A photograph of a young child, likely of African descent, smiling broadly and holding up a glowing, multi-colored light stick. The child is wearing a light blue t-shirt with a graphic. The background is a blurred night scene of a festival or fair, with various colorful lights (blue, green, yellow) and other people visible in the distance.

# Nove inteligentne tehnologije u sustavima javne rasvjete

**Stjepan Tvrtko Ćavar**

KAM Public Sector Cro / B&H

Zagreb, 18.9.2015.

1 x Žarulja

100 kWh / godina  
= 42 kg CO<sub>2</sub> / godina



= 1,5 zdravo stablo





# Moguća ušteda u Europi samo na efikasnoj rasvjeti!



28 000 000 000 kg CO<sub>2</sub>  
12 snažnih elektrana  
**> 50 000 000 bar. nafte**



# Smjena tehnologija: cijevi HID > poluvodiči LED



Uštede na konverziji  
Električne energije u  
svjetlost  
40-60%





Zagreb  
Samoborska cesta







Umag  
Ulica 1. svibnja  
77% energetske uštede





Zaprešić  
Šetnica





Kaštela











# UNESCO godina svjetlosti 2015.







# Climate Neutral Group

## Carbon offset projects:





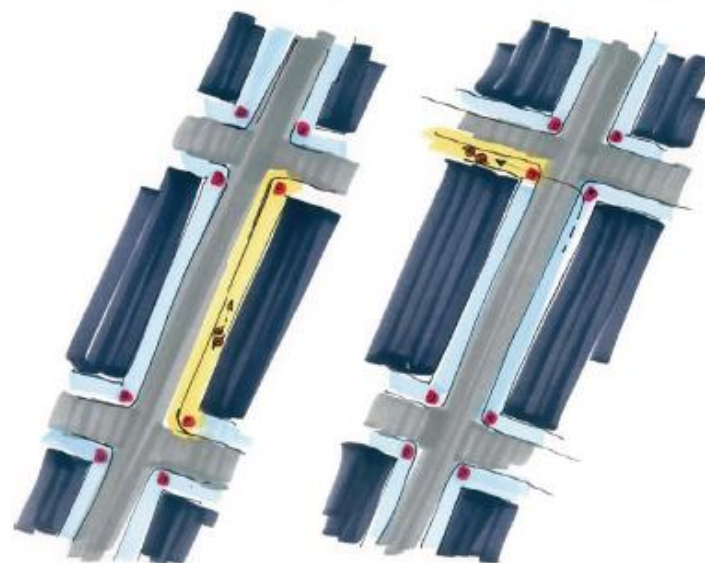
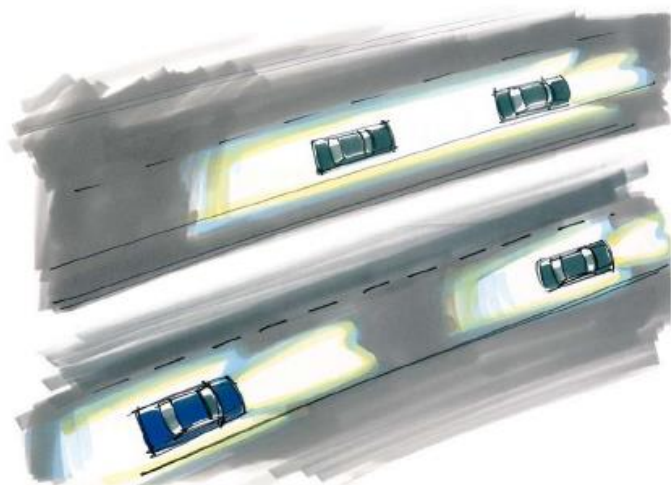


