



EUROPEAN  
COMMISSION



# **IMPLEMENTING A SUSTAINABLE ENERGY ACTION PLAN 10 GOLDEN MEASURES BARCELONA PROVINCE**

**Ferran Vallespinós Riera**

Environmental Area, Province of Barcelona (Spain)

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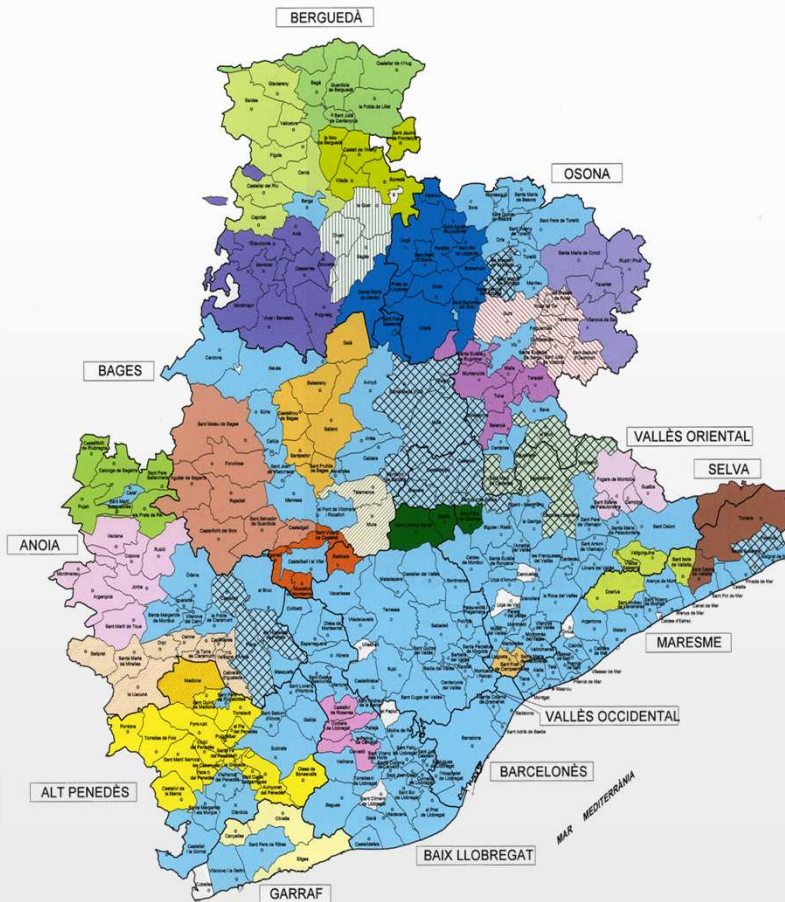


Diputació  Barcelona  
xarxa de municipis

**Barcelona Provincial Council**  
is a **2nd level Local Government**  
whose mission is to promote the  
progress and welfare of citizens,  
acting in the territory and in  
cooperation (technically and  
economically) with municipalities.

**311 municipalities, with a population of more than  
5.4 million inhabitants. Extension: 7,719 Km<sup>2</sup>**

**Barcelona Provincial Council has an extensive experience in working with municipalities to promote developmental policies compatible with the conservation of resources. Local Agenda 21 processes have been driven through agreements with local governments as a key tool to increase the sustainability of the territory**



**Municipalities with LA21: 207 (67%)**



It is an innovative initiative of the European Union to achieve the GHG reduction targets and improve efficiency by 2020 (20/20/20) with the involvement of local governments. The fight against climate change reinforces the processes of LA 21

**On 9th September 2010 ([www.eumayors.eu](http://www.eumayors.eu))  
1,934 local authorities  
80 Supporting Structures**

