



## MF Case 9: Barcelona, Spain

### Barcelona Provincial Mitigation Funding

This example showcases how with very little own funding energy efficiency projects were implemented through the involvement of energy service companies (ESCOs) and the development of public-private partnerships for renewable energy investments in public buildings. After Barcelona province went through the process of preparation of its sustainable energy action plan (SEAP) in 2013 investments of more than € 1, 172 Million were identified to save energy. The plan was to focus on energy efficiency in public buildings and lightning and on bio thermal heating. Expected results were savings in energy of MWh 5,517 Million and an increase in energy production of MWh 600tsd.

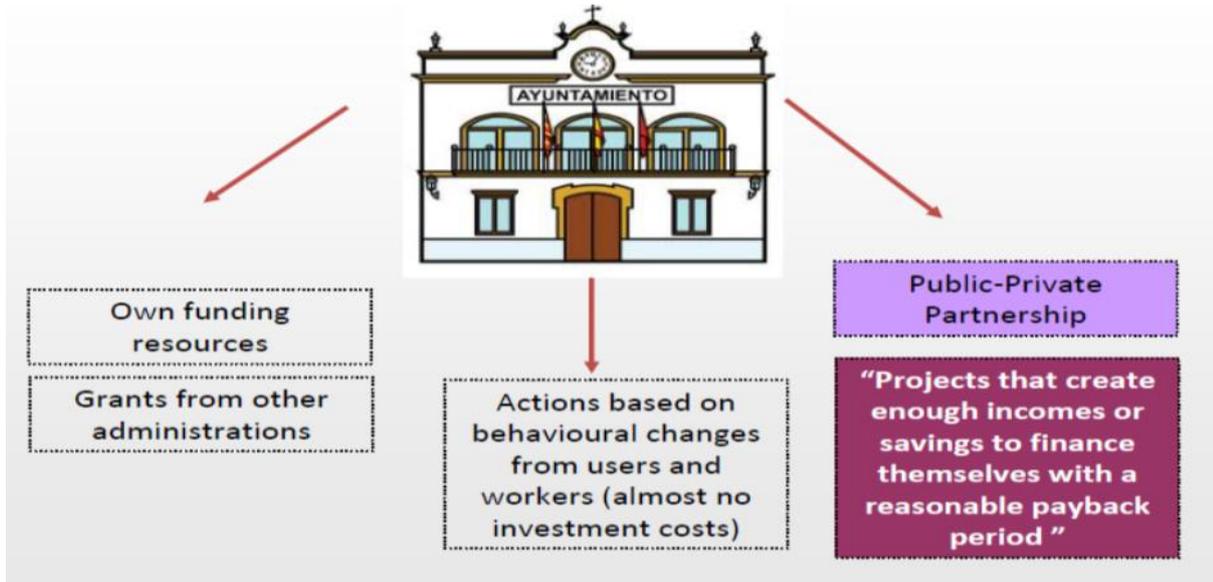
Barcelona province is characterized by a reduction of incomes of it 5.6 million inhabitants due to the economic crises and little to no investment and borrowing capacity.

#### Funding Sources

The project started out with as little as €0.6 Million investments on the side of the provinces, which were leveraged with €2 million from the ELENA fund. The object was to raise €50 million. The province used the following own sources:

Through various forms of PPPs the Province of Barcelona was able to sign contracts with ESCOs, leasing contracts for energy efficient equipment, maintenance contracts including energy efficiency investments. Between 2010 and 2013, projects are to target the installation of photovoltaic plates on the roofs of public buildings, retrofitting of public lighting and traffic lighting systems and the refurbishment of municipal buildings. ELENA promotes and analyses potential project applications by municipalities and provides technical support to municipalities in the implementation of the projects. The leverage factor for this operation is estimated to be between 50 and 250. Please refer to Figure 27 as to where funding sources came from. In the best case scenario, it is expected that an additional €500m will be mobilized for the investment program. Expected outcomes include 114 GWh/y PV electricity production, 280 GWh/y energy savings, 185.000 tCO<sub>2</sub>eq/y CO<sub>2</sub> reduced, 3,000 jobs created/sustained in PV installation and maintenance, and 2,000 jobs created/sustained in energy efficiency.

