# SMART CITY HELMOND

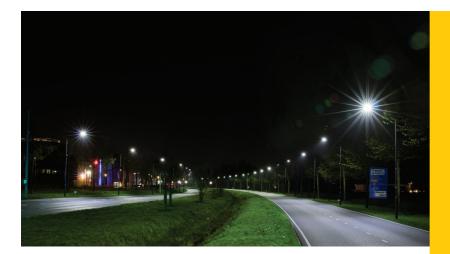
#### **Reference Project / City Lighting**

# TRANSFORMING HELMOND WITH CONNECTED INTELLIGENT STREETLIGHTS.





## **Project Information**



Intelligent streetlights on Europaweg, Helmond 2017

Dutch city Helmond adopted the intelligent street lighting technology from Tvilight to make the streets safer, cut energy use, optimize maintenance, and become a more attractive place for working and living. Thanks to Tvilight Open API and best-in-class interoperability, Helmond has laid a foundation for a Smart City. Application areas:

main and secondary roads, residential neighborhoods, pedestrian zones and bicycle paths

Location: Helmond, the Netherlands

**Tvilight products:** CitySense, SkyLite, CityManager (with a variety of LED streetlights)

**Client:** Municipality of Helmond Connecting a growing industrial city

Helmond is a historic city in North Brabant, the Netherlands, with about 90,000 residents and more than 25.000 public lighting points.

The city is known as a knowledge hub and a living lab for the automotive industry, where many companies design, develop and launch innovative new transport technologies.

As a growing industrial city, Helmond has been facing several challenges. First of all, the city needed to find ways to save energy and become more sustainable in its daily operations.

Furthermore, the municipality wants to tackle the negative effects that street crime has on public safety and comfort. To achieve these goals as well as to enhance the attractiveness of the city, local authorities have focused attention on improving public street lighting.

> Heeklaan Helmond 2017

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city attractiveness.

**CUSTOMER CHALLENGE:** how to slash the energy use while maintaining public safety and comfort? Helmond was looking for a solution to help it save energy, fight street crime and uplift the

