

# SMART LIGHT CONCEPTS

Carbon emissions produced through public lighting can be greatly reduced using existing and new technologies. 2 universities and 7 government agencies and organisations from the UK, the Netherlands, Belgium and France have teamed up to find solutions that will help reduce CO<sub>2</sub> emissions from public lighting. The EU-funded Smart Light Concepts (SLIC) project aims to accelerate the roll-out of smart public lighting systems between 2018 and 2021.



## RESIDENTIAL AREA GROTE HEIDE, BONHEIDEN (IGEMO)

### What

A combined system of LED, dynamic and low impact lighting in a new residential area.

### How

- Dynamic lighting with motion sensors
- Reflectors on solar energy
- Coloured lighting to lower impact on habitat
- Wireless communication between lighting posts, controlled by remote central

[www.igemo.be/slic/](http://www.igemo.be/slic/)

## CITY OF BRUGES

### What

The introduction of LED lighting in a UNESCO protected world heritage city centre pilot site.

### How

Newly developed (same appearance) smart-ready lantern armatures with LED technology (technological challenge).

[www.brugge.be/europese-subsidies#SLIC](http://www.brugge.be/europese-subsidies#SLIC)

## AMIENS MÉTROPOLE

### What

Dynamic LED-based lighting in a commercial zone for motorised vehicles.

### How

Reduce power consumption & carbon emission. Get consent of citizens (drivers and pedestrians) and users of the commercial zone (sellers, workers, consumers). Analyse security & norm compliance (NF C13-200).

[www.amiens.fr/Institutions/International/Cooperations-eu](http://www.amiens.fr/Institutions/International/Cooperations-eu)

## MUNICIPALITY OF ETTEN-LEUR

### What

Public lighting management system with static and dynamic dimming, motion sensors and solar energy in the rural area.

### How

Co-creation with inhabitants, focus on balance between dimming regime, road and social safety.

[www.slic-el.eu](http://www.slic-el.eu)

## SMART SUIKERFABRIEK SITE MUNICIPALITY OF VEURNE

### What

Intelligent public lighting in a mixed urban redevelopment site.

### How

- Movement detection
- Bicycle counting
- Sensor for temperature and humidity

[www.wvi.be/nl/werkvelden/europese-subsidieprojecten](http://www.wvi.be/nl/werkvelden/europese-subsidieprojecten)

## SMART SUIKERFABRIEK SITE MUNICIPALITY OF VEURNE

### What

Intelligent public lighting in a mixed urban redevelopment site.

### How

Connected street lighting, sensor technology for nuisance detection and detection of parked trucks.

[www.suikerfabriek.be/slic-innoveert-openbare-verlichting-op-suikerfabriek-site](http://www.suikerfabriek.be/slic-innoveert-openbare-verlichting-op-suikerfabriek-site)

## SUFFOLK COUNTY COUNCIL

### What

Linking motion and temperature sensors directly to the street light data hub (1).

### How

Adaptive lighting-radar/camera solution utilising existing lighting sensor deployment with road surface temperature sensing.

## SUFFOLK COUNTY COUNCIL

### What

Linking motion and temperature sensors directly to the street light data hub (2).

### How

Multi-data street lighting: sensor system designed to collect and integrate the following 3 sources of data: Road traffic flow, Pedestrian counts, Temperature (ice risk).

## FACTS & FIGURES

- 1 European research project
- 3 years
- 2 universities
- 7 government agencies and organisations
- 4 countries
- 4 themes: Finance, Technology, Stakeholders & Safety

## DEVELOPMENT AND VALIDATION OF METHODS, TOOLS AND CONCEPTS FOR:

- 7 funding models
- 7 business cases
- public involvement and support (more than 200 beneficiaries)
- 1 decision support tool
- 1 cross-border knowledge platform

## ROESELARE (PROVINCE OF WEST FLANDERS)

### What

An off-grid PL system with solar nano grid for bicycle highway in City of Roeselare.

### How

Solar, storage, low-voltage network, dynamic, SMART: possibility of off-site management and maintenance.

[www.west-vlaanderen.be/slic](http://www.west-vlaanderen.be/slic)