County Kerry (Ireland) welcomes Tvilight’s Smart City solution

"On demand lighting is a great solution for Tralee because of limited activity during night."

Visitor Tralee
County Kerry, Ireland
JCL are using the Tvilight solution in County Kerry, which is the first installation of its kind in Ireland. The solution has proven to be very successful over the past twelve months both for the citizens and the municipality. We used a meter system in parallel with the Tvilight solution and have determined that 60% savings on energy have been achieved. These savings can be increased further by applying timed dimming profiles through Tvilight’s CityManager Software system. This is very impressive technology and JCL look forward to working with Tvilight in the future.

Philip Curneen
Director and Program Manager at JCL
Background
Tralee is a town in the west of Ireland, famous for its annual festival, the Rose of Tralee. With a little more than 20,000 inhabitants, the medieval town is situated in the green surroundings of County Kerry, enjoying a quiet and historic feel. The county was planning to renew its outdoor lighting infrastructure. As a result, County Kerry requested JCL Engineering Services, a technical company to come up with a sustainable street lighting solution, while maintaining the public safety.

Challenge
Going green for County Kerry meant reducing CO2 emissions, saving energy and reducing light pollution. The county management sought solutions to help implement its strategy. As a primary example and working with local groups the county management developed an old railway line into a walkway. It was very important to have an energy efficient lighting solution that also makes people feel safe. JCL Engineering Services managed to find an innovative company, Tvilight BV, which met all the criteria.

Solution
Tvilight applied its intelligent lighting controls to County Kerry lighting infrastructure to improve cost efficiency and achieve sustainability. The location is ideal for adaptive lighting as it has only a limited activity after 10pm. Thanks to Tvilight’s presence detection technology, the lights do not need to burn at full brightness throughout the night. Another beauty of this solution is that the lamps do not even need to be replaced; Tvilight can integrate wireless sensors into both existing and new street lighting fixtures.

The system functions in a smart and unique manner. The CitySense sensor detects moving objects such as cars, cyclists, and pedestrians. Based on the anticipated movement, a number of streetlights glow at 80% of its full capacity. When the moving object has crossed, bright lights are no longer needed, and the lights intelligently dim to a predefined level of 20%. The exact level of brightness can be configured further through CityManager lighting management dashboard. Each CitySense module can also send maintenance information and notifications of lamp failure to CityManager.

Benefits

- **County**
  - Significant reduction in energy usage without compromising public safety
  - Remote management, control and monitoring of the lighting infrastructure through CityManager
  - Reduced maintenance costs up to 60%
  - Positive public image

- **Citizens**
  - Maintained sense of safety
  - Light on demand
  - Preservation of the historic characteristics of the town
  - Reduced light pollution

- **Planet**
  - Significant reduction of CO2 emissions
  - Reduced light pollution

*Data Collected from CityManager*