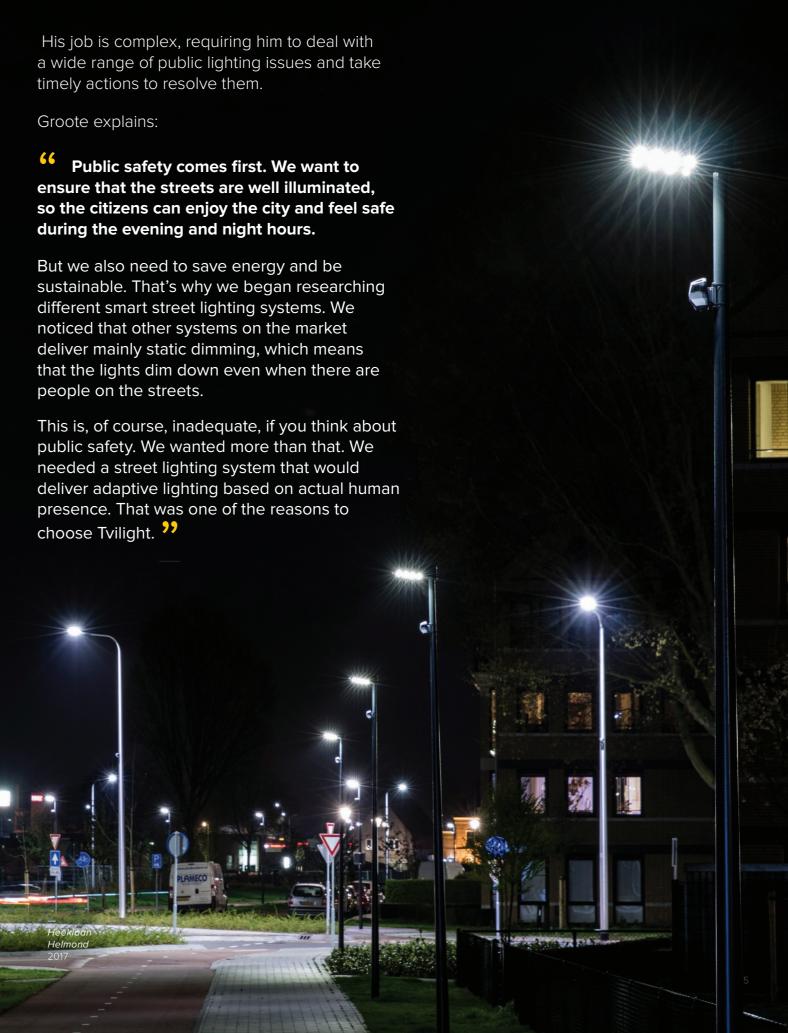
Sjef de Kimpepao

It is known that public safety and street illumination are linked: safer streets are the ones that are well illuminated. However, striving to provide citizens with sufficient lighting levels, cities typically end up with overly-illuminated streets where the lights burn for hours without a single living soul around them. In short, cities spend on powering the streetlights that burn for nobody. At the same time, switching off the lights completely is never an option for reasons of public safety.

How can municipalities save energy while ensuring citizen safety with the right amount of light? This dilemma is well known to cities worldwide. As much as there is a need to save energy and cut costs, there is also an imperative to put citizens first and ensure their safety and comfort.

One of the leaders who understands this challenge well is Alfred Groote, Public Lighting Manager at the Municipality of Helmond. He says:

My job is to provide adequate illumination for our citizens and to make sure that the municipality achieves this at a reasonable cost. "





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## **SOLUTION:**

## The right amount of light with Tvilight

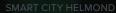


**CitySense delivers** true "light on demand", just the right amount of light when and where it is needed

Groote is in direct contact with the local citizens and is well aware of the resident's needs and preferences when it comes to street illumination. **Feople usually** complain that there is either too much light or too little. That's always the trick-to get to a point when the level of illumination is just right. Motion-sensing street lighting technology helps, because it allows to have just as much or as little light as needed. With Tvilight, Helmond preserves citizen safety with maximum energy savings. <sup>>></sup>

In 2013, the city started testing CitySense (Tvilight streetlight sensor) on selected locations and was quickly convinced of the benefits. Today, Helmond counts more than a dozen of intelligent street lighting networks extending across the city and continues to roll-out the solution further.







# Smart City Helmond safe, sustainable,

and attractive

In Helmond, one can see the true versatility of the Tvilight intelligent street lighting solution. The wireless street lighting controllers were deployed throughout the city in a variety of application areas.

