

# ILLUMIENT



Corporate  
Facilities

## SAFETY AND SECURITY WITH OFF- GRID LIGHTING



Purdue Pharma Canada is one of the leading pharmaceutical companies in Canada. Headquartered in Pickering, Ontario, Purdue Pharma Canada furthers research in the field of drug delivery and markets products for the treatment of pain, attention deficit hyperactivity disorder (ADHD), gastrointestinal disorders, respiratory disease, infection control and urinary incontinence. The company is dedicated to developing and providing innovative medicines for patients and health care professionals and to supporting quality education for the safe use of its products.

Purdue Pharma Canada also has a strong corporate commitment to environmental sustainability. This commitment has been demonstrated in numerous ways. The company is involved in the Ontario Power Authority's Feed-In Tariff (FIT) program. This includes the use of roof top solar power to generate electricity for the hydroelectric grid at both of their facilities.

Additional outside lighting in order to enhance security was required for the Shipping and Receiving area. The particular area is a loading zone, and a distribution point for Purdue



***“The light is like a kinetic sculpture. People can see the wind turbine moving, but it is very quiet. It really adds to the aesthetics of the area, while providing the illumination needed to secure the area.”***

***Chris Martin  
Sr. Project Engineer  
Purdue Pharma Canada***

Pharma Canada’s pharmaceuticals. Ensuring the security of staff and inventory was a key concern, as the area was dark and surrounded by trees and bushes.

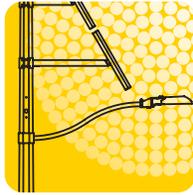
While there was electric cabling across the street, there was no existing lighting in this area, and drilling a trench would have required drilling into the heavy concrete driveway that led to the loading zone. The alternative was directional boring, which is the preferred method of installing underground cables when trenching or excavating is not practical. The estimated cost of installing electric cabling, installing a traditional street light and having it connected to the power grid was \$30,000.

Chris Martin, a senior project engineer at Purdue Pharma Canada, investigated an alternative – the installation of a hybrid solar and wind-powered streetlight. Having seen a recent presentation on solar lighting, and in line with the company’s commitment to green energy, he believed it might be a practical and cost-effective option. He knew that solar and wind technology was maturing but needed to know whether such a light would provide sufficient illumination to ensure the security of the area.

Chris turned to Illumient, who worked with him on a lighting dispersion analysis to answer that question. Illumient proposed an off-grid light with two solar panels and a wind turbine. As a showcase for green energy, Purdue Pharma Canada also elected to go with a decorative concrete pole.

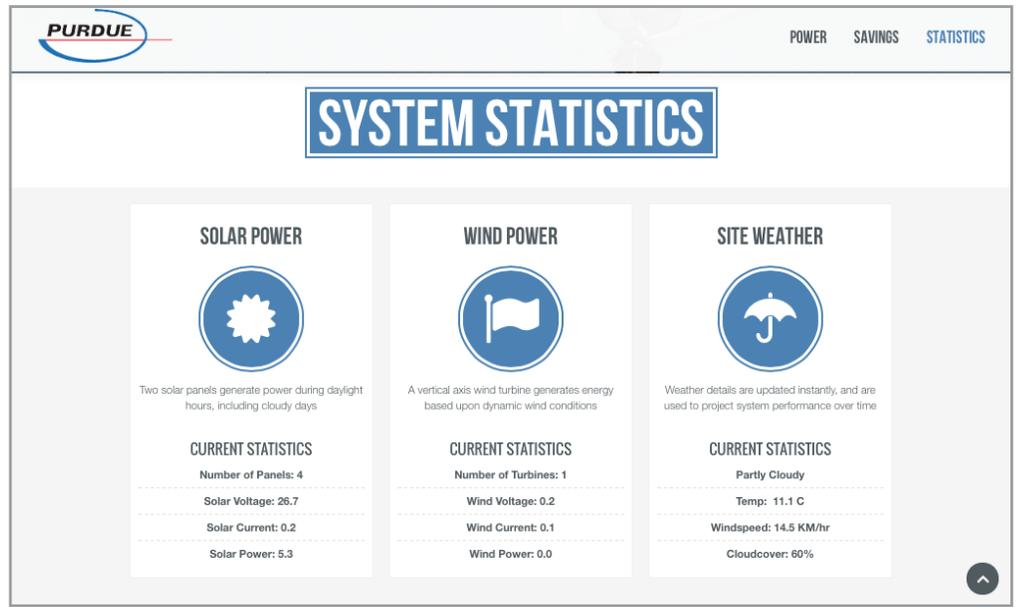
Beyond these benefits, the off-grid light did not require power to be brought to the site nor an expensive concrete pad. Instead, installing the off-grid light required a simple direct embedded method of installation, “drill and drop”. The cost advantage was also clear, about 1/2 the cost of an electric street light.

Illumient’s Smart Off-Grid technology captures and streams data about all aspects of the light as well as local weather conditions to a cloud-based application. It also monitors system health around the clock to eliminate downtime, and provides greater functionality with remote dimming and motion control options for high reliability and performance.

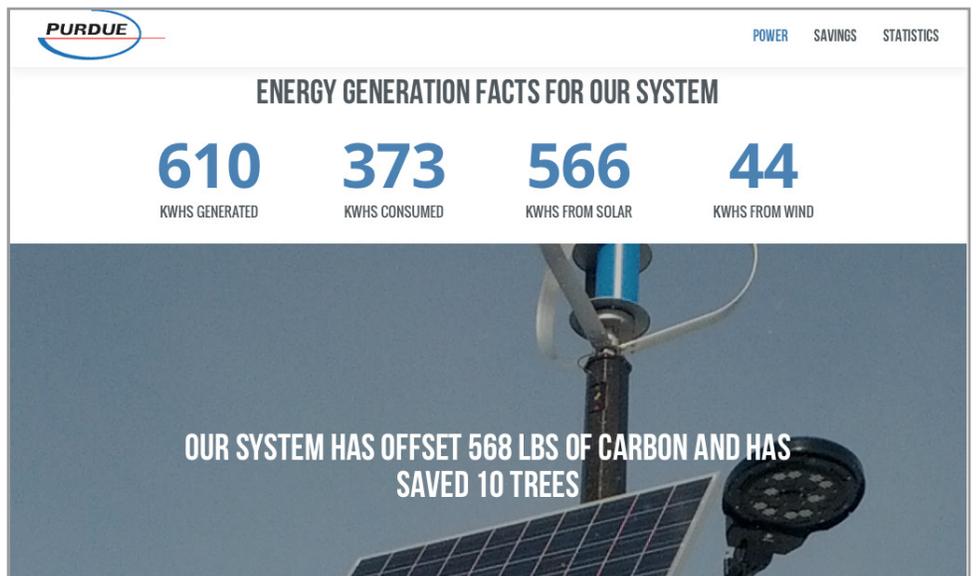


Illumient Smart Off-Grid provides remote, real time monitoring and control from a PC or smartphone.

It was invented by experts who understood that off-grid lighting needed to deliver the reliability of grid-powered systems.



Purdue Pharma Canada employees can get a real time view of the benefits of the light. The data is presented on a Web page that employees can access, showing how much power is being generated by the solar panels and wind turbine, how much load the light is drawing and the environmental benefits.



After seeing the benefits of off-grid lighting Purdue Pharma Canada is planning to install an additional light at another location that lacks electric power.