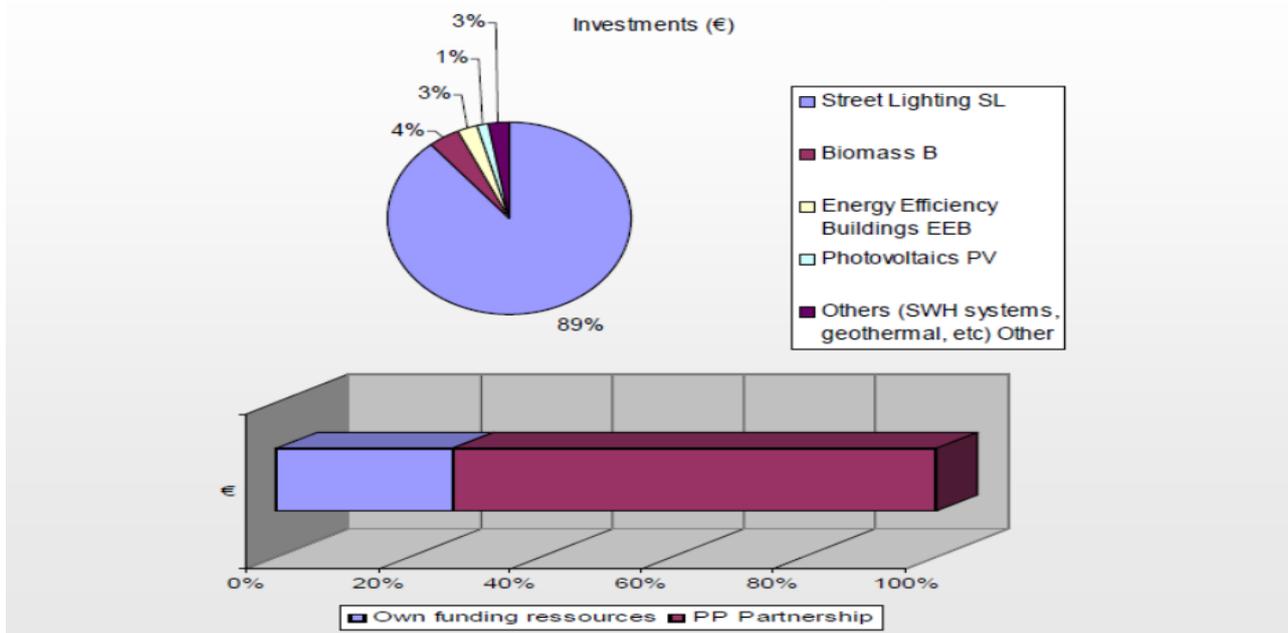
## Barcelona Provincial Funding Sources



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## Barcelona, Spain : Funding sources by type of technology

### Results at September 2013 by type of technology and funding source



### Lessons learned:

- It is important to keep the know-how internally instead of depending on external engineering or consultancies;
- The cost of each external study has been reduced significantly as the REDIBA moved forward;
- It is important to take into consideration the elections calendar at the city councils in the investment program;
- A tailor suit for every tender and initiative it is of great significance. REDIBA technical staff has to stand next to the councilor and the council technical staff in order to help the council against the lack of knowledge and the influence of private companies. technical and legal assistance necessary from the very beginning to the very end.

## References

**Factsheet:** [http://www.eib.org/attachments/documents/rediba\\_project\\_factsheet\\_en.pdf](http://www.eib.org/attachments/documents/rediba_project_factsheet_en.pdf)

**Presentations:**

[http://www.mayorsinaction.eu/fileadmin/user\\_upload/general\\_folder/Trainings/ELENA\\_experience\\_in\\_Barcelona\\_Vendrell.pdf](http://www.mayorsinaction.eu/fileadmin/user_upload/general_folder/Trainings/ELENA_experience_in_Barcelona_Vendrell.pdf)

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## Credentials

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