#### Alfred Groote:

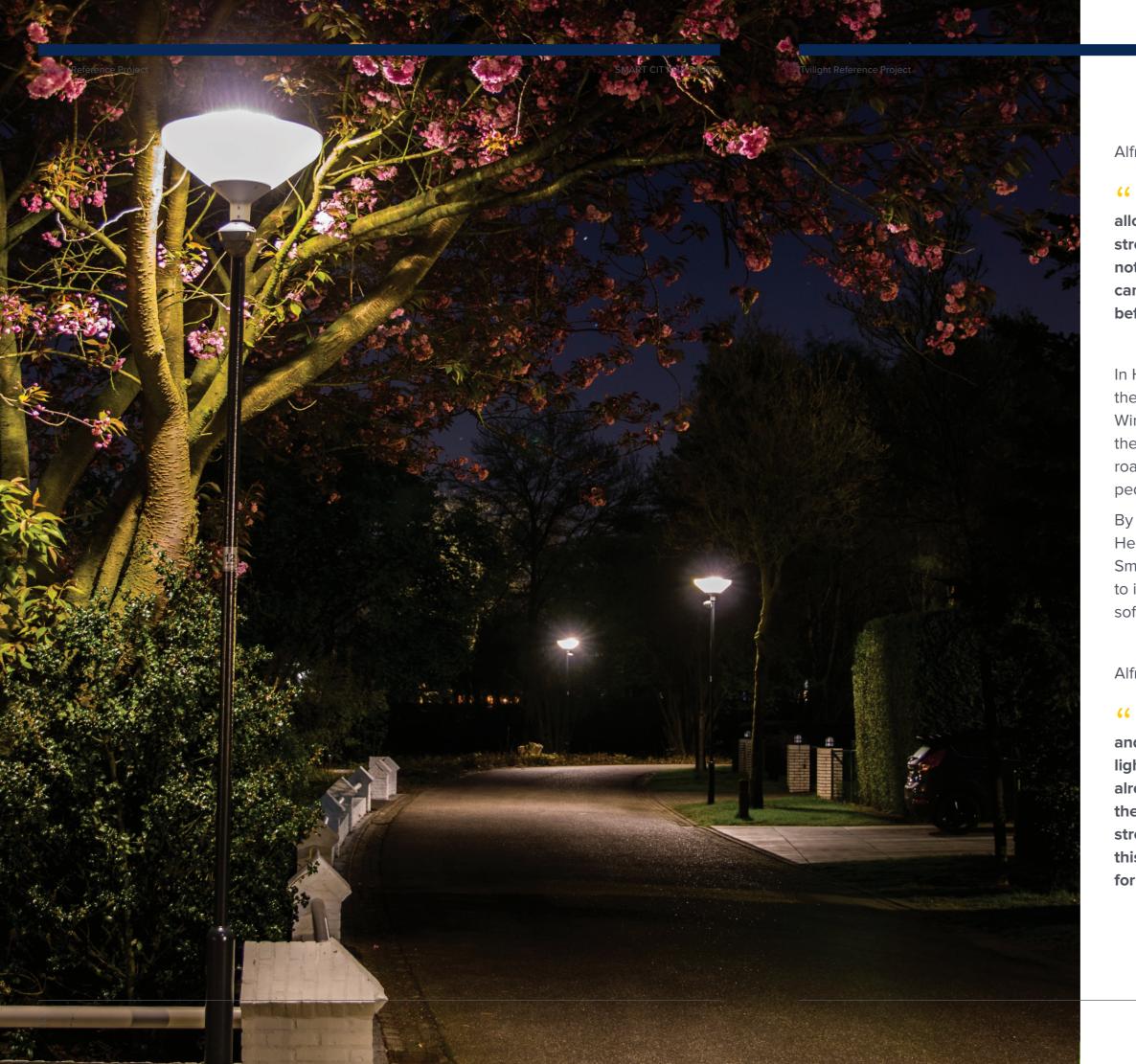
step towards this goal. ??

During the past years, Helmond has made significant progress in improving the street safety, which is a result of a variety of measures, including a better street illumination and the implementation of new technology.

With the deployment of wireless smart street lighting, Helmond's streetlights are centrally managed, monitored and controlled with the Tvilight CityManager software. Using the software, the municipality can set up dimming and switching profiles as well as regulate the brightness of each streetlight based on a time schedule, type of the road and needs of local citizens. CityManager online platform delivers valuable information and control of luminaires on the individual and group level.

Tvilight connected intelligent street lighting technology has helped Helmond to slash the energy use by up to 70% and improve the maintenance efficiency by up to 50%.

#### We want to make Helmond a smart city and a great place for people to live and work. Connected intelligent lighting is a logical



<sup>66</sup> I was looking for a system that would

allow us to remotely monitor and manage the streetlights across the city. A smart streetlight notifies us about a failure immediately, so we can take corrective action and repair it even before a citizen notices the problem.

In Helmond, one can see the true versatility of the Tvilight intelligent street lighting solution. Wireless controllers are deployed throughout the city in a variety of applications: from roadways, and residential neighborhoods to pedestrian streets and bicycle paths.

We are interested in sensor applications and Big Data analytics. We see connected lighting networks as a gateway to this. We are already testing several sensors and exploring the possibilities to interconnect smart streetlights and traffic lights. To achieve all of this you need a system that is open and ready for the future. With Tvilight, we can. \*\*

Alfred Groote:

By rolling out the connected lighting networks, Helmond has prepared an infrastructure for a Smart City. Tvilight Open APIs enable Helmond to integrate multiple third-party sensors, software and applications.

Alfred Groote continues:



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