

Tegis® & SensyCity®

Outdoor lighting and the northern lights, cohabitation made possible...



Case study

Reykjavik - Iceland

Outdoor lighting and the northern lights, cohabitation made possible...



LAKE RAUDAVATN IS :



4,2km
in distance



1
electrical cabinets*



63
light points*

THE ISSUE

- ▶ Reykjavik and LACROIX now have a common history. The Icelandic capital, and at the same time the largest city in the country, has equipped itself with a smart public lighting installation thanks to LACROIX products.

Reykjavik, considered as the «greenest city in the world», aims to make certain roads around Lake Raudavatn, which are used by a wide variety of people, safer and more attractive.

The particularity of this site is to be composed of two paths side by side: one for horsemen and the other for pedestrians. The detection and the smart lighting management were then adapted allowing the lighting of the users while preserving the night environment.

THE CHALLENGES

- ▶ To detect at strategic places to optimize the lighting of the candelabras on two alleys and to guarantee the safety for all: pedestrians (path notably used for walkers or joggers...) and horsemen (horses are not dazzled).
- ▶ To preserve the environment, nature and especially to guarantee the visibility of the aurora borealis. Indeed, light pollution is a major concern in the Nordic countries, darkness being the first key factor to be able to observe them.
- ▶ Reduce energy consumption on a daily basis.

** for phase 1 of only 1,5 km*

THE SOLUTION

▶ In August 2021, based on an LED installation, the city of Reykjavik together with the technical consulting firm **EFLA** (also one of LACROIX' official partners in Iceland) and **LACROIX' City teams** have equipped 63 light points and one cabinet of the **SensyCity** and **Tegis** ecosystems over 1.5 km. These two intelligent lighting solutions are manufactured in France.

The SensyCity devices were chosen for their design, which preserves the aesthetics of the existing masts. This is a real difference for the city of Reykjavik, which is attentive to this style criterion. This argument obviously complements the simplicity of implementation, the intuitive customer interface and the scalability of the detection ecosystem.

A total of 100% of the light points were equipped with **SensyCity**, with 13 SIR detectors and 53 NOD receivers installed on double masts offering **360° detection**. **The dimming was also customized** according to the different uses: at 20% for the pedestrian paths with 100% boost, and at 50% for the path dedicated to horse riders with 100% boost as well.

At the same time, the city of Reykjavik chose to deploy the **TEGIS Lighting Plus 24/7 intelligent management ecosystem**, with 63 TNX24 at the Raudavatn lakefront. Positioned at the base of street lights, these communication nodes will enable 24-hour remote management of **third-party services** in addition to street lighting. Reykjavik choose these new services for a lot of different uses : smartphone charging, electric scooters or bicycles charging and in the future connecting surveillance camera and weather stations. TEGIS measures electricity consumption instantaneously and sends the data to the associated **LX Connect platform**. This solution allows the public lighting network to be controlled directly and thus to be able to adjust the 2 lighting scenarios implemented (dimming, extinction, etc.).



63

Light points
fitted with TNX24
nodes.



1

Electrical cabinets
equipped with Tegis
control units.



66

SIR sensors et
NOD réceptors



WHAT PEOPLE SAY ABOUT US

«These solutions combine safety and the environment. SensyCity strongly limits environmental impacts, respects light pollution and promotes the natural beauty of our landscapes.»

Arsaell Johannsson

Project Manager – Reykjavik Street Lighting
The City of Reykjavik



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