Carbon Neutral  
SpeedStar

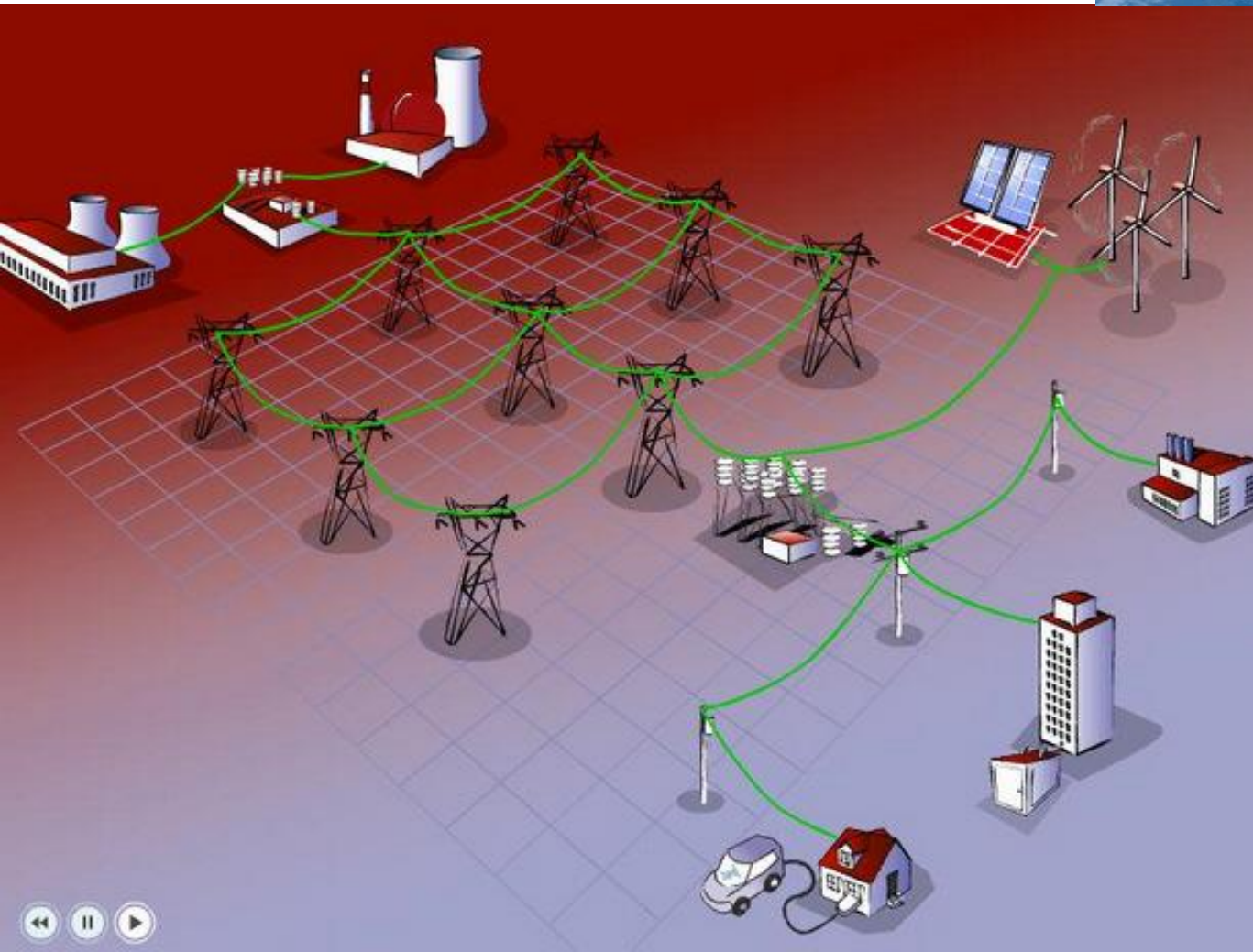
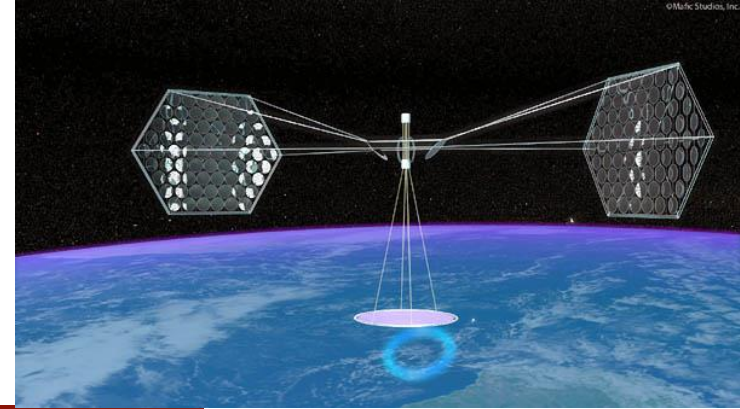




