



PHILIPS

CityTouch

Public lighting



Floating Garden: **greener** with connected lighting

The Polish city of Szczecin, nicknamed “floating garden”, is using CityTouch software and LED luminaires to manage its lighting infrastructure.



Szczecin sparkles in the evening sky



Szczecin is the largest city and capital of the province Zachodniopomorskie Voivodeship. It is the seventh most populous city in Poland, and currently has more than 408 000 residents. Szczecin is a center of maritime economy, handling shipping from around the world. Because the downtown area is filled with greenery and rivers, the city is nicknamed Floating Garden. Szczecin aims to be an attractive place for investors and tourists, as well as a safe and friendly city for its citizens.

To enhance its attractiveness and competitiveness, the city's municipal authorities raised funding under the energy-efficient street lighting priority program of the Green Investment Scheme (GIS) in Poland, aimed at replacing existing street lighting with a modern, eco-friendly, and economical system. The National Fund for Environmental Protection and Water Management subsidized 45% of the city's total energy bill. Philips CityTouch software and its LED luminaires were selected for the project.

The Project

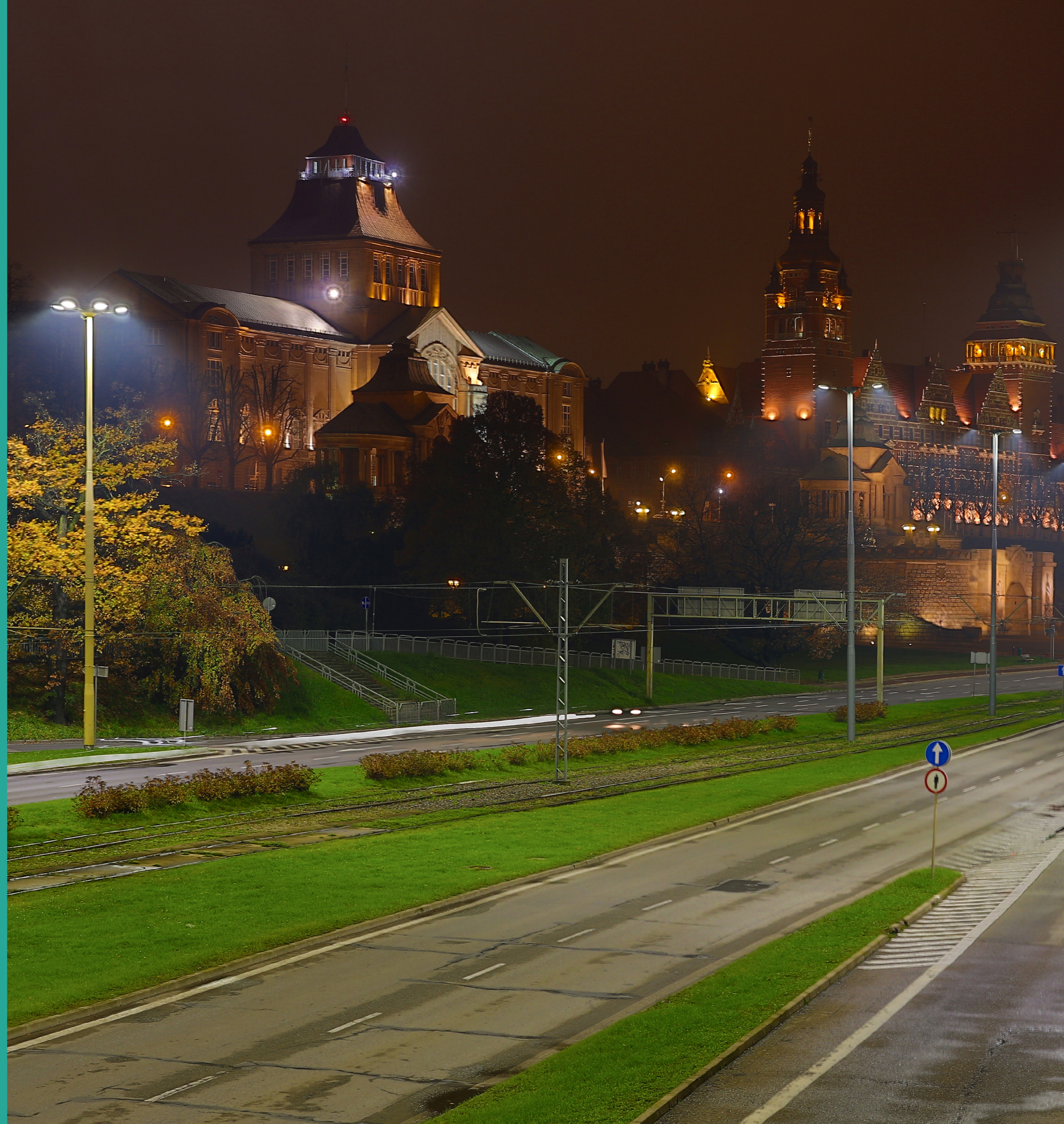
The lighting replacement involved the removal of yellow sodium street lights from the center of Szczecin, within the area of Victory Square and Kopernika, Narutowicza, Ku Słońcu, Santocka, Poniatowskiego, and Traugutta streets, and along the Oder West railway line. Beginning in September 2014, a total of 4 985 Philips Luma LED luminaires were installed, 1 888 of which are managed by CityTouch connect app.

