

# PHILIPS

sense **and** simplicity

## Sustainable LED Lighting in Local Communities

Erwin Dolmans

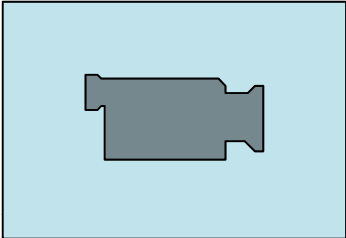
Sr. Director Marketing – Philips Lighting

CEPS Climate Change Conference – Brussels, March 02, 2011

**PHILIPS**

# Introduction

Philips Outdoor Lighting



# LED in Architectural Illumination

Since 1999



**PHILIPS**

# LED in Architectural Illumination

Since 1999



*Buckingham Palace, UK*

**PHILIPS**

# LED in Architectural Illumination

Since 1999





Sky Tower  
Auckland, New Zealand  
ColorReach and ColorBlast  
Installed 2009



Singapore Flyer  
ColorBlast and iColor Accent  
Installed 2008



Adelaide Entertainment Centre  
Adelaide, Australia  
ColorGraze  
Installed 2010



**PHILIPS**

# LED in Street & Road Lighting

Since 2009



*motorway A44, NL*

**PHILIPS**

# LED in Local Communities

Since 2009

*Port d'Ensuès la Redonne, France*



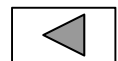
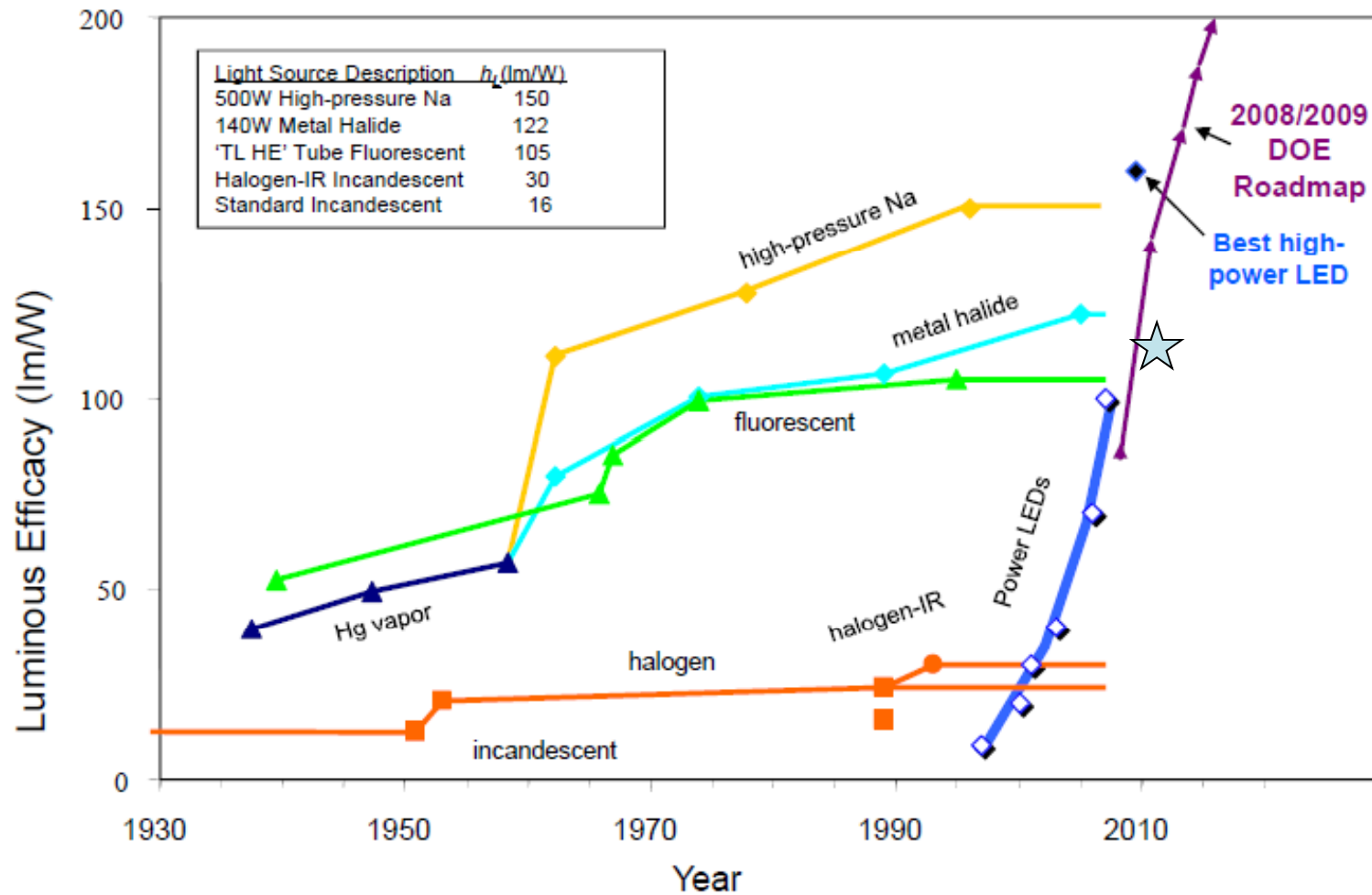
## LED in Local Community Lighting Statements