# Inteligentna dinamička rasvjeta

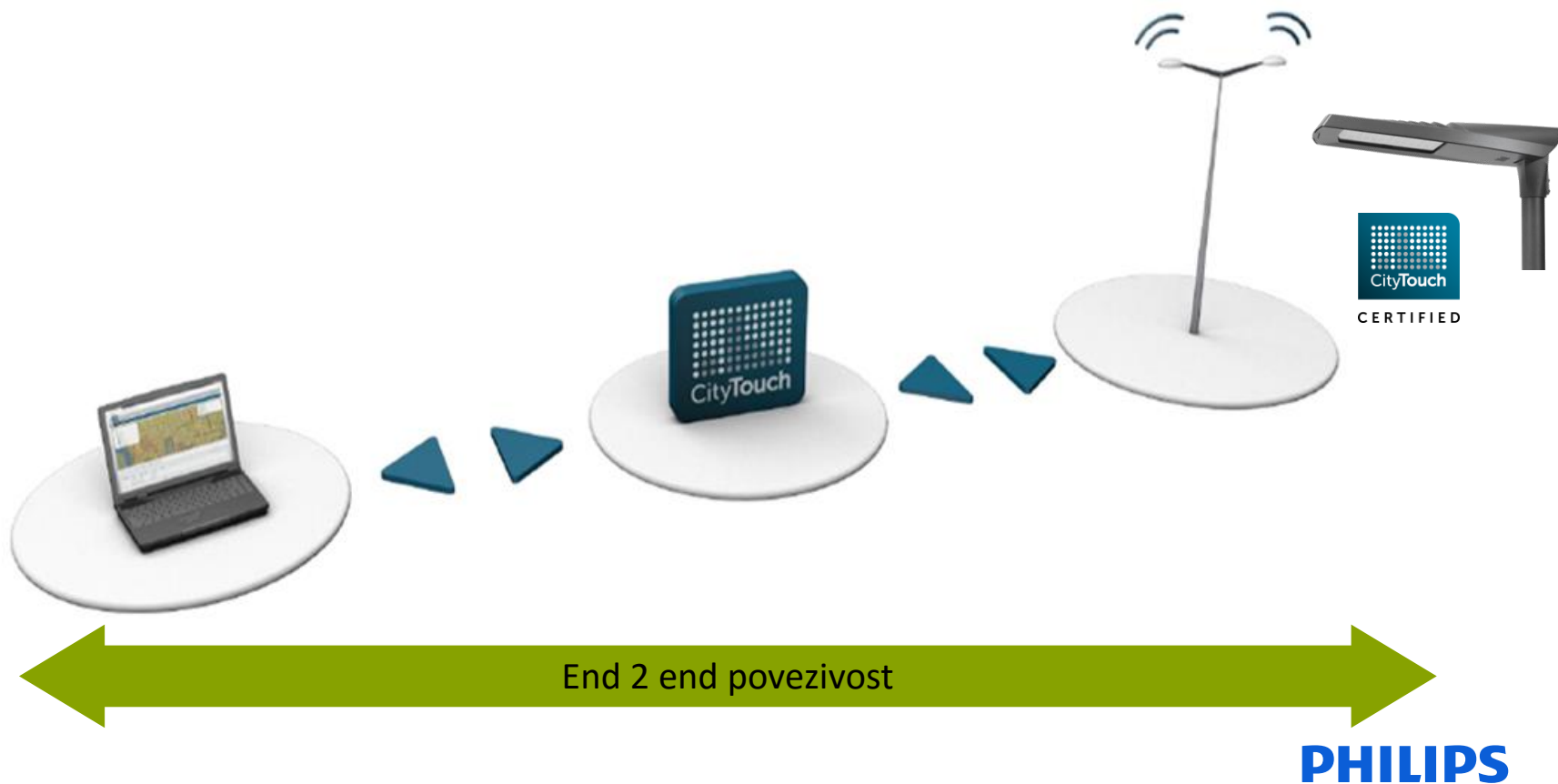


# Energy internet



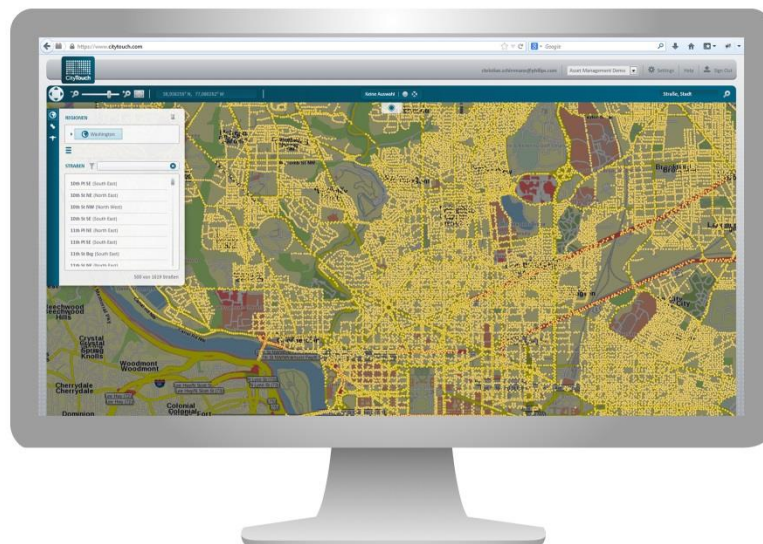


# Internet of things





# CityTouch Cloud usluga



**CityTouch LightPoint**

Asset management aplikacija



**CityTouch LightWave**

Remote management aplikacija



IntelligentCity

**PHILIPS**



# Paris RATP



Lighting of transport public spaces is currently  
**19%** of RATP's overall energy consumption.  
Switching from conventional to LED lighting  
reduces energy consumption necessary to light  
the metro and RER networks by **50%.**





# Dubai, UAE



In the Middle East, lighting accounts for **22%** of the energy bill. Individual cities can reduce their energy bill by **50%** simply by switching to LED.