## MEASURE # 1: SUPPORTING STRUCTURE

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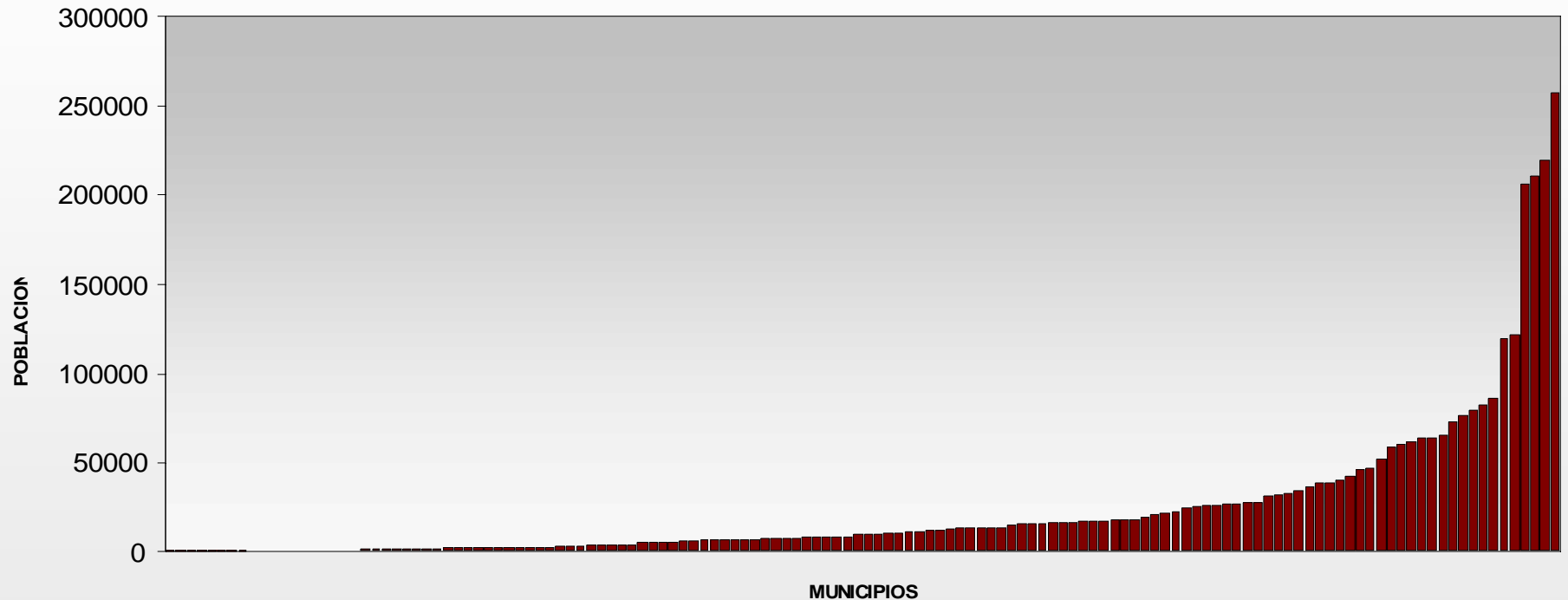
The Barcelona Provincial Council was the first supporting structure (november 2008) to provide strategic guidance, financial and technical support to municipalities that signed up to the Covenant of Mayors

- Promoting municipalities to join the Covenant : no cost to the realization of SEAP's
- Provide financial, technical and legal assistance to municipalities
- Find financial instruments for investment



## MEASURE # 1: RESULTS

### MUNICIPIOS ADHERIDOS AL PACTO DE ALCALDES/ESAS



**137 signing municipalities, 82 SEAPs delivered to CoMO  
(9 September 2010)**

## SAMPLE OF 84 MUNICIPALITIES WITH FINISHED SEAP

<b>Total emissions (tCO<sub>2</sub>eq)</b>	15,241,846
<b>SEAP emissions (tCO<sub>2</sub>eq*)</b>	10,044,491
<b>Potential reduction year 2020 (tCO<sub>2</sub>eq) according to the CoM</b>	2,044,491
<b>Emissions of the City Council (tCO<sub>2</sub>eq)</b>	247,403
<b>Number of actions to achieve goals</b>	3,400
<b>Percentage of actions of municipal ownership (%)</b>	40
<b>Total emissions per capita (tCO<sub>2</sub>eq/inh)</b>	7.30
<b>Emissions SEAP per capita (tCO<sub>2</sub>eq/inh)</b>	4.48
<b>Emissions City Council per capita (tCO<sub>2</sub>eq/inh)</b>	0.16
<b>Percentage emissions of the City Council (%)</b>	2

\* INDUSTRY AND PRIMARY SECTOR NOT INCLUDED

## MEASURE # 2: FINANCIAL SUPPORT

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1. Access to EIB financing (and other financial institutions) to ensure the necessary liquidity to make investments without entailing increased municipal debt
2. Facilitate access to grants from other governments
3. Adapting the grants from Barcelona Provincial Council to the objectives of the SEAP