- LED development "just" started ;  
will be further developing over the next 10+ years
- Controls / Intelligence inroad is the next revolution in Lighting  
every light point will have software inside
- China + USA lead the way : >750.000 systems installed  
Central government support through "21-cities" program in China
- Breakthrough in Europe in 2010 in spite of / due to crisis  
>150.000 systems installed so far



# LED Evolution Compared to Conventional Lighting Technology



# LED-based public outdoor lighting in Europe

Well over 150 cities

**Some of the cities  
that have installed  
LED-based Public  
Lighting:**

London  
Berlin  
Frankfurt  
Brussels  
Lyon  
Lille  
Marseille  
Grenoble  
Rome  
Firenze

Copenhagen  
Madrid  
Valladolid  
Granada  
Murcia  
Bilbao  
Zaragoza  
Amsterdam  
Tilburg  
Rotterdam  
Eindhoven

....  
>150

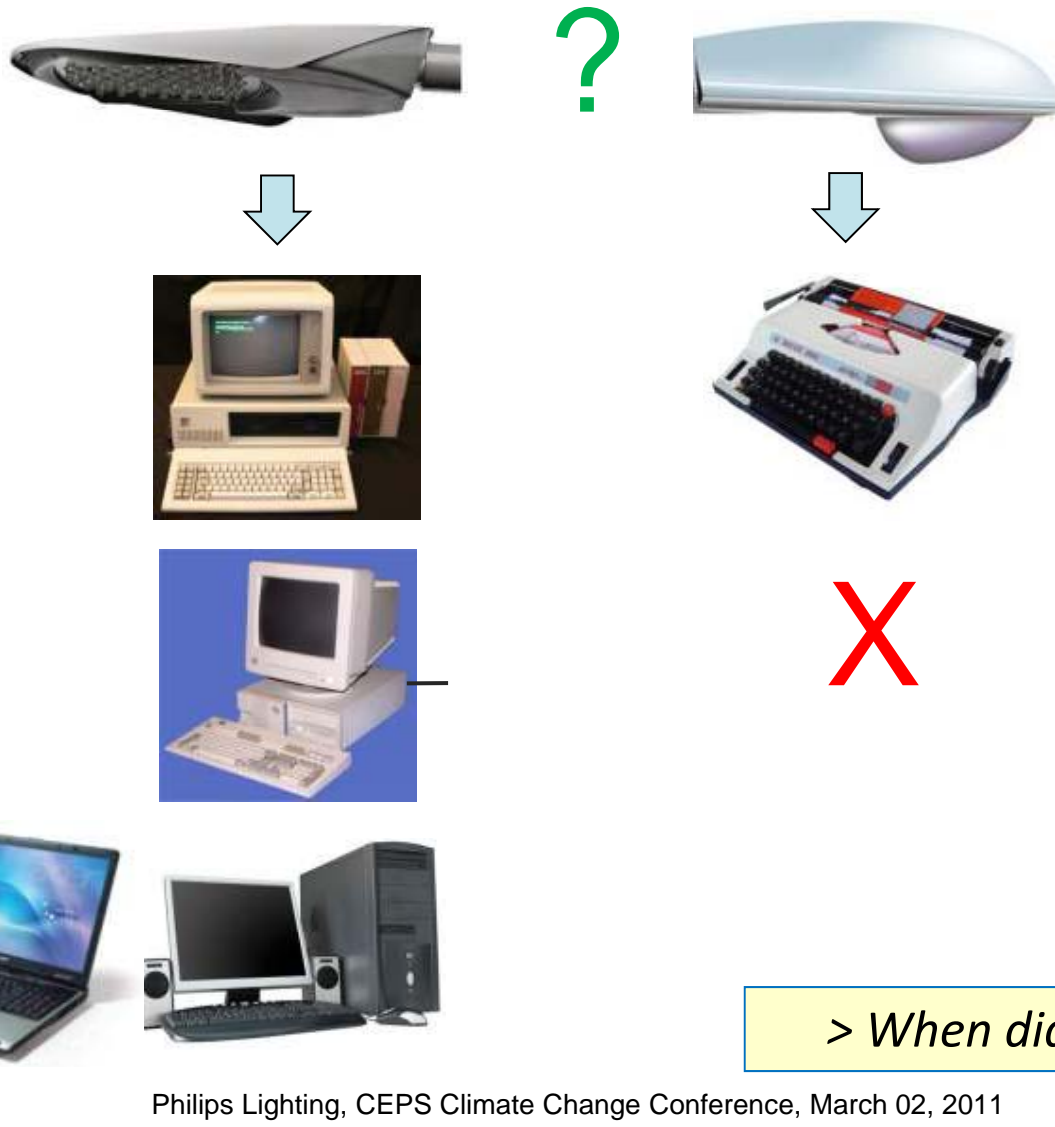
## LED in Local Community Lighting

### Some Statements

- "LED lighting is a Hype and Expensive"
  - a) No, a hype fades out ; LEDs will not
  - b) Yes, true - for the initial investment
  
- Energy Saving vs. Conventional Lighting : yes, since 2009 meaning CO<sub>2</sub> emission reduction
  
