Kristoffer Gundersen (Norway) **Applied Computer Science**

Lisa Toussaint (France) Packaging Engineering

neàpolis

Sensor 1

Sensor 2

Acquisition

Unit

Brain

Unit

••• ••• UPC

Departament de Llenguatges i Sistemes Informàtics

UNIVERSITAT POLITÈCNICA DE CATALUNYA

Piotr Czurak (Poland)

Telecommunications & Computer Science

International Sales & Purchasing Engineering

Felix Ketelsen (Germany)

Multiplexer

Demultiplexe

URBAN MODE

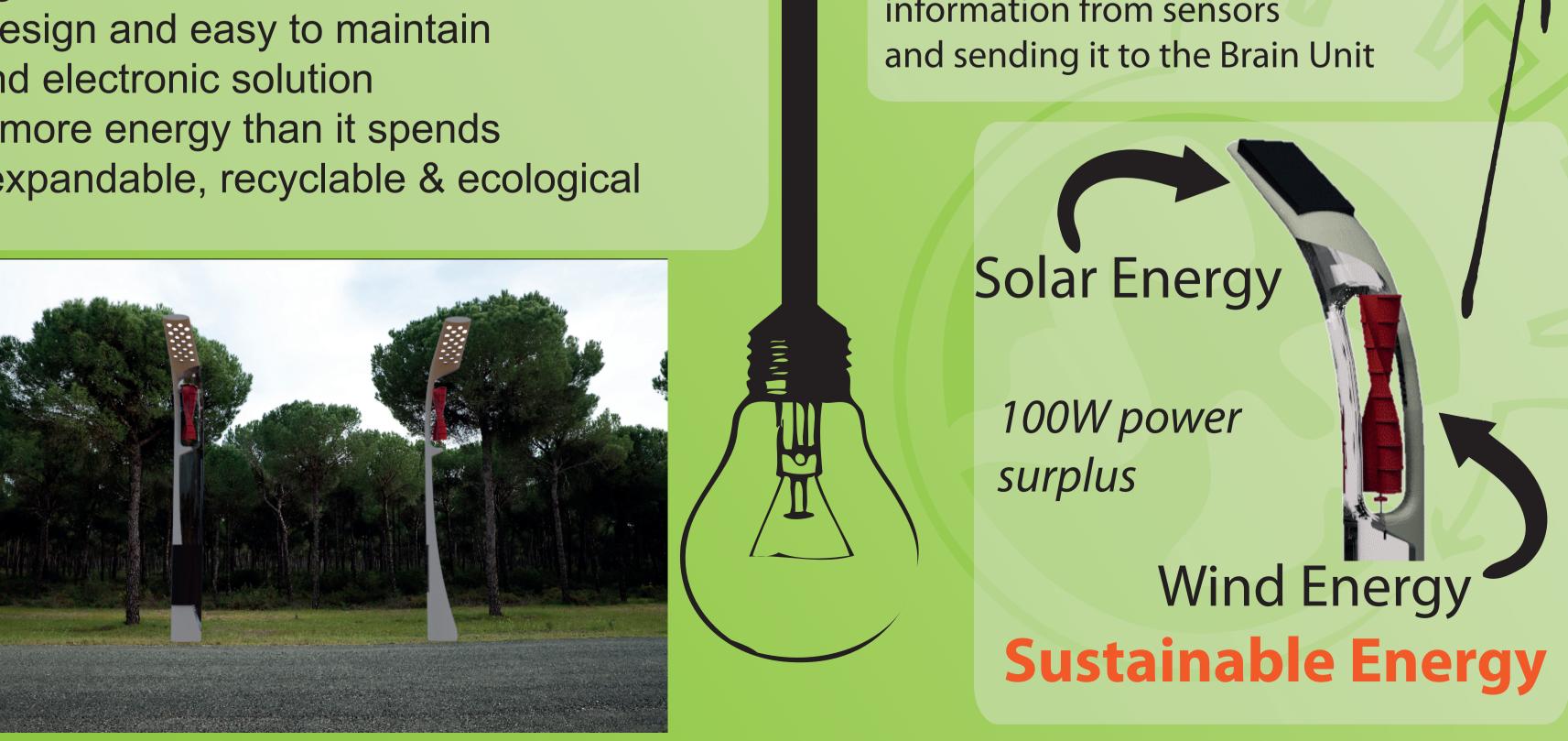
«Smart lighting for a smart city -Encourage the network»

OBJECTIVES

Creating an electronic solution for a new urban element to turn Vilanova i la Geltrú into a Smart City.

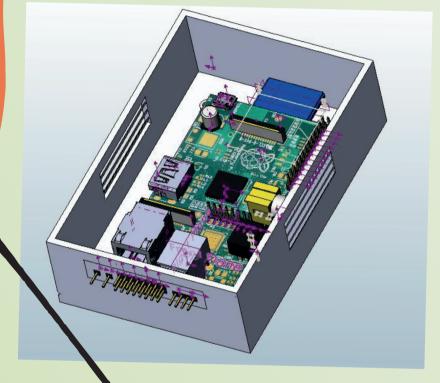
This project is divided into an electronic part (EPS) and a design part (IDPS). This presentation is the EPS part and these are the electronic objectives:

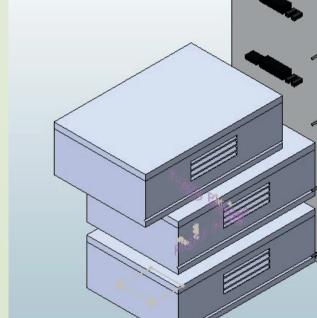
- Create a new sustainable standard
- Add intelligence to the street environment
- Modular design and easy to maintain
- Electric and electronic solution
- Generate more energy than it spends
- Durable, expandable, recyclable & ecological



Modularity

- Rack system
- Standard boxes for electronics
- Easy adding and removing of modules





Power Unit

Mother Board

Electronic Solution:

Motherboard connects all the parts togheter, gathering information from sensors





Raspberry Pi

Arduino Uno

Functions

- Wi-Fi
- Collect information from the environment
- Mobile phone charger
- Interactive display with information about the city
- Parking facilities
- Apparatus for physical exercise
- Video surveillance for safety