## MEASURE # 2 : RESULTS

### ER-DIBA PROGRAM (EIB financing)

	<b>To reduce GHG emissions by 200,000 tn CO2/year</b>
<b>Environmental targets</b>	<ul style="list-style-type: none"> <li>- Photovoltaic (PV): 87.5 MW in 1,500,000 m2 roof</li> <li>- Energy efficiency (EE): 200 MW</li> </ul>
	<b>Financing of projects by 500 M€</b>
<b>Economic targets</b>	<ul style="list-style-type: none"> <li>- PV: 350 M€</li> <li>- EE: 150 M€</li> </ul>
	<b>Creation of permanent jobs</b>
<b>Social targets</b>	<ul style="list-style-type: none"> <li>- PV: 3,000 jobs in installation and maintenance</li> <li>- EE: 2,000 jobs</li> </ul>

## MEASURE # 3 : TECHNICAL ASSISTANCE

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- The degree of "maturity" of the local projects is highly variable
- Technical support needed to enable the transition from potential to real investment projects
- This will accelerate the development of planned investment foreseen on SEAPs
- The procedures can be replicated between local governments
- The ELENA program is an innovative instrument of the EIB (financed by the EU) to achieve these objectives.



## MEASURE # 3 : RESULTS

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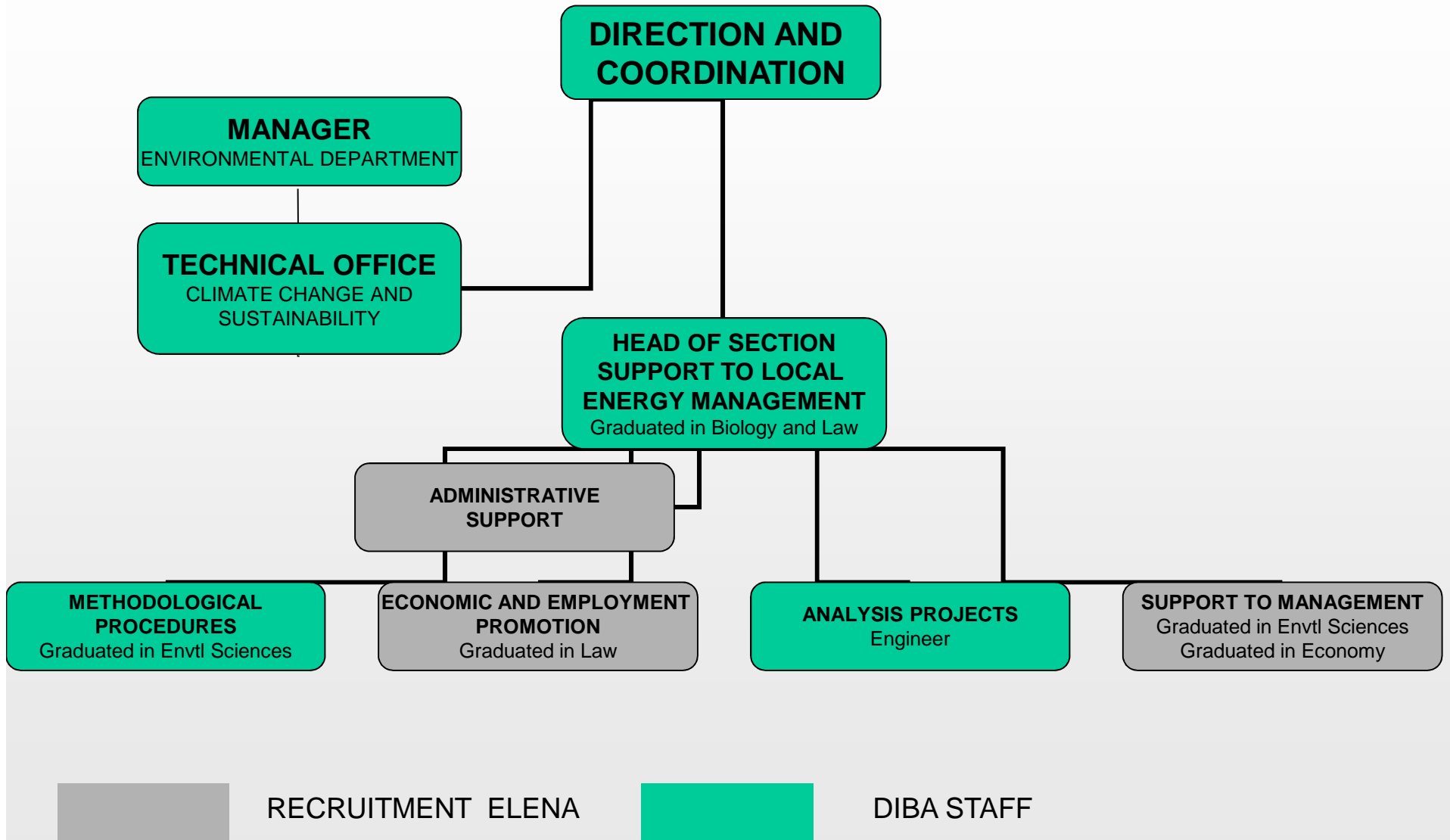
<b>Requested funding from ELENA facility [in EUR]</b>	<b>in%</b>	<b>75%</b>	<b>1.999.925</b>
<b>Own funding [in EUR]</b>	<b>in%</b>	<b>25%</b>	<b>666.642</b>
<b>Other sources [EUR]</b>	<b>in%</b>	<b>0.0%</b>	
<b>TOTAL funding [in EUR]</b>			<b>2.666.567</b>

