



Remote management in public lighting

Diputació de Barcelona



Remote management in public lighting: the example of Viladecans

Objectives

1. Reduce energy consumption and, thus, GHG emissions
2. Optimize public lighting
3. Increase the quality of public lighting
4. Improve public lighting management

DIBA is giving support to this municipality in order to improve its public lighting. Viladecans is a town over 60.000 inhabitants near Barcelona. Viladecans joined the Covenant of Mayors in 2008 and approved its SEAP on 2009.

<http://www.mayorsinaction.eu>



2. Methodology: Steps of implementation and Tools

DIBA is helping municipalities implementing energy efficiency and energy saving projects in the LG of the province of Barcelona. The RESDIBA-ELENA project has been a way to develop this assistance

- (1) LG asks for support to DIBA through our website. Previously it is recommended that the municipality has talked with our technicians
- (2) DIBA, in case there hasn't been a previous contact, contacts with the LG.
- (3) Asks a minimum set of data on the public lighting, energy consumption, sources, number of lamps, type of lamps, power of the lamps, management of the public lighting
- (4) A first quick feasibility analysis is made in order to see the potential savings that can be implemented in the public lighting.
- (5) The municipality decides if the project will be implemented. If so:
- (6) DIBA pays the executive projects and the business studies to see which is the best way to finance and develop the project
- (7) The LG, with DIBA's assessment, decides how to carry on the project.
- (8) DIBA can give support to the LG helping in the drafting of the tenders that can be either for a standardized public procurement or maybe to have a third party financing (PPP).





Pàgina d'inici

La Diputació de Barcelona posa a la vostra disposició el Portal de Tramitació, destinat a facilitar la tramitació electrònica i seguiment de les sol·licituds dels ens locals i altres administracions.

Avisos

Catàleg de serveis 2014 (31/01/2014 - 31/12/2014)

1. LG ask for support. A first questionnaire is sent to them



2. Questionnaire assessment by the REDIBA team



3. First meeting with the LG



4. Commitment letter of the Mayor so they will carry out the resulting project



5. Contracting specific studies or direct support by REDIBA technicians



3. Actors of the process -Roles

Covenant coordinator: DIBA. DIBA pays the necessary studies and gives the specific technical and economical assesment for the project being implemented

Local governemnts: They are the ones that will implement the project. They are the ones asking, formally, for our support, they must comit in developing the project and the ones financing it or the tender responsables.

Private sector: They are the ones making offers for the tenders and so executing the projects



Viladecans:

On going project.

The remote management will be done through each control panel, but there will be the possibility to change it to a point-to-point control system in the future.

For each control lighting panel:

- There should be installed remote management terminals.
- There should be installed communication systems (via GPRS, optical fiber or WIFI, according to the Council's needs)
- Each control lighting panel should be adapted so it can support the remote management system.

Data from the remote management system must be connected with the maintenance and accounting system proposed, in order to facilitate remote measurements of the consumptions and alarm and warning systems for the control lighting panel.



Viladecans:

The control lighting panel will include::

- Astronomical clock
- Remote switching on and off and control lighting regulation.
- Alarms and warnings concerning the control lighting panel (drop line, door open, overconsumption, etc.)
- Measurement and storage of consumption data and other electric parameters..
- Communication system might be through: GPRS, WIFI or optical fibre.
- The possibility to be transformed into a point to point control.
- Open software which can be integrated in other systems and platforms.
- Possibility to read any data from distance, to download them and to have them available when disconnected in order to analyze them.
- Management of users and profiles.



THANK YOU

