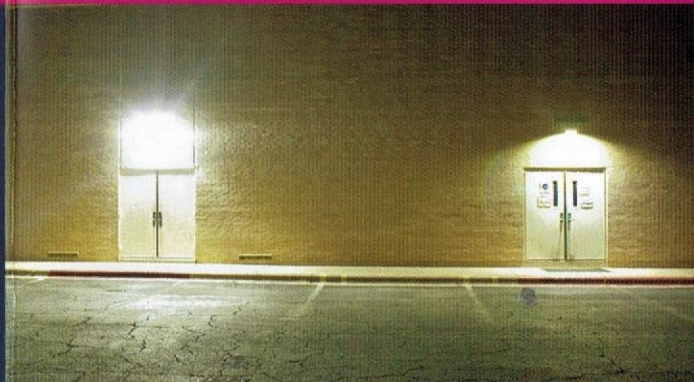
The average house with poorly designed outdoor lighting wastes 0.5 kilowatt-hours (kWh) per night. A kilowatt-hour is a unit of energy equivalent to one kilowatt of power for an hour. It's enough energy to power a 50-inch plasma TV for one hour or run one load in your dishwasher!



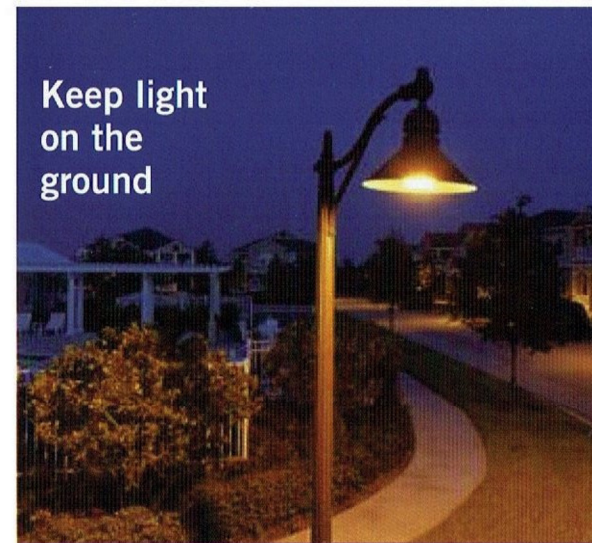
It just takes small changes to save energy, money and our night skies. You can make a difference today.

Good vs. Bad Lighting

This photo (right) shows examples of good and poor lighting design. The unshielded light fixture on the left throws light into the sky and creates glare, impairing visibility. The shielded light fixture on the right directs light to the ground where it is needed and does not create lighting pollution. To learn about light fixtures that are environmentally friendly, energy efficient and certified with the IDA Fixture Seal of Approval, visit darksky.org.



Keep light
on the
ground



ENERGY EFFICIENCY SOLUTIONS

Shielding outdoor lighting saves energy and money, reduces our carbon footprint and helps protect the natural nighttime environment. The solutions are easy. Work with your neighbors and local government to keep the light on the ground and the skies natural. It's a win-win for everyone. You save money while preserving a valuable natural resource.

Tips to help you conserve energy and use light efficiently:

- Install quality outdoor lighting to cut energy use by 60-70%, save money and cut carbon emissions.
- Fully shield all outdoor lighting — light should go down on the ground where it's needed, not up into the sky.
- Be aware that fully shielded fixtures can provide the same level of illumination as unshielded fixtures, but with lower cost and less energy waste.
- Turn off indoor lights in office buildings or homes when not in use to save money and energy.

Visit darksky.org for more information.