## MEASURE # 4 : TEAMWORK

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- Promote joining of municipalities to the CoM
- Analysis of the proposals contained in the SEAP in relation to renewable energies and energy efficiency
- Assistance in evaluating the technical and economic feasibility of potential projects
  - With the team's own resources
  - Outsourcing by ELENA funds
- Development of specifications adapted to bankruptcy proceedings (under contract)
- Selection of appropriate financial instruments to address investment
- Improved knowledge: identifying barriers, products and strategies. Transfer to other entities.

## MEASURE # 4 : RESULTS



## MEASURE # 5 : LEGAL AND CONTRACTUAL SUPORT

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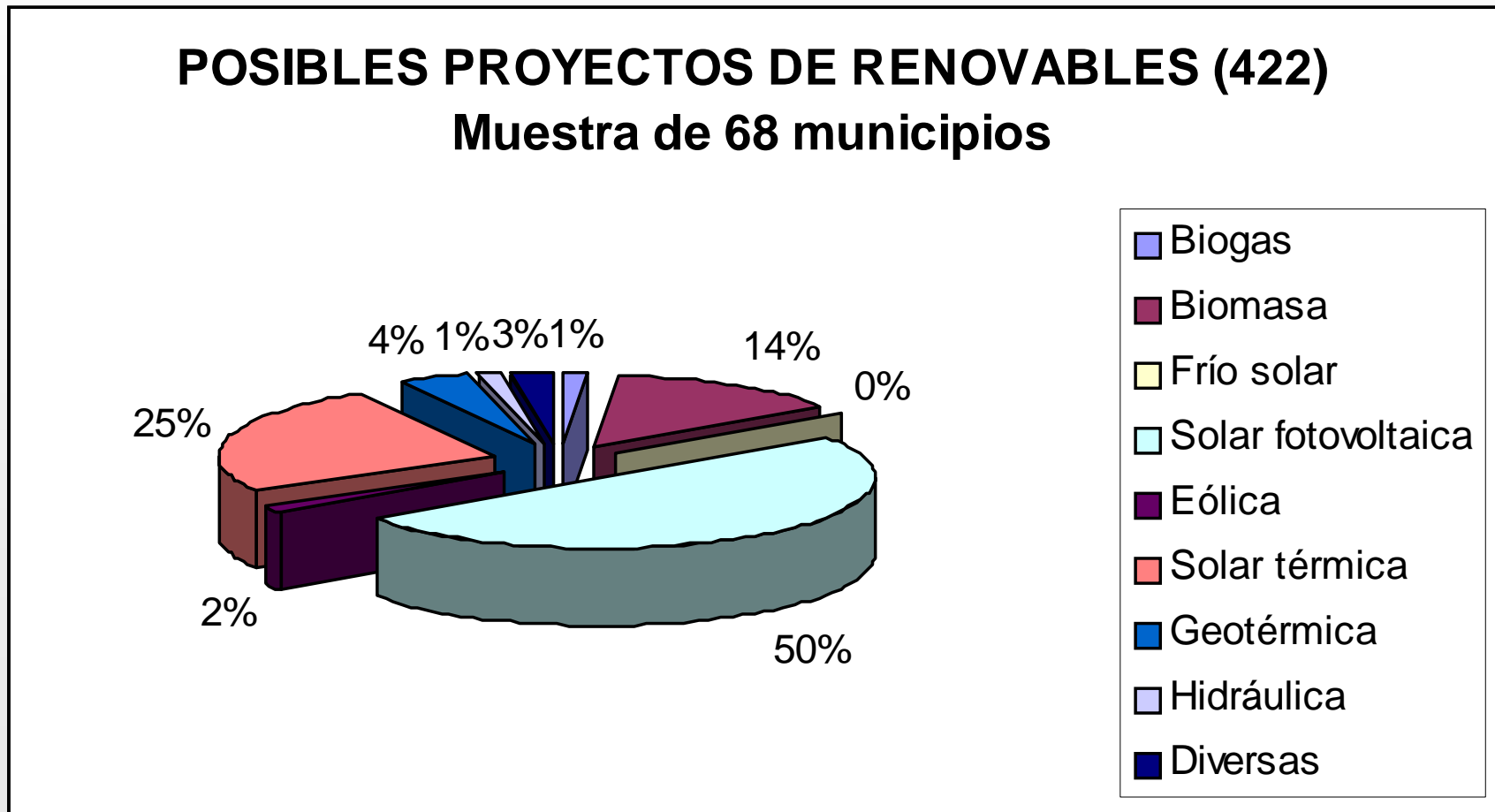
1. Advice on existing contractual models availability
2. Advice for the process of public domain renting
3. Advice for concluding “rentings” (PV and EE)
4. Aggregation process design for the award in a better position (PV and EE)
5. Advice for ESCOs hiring
6. Advice for sustainable energy procurement
7. Technical support for administrative contracting