- Acceptable pay-back time : 2012
  
- Why apply anyway :
  - show your innovative character
  - benefit from social value creation (white light, perceived safety)
  - get on the learning curve!
  
- Cities suffer from the "**PC-Dilemma**"

# LED in Local Community Lighting

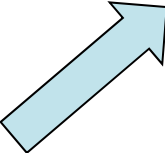
## The PC Dilemma



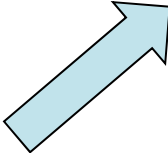
# Cost or Value?

Towards Sustainable Investments

The Price of a Lamp



The Cost of Light



The Value of Lighting

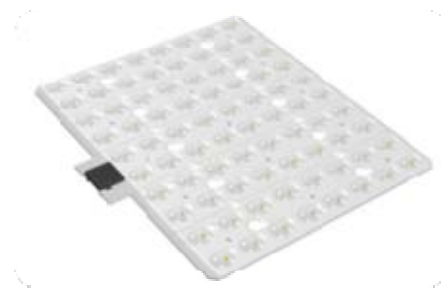




## Upgradable LED Engines

Ensure to make a Sustainable Investment

- LEDs last for 50,000 hrs = 12 years
- Poles, wires & luminaires are used for 35+ years
- Choose for a solution with **upgradable Light Engines** :
  - easy & cheap replacement of failing lights (like a lamp)
  - benefit from technology improvement over time



## Upgradable LED Engines

To overcome a short lifecycle

- Industry Standards Consortium : [www.zhagastandard.org](http://www.zhagastandard.org)
- Focus on standardization of interfaces
- On initiative of Philips:  
47 Regular members  
64 Associate members
- Consumer & Public stakeholder protection



Thank You