For Dubai Municipality, the potential savings are – **6,200 tons** of CO<sub>2</sub>.





# Los Angeles, USA

Associated costs of on-site new lighting installations are reduced from days to minutes

New retrofit technology helps cities protect investments by making conventional third-party street lights

**smart and connected**





# Barcelona, Spain

The luminaire **integrates** functional lighting, architectural projectors and telecommunications devices.

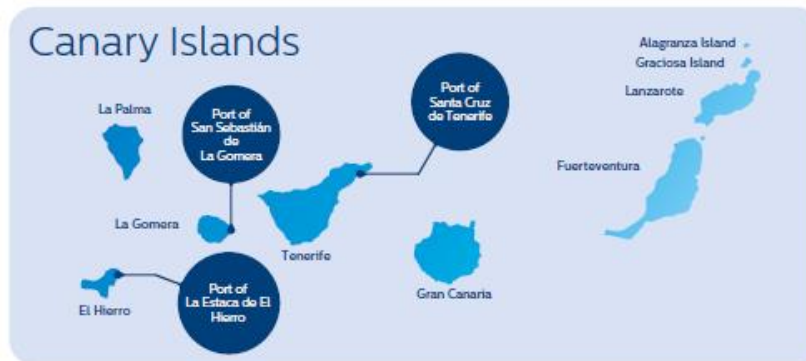
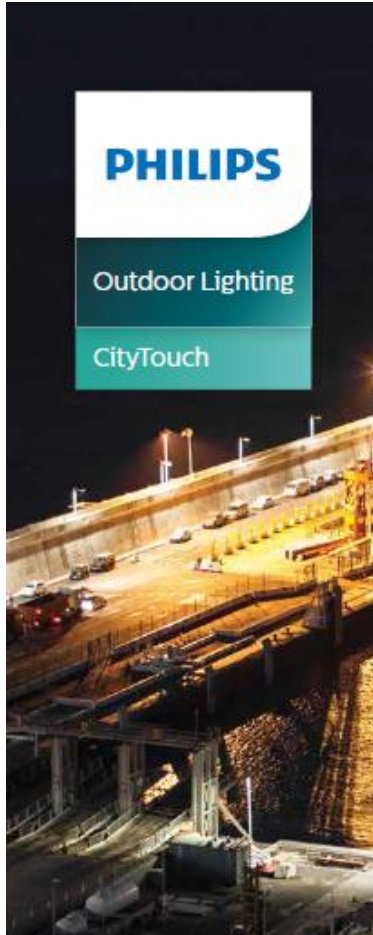
CityTouch software platform allows for **remote management** per light point.





