

## CASE STUDY: Illuminating New Logistics City in Settat, Morocco

Clear Blue's Smart Off-Grid technology and remote management service ensured high performance, reliability, and low maintenance costs for 800 new streetlights in the new logistics town in Settat, Morocco.

### SUMMARY:

IDSUD Energies Afrique installed 800 solar lights powered by Clear Blue Technologies' Smart Off-Grid technology in Settat, Morocco. These installations were a key part of the development project Logintek Morocco, which established a network of integrated logistics and industrial cities designed to serve as transit hubs for Morocco and the rest of Africa.

### Background

One of the major initiatives in Morocco is the Logintek Morocco project by Zinafrik Development Group, launched in 2014. It is the first national private network of integrated logistics and industrial cities, dedicated to economic, social and eco-green growth. These new cities will become transit hubs throughout the country and become a regional hub to conquer the African market. They are being located near the national highway, airport, and railway to ease the movement of goods and products. Not only will these planned cities encourage competitiveness from businesses at regional, national, and international levels, but they are also expected to create about 70,000 jobs in the next 15 years.

In the new logistics town near Settat, 800 solar and solar-wind powered streetlights were needed to provide outside lighting. Idsud Energies Afrique, a division of Idsud Energies, a renewable energy company headquartered in France, was chosen to provide and manage the installation of the lights. Idsud Energies Afrique partnered with Clear Blue Technologies as well as many local companies who were participating in this major effort.

### Why Smart Off-Grid?

Clear Blue's Smart Off-Grid technology was the perfect fit for the project. With extensive management, energy forecasting, and proactive maintenance tools provided by the Illumience software, Smart Off-Grid technology ensures that systems have the longest life, and any system issues are immediately resolved remotely. Smart Off-Grid provided the highest reliability and uptime at the lowest total cost for Logintek Morocco.

## Case Study: Settat, Morocco

As installation of this project started with the first 30 systems. Clear Blue's Smart Off-Grid remote management service performed its remote commissioning of the system, which determined that all 30 systems had issues. It quickly became apparent that Clear Blue's Smart Off-Grid service would be key to the successful installation of this system.

Idsud, the local contractor, and Clear Blue worked together over 6 months to successfully install all systems as the streets were constructed. On a daily basis, the contractor was notified by Clear Blue of the issues and fixes needed for the next phase. Today 100% of the systems are operating properly.

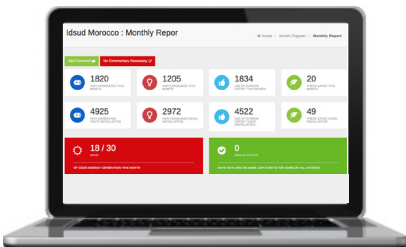


*Illumience Dashboard Map of the Installation*

### Results:

#### Smart Off-Grid is the key to successful off-grid lighting installations

With Clear Blue's Smart Off-Grid, the project moved ahead quickly and efficiently. A commissioning report kept local installers aware of what remained to be done and which lights had been correctly installed. Each light now communicates automatically with the Illumience cloud software, sending status information and other data that first validated a successful installation, then ensures ongoing reliability and performance.



The lights can be controlled and managed remotely, and any issues dealt with quickly if they arise. In addition, daily and monthly reports track and report on all aspects of the lighting systems, and are available online to whoever needs the information.

Clear Blue's Smart Off-Grid technology was critical to the successful installation of the 800 lights in Settat. Thanks to Clear Blue's Smart Off-Grid technology and ongoing expert management service, all these systems have operated exactly as designed. The 800 installations in Settat are part of a multi-phase project which will ultimately install nearly 5,000 Smart Off-Grid lights.

*"As a result of this project, we have realized that a successful project requires Clear Blue's Smart Off-Grid System and Service."*



*"Clear Blue was able to deliver . . . with the lowest cost solution and the Illumience energy monitoring, management and control platform. We were thrilled with the results and continue to work with Clear Blue on more projects."*



## Smart Off-Grid

### Built-in Communications

All poles connect to the Internet via built-in communications.

### Installation & Commissioning

Clear Blue provides remote support and advanced digital tools to ensure installations are done correctly, without the need for experts.

### Remote Management & Control

Clear Blue's cloud platform, Illumience, controls all power and load functions remotely to optimize performance, set lighting profiles and dimming easily.

### System Alerts & Remote Troubleshooting/Remediation

Illumience automatically identifies and diagnoses issues for fast and convenient troubleshooting, sending alarms when needed.

### Expert Service

Clear Blue's experts provide ongoing system uptime management, battery lifecycle management and remote maintenance and repairs.

### Reporting

Automated monthly reports provide insight to uptime, energy usage and generation, plus battery health and more.