



ULTIMATE SOLAR LIGHTING SOLUTIONS



SOLAR LIGHTING IMPROVES THE QUALITY OF LIFE

AT **AKEENA ENERGY**

our solar-powered LED lighting improves the quality of life for our families, businesses, and communities by providing a cost-efficient, environmentally friendly alternative to traditional high-pressure sodium lights. But the benefits of solar-powered LED lighting go far beyond the environment. Solar-powered LED lighting is the new normal because of its versatility for any public area, from residential neighborhoods, to parking lots, to public parks, to commercial venues, to street lighting.



OUR **LED LIGHTS** ARE RATED TO LAST UP TO **100,000 HOURS**, AND THE BATTERIES LAST FOR **5 TO 7 YEARS**. THE SOLAR PANELS AND LIGHT POLES LAST FOR **TWO DECADES**.





A SMART INVESTMENT IN SOLAR-POWERED LED lighting will pay for itself while making our communities safer and healthier. For example, choosing **solar reduces sulfur dioxide, nitrous oxides**, and other **harmful emissions**. The amount of carbon dioxide emitted by all the streetlights in the United States is equivalent to the annual emissions of **26 million** vehicles. Choosing solar-powered LED lighting contributes to a significant **reduction** in **pollution**.

Besides **cost-efficiency** and **environmental benefits**, solar-powered LED lighting **increases security, deters crime, and enhances safety**. A recent study headed by a research team in New York did a controlled trial of LED lighting that saw a **39 percent drop-in crime**.

BENEFITS OF SOLAR LIGHTING

GO OFF THE GRID

Whether the grid power is operating or not, commercial solar lighting systems are completely self-sustained and off-grid. This makes them a resilient investment for areas that are prone to blackouts. There is also a backup battery that allows for an additional 5 days of backup power storage in case there are interperate or unexpected changes in the weather.

PROTECTING THE PLANET

There is enough energy reduced by the sun every 10 seconds to meet the energy needs of the world. For that reason, solar energy is the way to protecting our planet in the long run. The unlimited energy source will protect our planet against the damaging emissions that CO2 creates and pollutes from unclean energy producers.

NO NEED FOR TRENCHING

There is no trenching or underground wiring that is involved with solar lighting. Since the systems are installed on a pole, installation costs decrease by not having to bring down power lines and trenching into the ground in order to run the wire.

ZERO ELECTRICAL BILL

No electric bill is associated with off-grid solar lighting systems. Solar lighting systems do all the work for you. There is no grid backup or traditional power sources needed, allowing for a cut in costs of your electricity bill. Several states offer \$0 down for installation plans that will automatically lower your electric bill and cost nearly nothing to install or maintain.

FAST & EASY INSTALLATION

There is nothing when it comes to installing a commercial solar powered light. Simply set the pole with the specific foundation requirements and assemble the solar power fixture and mounting bracket on top of the pole.

ENVIRONMENTALLY FRIENDLY

Powered by the sun, the solar panels charge the battery during the day and the controller switches to power the light from that supply during the night. The process repeats itself in the morning. This creates a seamless and effortless process when it comes to setup.

SAVE MONEY ELIMINATE THE COST OF TRENCHING, WIRING, SWITCH-GEAR AND SOIL REMEDIATION.

SOLAR FOR SCHOOLS AND UNIVERSITY CAMPUSES

Solar is a cost-effective way to increase the safety for students, faculty, staff, and guests using the facilities. Solar powered lighting is a self-contained lighting solution with no underground connecting wiring required. This means no hassle in disturbing infrastructure or historical landmarks on your campus.

Universities, colleges, and schools, have gone solar. They've been cutting carbon footprints and educating about environmental issues. By setting an example of making a choice to reduce pollution and slow the damage from global warming, you're preventing further damage and educating students in the process. Solar powered lighting is a great way to promote campus safety and sustainability at the same time.



SOLAR FOR COMMUNITIES

Light your roads. Light your trails. Light your entire community. Solar lighting offers a practical, money-saving lighting alternative for your remote community or rural area to help increase safety and security.

Does solar work for our Community?

You can avoid damaging the landscape with trenching and preserve the night sky with fixtures that ensure no light or power is wasted. Meanwhile, your community can maintain its **independence** by avoiding ties to the grid while gaining sustainable solar lighting that won't be affected by **brownouts** or **blackouts**. Inadequate public infrastructure can threaten long-term **economic growth**, and so improvements can enhance the quality of life for business owners and local citizens alike. **Reliable solar lighting is a great place to start.**

SOLAR LIGHTING FOR NATIONAL PARKS

Solar lighting is a versatile solution for all lighting needs for national parks, historic sites, or memorials and it can do so without adding to the maintenance budget in the long term. Solar lighting costs are on par with grid-connected lights, but without the added unknown costs of trenching for wiring and electricity bills, making it a cost-effective upgrade that also shows a commitment to green technology.



CHALLENGES OF ON-GRID ELECTRICITY

Why you should consider switching to commercial solar lighting systems today.



1. **DISTANCE** – The closest grid connection may be a considerable distance away, ultimately increasing the costs because of the environmental disruption occurring that is required by trenching.
2. **COST** – The price per kilowatt an hour may be unmaintainable for a community, business, household that is paying for the power.
3. **CONSTRUCTION APPROVAL** – When trenching occurs, more often than not, studies are required to determine the environmental impacts of going into the ground causing a high consultation fee along with the possibility that trenching may not be allowed in the first place.
4. **ENVIRONMENTAL RESTRICTIONS** – On-grid lighting may not be an option any longer due to locations that have been designated as environmentally susceptible or at-risk.

5. **CURRENT INFRASTRUCTURE** – Trenching would be costly and potentially damage the existing infrastructure of the site.
6. **POWER SUPPLY** – Some locations may have unpredictable grid power, increasing the cost of grid lighting and causing a product to potentially not work when it is supposed to.
7. **GROUND CONDITIONS** – Depending on where trenching would occur, some areas may be at risk due to the water table being too high or ground materials making trenching unstable.
8. **GRID CONNECTIVITY** – Some cities may desire to use an alternative energy source or even have a mandate from using on-grid power.

CITY OF LA PUENTE SOLAR LIGHT PROJECT

BATTING CAGES



CITY PARK MONUMENT



CITY PARK PATHWAY LIGHTS





REGINALD YORK
COO

reginald@akeenaenergy.com
+1 559 307 8670
akeenaenergy.com