# Canary Islands

## Santa Cruz de Tenerife



“With CityTouch, we can manage the new Philips LED luminaires, **as well as the sodium vapor lamps that we haven't yet replaced.**”

Santiago Yanes  
Lighting Operator, Ports of Tenerife

**PHILIPS**

# Connected office 'The Edge', Deloitte and AKD, the Netherlands

Lighting accounts roughly for  
**19%** of the world's electricity use.  
Approximately **40%** of all the  
electricity used in buildings comes  
from lighting.











Dubrovnik  
Gradska vijećnica / Knežev dvor

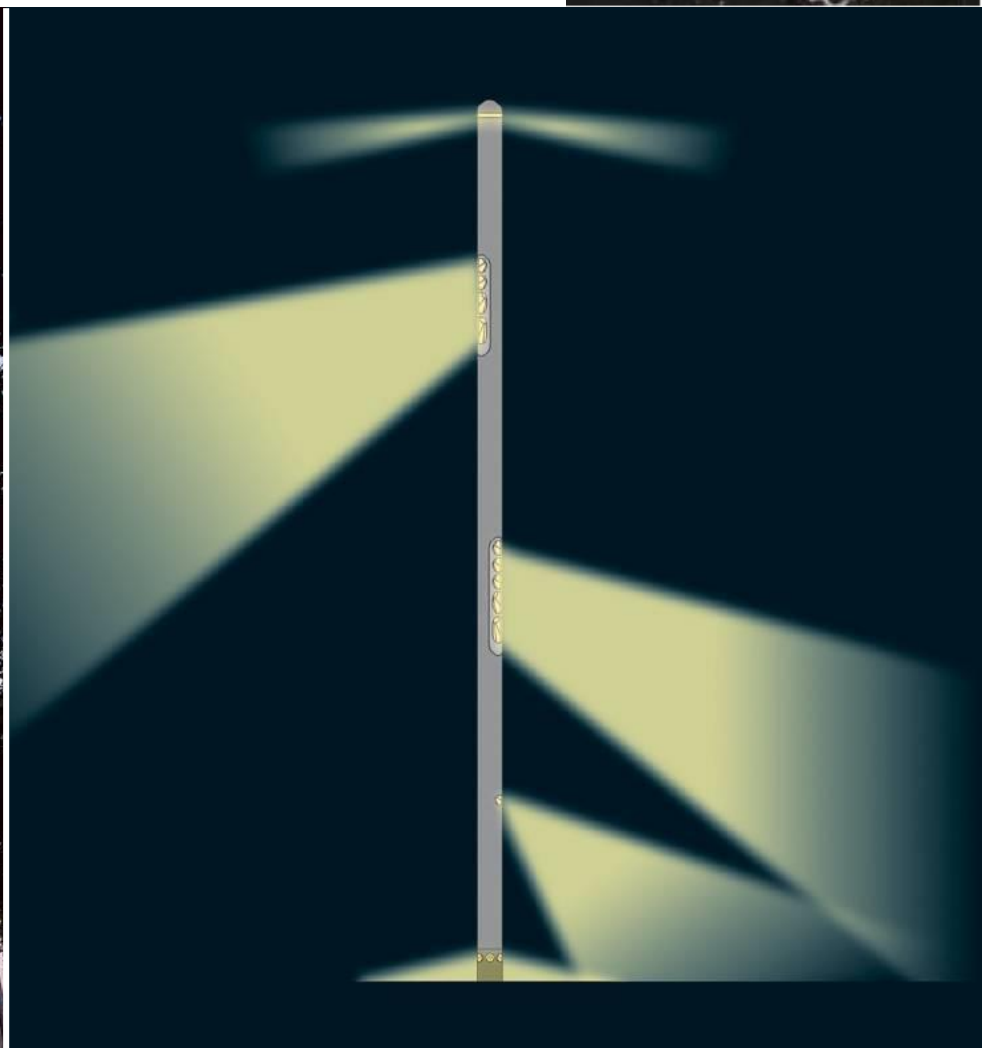




„Lighting giants”  
Pula



# Living tomorrow, Amsterdam Multifunkcionalna rasvjeta.







Hvala!