## MEASURE # 6 : TECHNICAL SUPORT

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1. Census of potential locations for the deployment of renewable energy production units
2. Support for the drafting of basic projects
3. Census of public buildings and equipments that have the capacity to take those investments
4. Development of a catalog of products of interest
5. Pilot testing

## MEASURE # 5 & 6 : RESULTS





## **MEASURE # 7 : GROUPING PROJECTS**

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- **To create economies of scale**
- **To act as an unique intermediary between municipalities and banks**
- **To share tools**
- **To share experiences**
- **To generate positive synergies**
- **To act as a lobby to influence over future legislations.**
- **To take advantage of joint procurement**

## MEASURE # 8 : TRAINING

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### SPECIFIC TRAINING FOR POLICY AND MUNICIPAL OFFICERS

## 15 TRAINING ACTIVITIES (2010)

- Waste management
- Noise pollution
- Mobility
- Thermal solar energy (PV and EE)
- Street lighting
- Basic Energy Management

## MEASURE # 9 : DISSEMINATION AND AWARENESS

- Dissemination to citizens of the results of the actions done
- Facilitating public recognition (participation in the EUSEW through the Technical Office of Awareness, Participation and Dissemination)
- Promoting the implementation of sustainable energy actions by citizens and business.

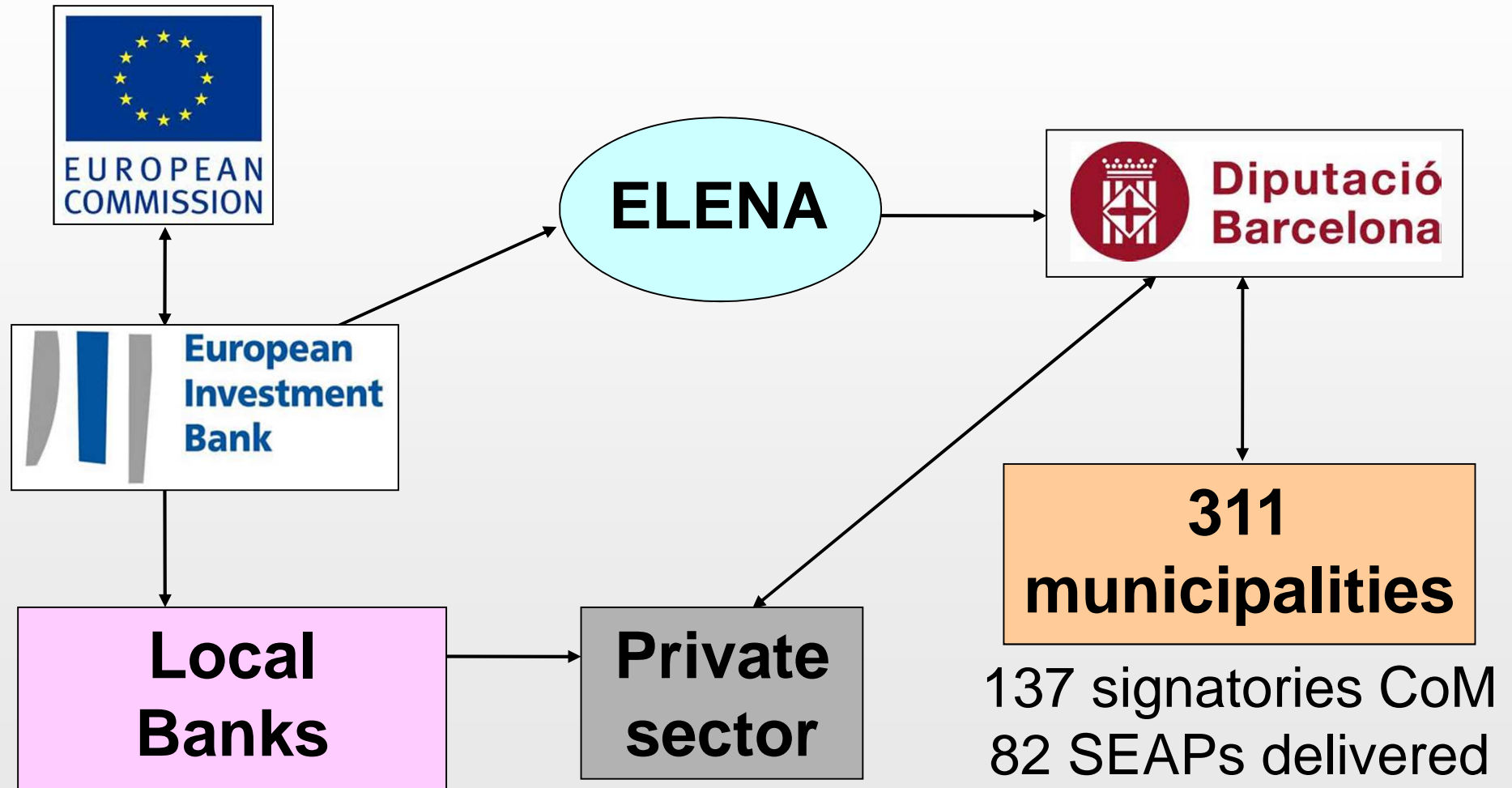


## MEASURE # 10 : IDENTIFICATION MAIN BARRIERS (IN SPAIN)

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1. Renewable energy payment scenario is changing and uncertain
2. Very limited indebtedness capacity in 2011 by Local Governments
3. Little previous experience of the energy services market for the public sector and lack of clear legal models to promote ESCOs
4. Limited understanding of business from local financial institutions and little willingness for risk, so excessive guarantees are requested
5. Resistance to change and excessive focus on issues of municipal ownership
6. Little interaction with superior administrations

# Energy Efficiency & Renewables Barcelona



## Program Status at the end of September 2010

1. Constitution of the teamwork (Local Energy Management Support Section)
2. Product identification and preparation of the terms of reference:
  - Energy services in buildings
  - Energy efficiency
  - CHP
  - Biomass
  - Mini wind power
  - Termosolar (mid term)
3. Establishment of agreements with power companies, public agencies, and business associations
4. Projects in advanced study: 76 projects, about 50 municipalities with a total investment of 40M€



**Diputació  
Barcelona**

**Thank you for your attention!**

**Barcelona Provincial Council  
Environmental Area**

**Tel. (+34) 93 402 24 56**

**vallespinosr@diba.cat**

**diba.cat/mediambient**