With communications and control of individual light points, the lighting network was transformed into an intelligent system centrally controlled from the operator's computer. CityTouch connect app provides a high level of flexibility. Individual luminaires can be switched on and off, and they can be dimmed to any lighting level at any time or according to a daily or seasonal calendar. Luma luminaires are equipped with the latest "fit-and-forget" LED technology.

Luma enables pre-programming of the light output, lifetime of luminaires and power usage, so that the system can offer the best solution per light point in terms of energy saving and costs.

Flat housing design combined with Optiflux optics technology prevents upwards light distribution and provides efficient roadway illumination to current European standards. The ability to change the tilt angle of the Luma gives great flexibility in lighting selected areas.

The CityTouch software management platform delivers valuable information on each luminaire's status and energy use, while automatically sending fault notifications. All together, the connected lighting system provides cost savings up to 70%, which contributes significantly to the smart city approach of Szczecin. "Expensive 'scouting' for luminaire outages becomes redundant. As a result, both energy and maintenance costs are significantly reduced, by the improved management of the city's lighting. In case of luminaire failures the maintenance crew can be instructed immediately, therefore improving maintenance efficiency as well as lighting standards



“The CityTouch connect app provides a high level of flexibility to meet the different lighting needs in our city at any time.”

Radosław Tumielewicz
Director of Roads and Transport Authority, Szczecin



Benefits

The use of LED technology reduces electricity consumption by up to 50% compared to the previous sodium lighting system. The new lighting can be switched on and off or dimmed as needed, so that luminaires use only as much power as needed. Lower energy consumption directly translates into reduced CO2 emissions of almost 7 000 tons per year.

The system, therefore, supports the European initiative to achieve a 40% reduction of carbon emissions over 1990 levels by the year 2030. Meanwhile, the new lighting system will save the city up to 360 000 EUR annually.

The new lighting increases the attractiveness of urban spaces and gives Szczecin residents and visitors the opportunity to enjoy the charms of the city at night. The white LED light makes the cityscape, parks, and squares of Szczecin look more beautiful and brighter at night, which helps people to feel safe. Nearly 2 000 luminaires are managed by CityTouch, and can be flexibly dimmed depending on the weather, traffic movement, or organized events, saving further energy.

The Luma CityTouch Ready luminaires allow auto-commissioning, auto-locating, and automatic fault notification via the public mobile network. This replaces the complex and labor-intensive process of adding and importing all luminaire data into a conventional lighting management system. The CityTouch software platform offers a friendly user interface that is easy to handle and work with, e.g. map-based navigation.

With CityTouch, the city has access to data about the status of each luminaire as well as information about faults as they develop. Maintenance crews can be instructed immediately, improving maintenance efficiency. CityTouch connect app helps to realize additional savings through accurate energy metering.



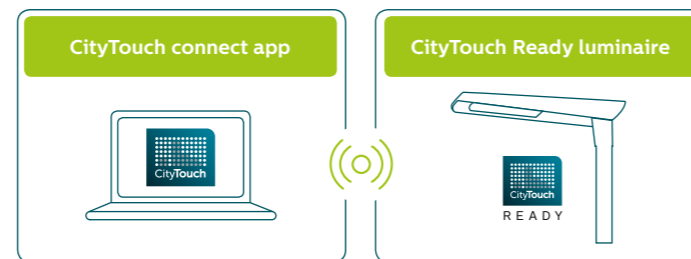
The CityTouch Advantage

Smart cities use new intelligent lighting and communication technologies to reduce their carbon footprint and enhance the quality of life throughout the city.

Municipalities use Philips CityTouch software to manage public lighting in order to respond to changing traffic conditions and different needs at different hours of the night.

It also monitors the entire lighting infrastructure, achieving massive savings in energy and maintenance costs.

CityTouch Ready luminaires connect automatically to the CityTouch lighting management system and do not require any additional controls hardware.



CityTouch connect app

- Remote control
- Remote monitoring
- Energy metering

CityTouch Ready luminaire

- Auto-commissioning
- Auto-locating
- Auto-fault-notification

