Case Study

Smart Street Lights for Ports
Sohar Port & Freezone (Sultanate of Oman)
Tvilight’s CitySense Plus & CityManager were deployed at SOHAR Port and Freezone to help the authorities achieve their sustainability goals while improving road safety and enhancing operational efficiencies.

Our vision is to create and maintain a high-class port that is healthy, safe, secure and environmentally friendly for the industries, its employees, visitors and the surrounding population and nature. Motion sensing street lighting solution plays a cardinal role in achieving these goals.

Sohar Port and Freezone

Customer Challenge

As Oman’s largest port and free zone, Sohar plays an important role in bridging the economics between Europe and Asia. Still growing, in the near future, all eyes will be on it as it focuses on sustainability, safety & an ideal hub for intercontinental trade and commerce. With the help from Tvilight and its partner Mustafa Sultan Enterprises, Sohar wished to become the first modern, safe and sustainable port in the Middle East with intelligent light-on-demand (adaptive) street lighting system.
The Assets Management Department has explored the recent development in the field of innovative technologies. The roads within the Port and Freezone area are not frequently used during the night, resulting in energy loss from the illuminated lights overnight. This is why we have identified a solution for real-time control of street lights within the respective areas.

Khalid Al Alawi, Manager of Assets Management at SOHAR

Solution

Conventional street lights were already replaced with LED street lights by the port authorities. Equipping LED street lights with Tvilight’s innovative motion sensors and intelligent outdoor light controllers, which enabled connected lighting system, however, began and completed in 2020.

Tvilight also offered an intuitive and feature-rich central management platform (CityManager) to the port authorities, which enable effortless monitoring, management and control of each luminaire from a centralized location. Thanks to the Open APIs, CityManager also opens up the possibility for port authorities to easily integrate third-party applications, whenever the need arises.
Empowering Intelligence

With innovative smart street light motion sensors, intelligent outdoor controllers, and an intuitive light management platform from Tvilight, the port authorities are able to provide just the right illumination, at the right time, at the right place, enabling:

- Significant improvement in public and traffic safety
- Exceptional energy savings
- Cut in electricity wastage
- Reduction in carbon emissions and light pollution
- Decline in operational and maintenance costs
- Creation of an ideal platform, allowing more room for innovations

Further, by employing Open APIs-based CityManager platform, the port authorities have the freedom to incorporate necessary third-party applications easily.

Motion sensor, Open APIs-based smart street lights truly empower Sohar Port and Freezone to become modern, safe and sustainable.
Project Summary

Location:
Sohar Port & Freezone, Oman

Client(s):
Sohar Port & Freezone

Application Areas:
Port and free zone roads

Products:
CitySense Plus (street light motion sensor)
SkyLite (wireless street light controller)
CityManager (light management platform)

Project Partner(s):
Mustafa Sultan Enterprises

About TVILIGHT

TVILIGHT PROJECTS B.V. is a European market leader specializing in motion sensors, wireless lighting controllers, and a complete portfolio of street light management software – to manage, monitor, operate and maintain citywide public lighting infrastructure. Our smart lighting platform and open API allow integration to city’s preferred software platform and thus constitute an open, reliable and future-proof base for Smart Cities and the Internet of Things. The company has installed over 600 projects globally across 20+ countries, including iconic cities and critical infrastructure around the world. Tvilight’s international projects include Amsterdam Airport Schiphol, Dutch Railways, Port of Moerdijk, Seoul, Beijing, as well as some of the largest German cities such as Düren, Münster, Cologne, Dortmund, and Berlin. To discover more about us and our products, visit www.tvilight.com

References: Sohar Port and Freezone, The Maritime Standard, Oman Observer