

Document 1 :

Energy-efficient street lights could be a ‘smart’ way to cut carbon emissions

2016 Euronews

Denmark is carrying out an exercise in energy efficiency.

A Copenhagen suburb is taking part in a massive experiment to determine the effectiveness of so-called ‘smart lights’.

5 These energy-efficient street lamps could cut carbon emissions, since they brighten as pedestrians, cyclists or cars approach, but remain dark when no one is nearby.

Each light can be controlled individually by iPad or phone.

The experiment is being carried out by a laboratory called the Danish Outdoor Lighting Lab, or DOLL.

10 “From the control room every lamp has an IP address, so you can monitor the run time, the efficacy, the lumen output or the power consumption,” he explained.

Some lights are driven by solar energy and wind power, which further reduces their carbon footprints. Sensors tracking air quality, traffic density, noise, weather conditions and UV radiation will also be tested on site.

DOLL’s Chief Technical Officer, Kim Brostrom, explained how the experiment was being run.

15 “We have installed nine kilometres of street(light)s: we have 280 masts placed here; we have 50 different solutions, we have ten different management systems; and we have a lot of different sensors and things out in the open area.”

Street lighting accounts for up to a fifth of the Danish capital’s electrical consumption.

20 Technicians believe the solutions currently being tested could help cut emissions by up to 85 percent.

Document 2 :

2016 Euronews

