



# ILLUMIENT

Smart Off-Grid Lighting

## Project Portfolio

Around the world, customers are turning to solar and wind powered street lights to illuminate:

- > Streets & Roadways
- > Pedestrian Walkways
- > Parks & Trails
- > Parking Lots
- > Other Applications



Illumient Smart Off-Grid lighting solutions from Clear Blue Technologies deliver the lowest cost of ownership. All of our lights are monitored, controlled and proactively maintained in the cloud. Illumient Smart Off-Grid lights are installed across North America in 26 US states and 9 Canadian provinces.

## Street & Roadway Lighting

### Mountain Brow Blvd, Hamilton, ON



The City of Hamilton installed 40 Illumient solar-powered lights on a road adjacent to the Niagara Escarpment.

#### Why Smart Off-Grid?

As the land is limestone, it would not have been conducive to the trenching and cabling that would have been required to run electric power cables. In addition, the City wanted to reduce the growing burden of utility costs from grid-based street lights.

#### Results

With the new Illumient lights, residents can enjoy the area later into the evening, throughout the year. The City also saved time and money in avoiding construction costs for cabling, ongoing maintenance and overall energy costs.

### Eckville, AB



The Town of Eckville installed a series of Illumient Smart Off-Grid Solar Street lights to illuminate Eckford Street, Eckville's main street.

#### Why Smart Off-Grid?

Both the monetary cost of connecting to the grid, as well as the disruption caused by the construction would have been significant. The Town chose Illumient lighting and avoided the headache posed by grid construction. Also, the Illumient solution was 30% cheaper than using traditional grid-connected lighting.

#### Results

The main street of Eckville is now well lit allowing for greater access to local businesses without construction disruptions. Monthly utility costs are avoided and the streetlights have provided enough energy to power seasonal decorations on the poles.

## Pedestrian Walkways

### New Maryland, NB



The Village of New Maryland in New Brunswick has installed 13 Illumient solar-powered street lights along a two-lane highway running through the center of the village, illuminating the sidewalk.

#### Why Smart Off-Grid?

The Village wanted to provide greater illumination for pedestrian walkways to encourage more foot traffic to local businesses, while installing a solution that fulfilled their goal for green initiatives within the village.

#### Results

In addition to welcoming visitors, these Illumient lights create an environment where tourists and residents can stop to take advantage of the local businesses. The project is also a key element of New Maryland's green initiative.

### Ajax, ON



The City of Ajax, just east of Toronto, Ontario, added Illumient Solar Street Lights to a new park.

#### Why Smart Off-Grid?

Wanting something beautiful, modern and easy to install, the City chose off-grid, solar lighting to avoid environmental disruption during installation, with the added benefit of reliable lighting.

#### Results

Blending in beautifully with the new, modern park, Illumient provides adjustable lighting for the new park, so residents can enjoy the area safely for a longer part of the day.

## Public Parks

### Lily Lake, Saint John, NB



Rockwood Park in the City of Saint John, New Brunswick, is the hub of outdoor activities year-round. Since there was no lighting along the Lily Lake trail, use of it became limited during the winter months.

#### Why Smart Off-Grid?

Using traditional grid-connected power would have been very expensive, and would have disturbed the natural setting.

#### Results

The 26 Illumient solar-powered lights that were installed along the 1.38 km length of the Lily Lake Trail provide illumination without disruption. Additionally, ten of the lights have inverters which allow the solar power to provide auxiliary lighting for loads, such as Christmas lights during the winter months, enhancing the community.

### Earl Rowe Provincial Park, ON



The Earl Rowe light configuration includes a concrete StressCrete pole, a 55W LED street light complete with dimming, a single solar panel, a wind turbine and four 12V batteries.

#### Why Smart Off-Grid?

As a green energy leader in the Ontario Parks Network, Earl Rowe has a focus on becoming as energy independent as possible.

#### Results

Not only did Earl Rowe get a reliable off-grid light to illuminate the park and meet its energy targets, but also the amount of energy generated was far more than needed to power the light on the pole. The team was able to install a 400-watt inverter that takes power from the battery, to power ten outside pot lights on the adjacent building.

## Parking Lots

### Hy-Vee, Throughout Midwestern US



Hy-Vee is an employee-owned chain of more than 240 supermarkets located throughout the Midwestern United States.

#### Why Smart Off-Grid?

Hy-Vee wanted a solution that would provide safety and security to customers in their parking lots. Smart Off-Grid lights provided clean, reliable lighting without costly grid infrastructure costs, while also meeting the company's commitment to environmental sustainability.

#### Results

As of 2021, 16 stores have installed Illumient solar and wind-powered lights in their parking lots. The advertising banner on the pole highlights the electric vehicle charging system next to it, providing further value to customers.

### IBEW Local 103, Boston, MA



The International Brotherhood of Electrical Workers (IBEW) Local 103 in Boston installed 16 Illumient solar and wind-powered street lights in the parking lot and pathways at their headquarters in Boston.

#### Why Smart Off-Grid?

IBEW Local 103 was looking for a lighting solution that was reliable, easily manageable and more economical than grid-based options.

#### Results

The Business Manager of Local 103 said "The new off-grid lights are practical, cost-effective, environmentally friendly and they give us a remote control and monitoring capability that doesn't exist with alternatives. They are also a beautiful addition to the Boston skyline."

## Other Applications

### Rte 347, Long Island, NY



Route 347 is a 14.5 mile state highway in Suffolk County on Long Island, New York. While there are grid-powered lights along the highway, the County is near the eastern tip of Long Island, an area that has been hit by many large storms including Hurricane Sandy.

#### Why Smart Off-Grid?

A significant number of these storms have resulted in power outages of long duration. In order to ensure that lights would work during these periods, reliable solar-powered solutions were required.

#### Results

Illumient was installed along stretches of the highway and at seven of the bus shelters along the road, providing increased safety and security without disruptions from extreme weather.

### Welland, ON



Located in the heart of Niagara, Welland is a 1.5 hour drive from Toronto and 45 minutes from Buffalo, NY. Home to Niagara College and near Brock University, the city is home to local and international students.

#### Why Smart Off-Grid?

The remote location of the sign, combined with the need for reliable lighting to ensure all visitors were able to view it, meant that a smart off-grid lighting solution was needed for Welland.

#### Results

Rich with multiculturalism and community spirit, Welland is a friendly city that endeavors to keep all citizens active, happy and healthy. The welcome sign is now visible day and night thanks to Illumient lighting.