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**CSI-Europe towards 2014-2020
Financial Instruments for Cities**

***Developing city sustainable energy
investments at scale: lessons learnt from
the ELENA facility***

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Motivation behind ELENA

- Energy and Climate Change goals require cities to invest in **large-scale** EE/RES programmes;
- Key is to find **scaleable** and **replicable** investment models.
- Opportunities:
 - Large investment potential at local level (buildings; transport; local energy)
 - Significant subset of investments have positive NPV; ie grants not needed.
- Hurdles: cities often constrained by lack of:
 - Investment capacity;
 - Technical expertise, administrative barriers.

Why support project development?

Need to accelerate investment and reduce transaction costs:

- Group together small projects and develop a standard approach
- Attract investor attention

Need to access competitive financing

- Efficient use of grants
- EIB (but not limited to) can provide financing

=> results in need for better project development

- Go beyond “business as usual approach” (scale & timing)
- Lack of funding for project development
- Studies on the shelf or pilots implemented but no large scale replication
- Need for Project Implementation Units (increase of internal staff needs and external expertise)

ELENA in short

- EC-EIB cooperation to support local and regional authorities to reach 20-20-20 targets.
- Technical Assistance facility: managed by EIB; funded by EU budget (CIP/IEE programme).
- Application to energy efficiency; local renewables; clean urban transport.
- Market replication focus (min investment EUR 30 m).
- Investment leverage required (ratio 20; claw back possibility)
- 90% funding rate (grant)
- Budget allocation 2009-2013 EUR ~90m (allocation possible until end 2015)

European Local Energy Assistance -- ELENA

ELENA

(Project Development Services)

Support to Final Beneficiaries with:

- Additional technical staff
- *additional Technical studies*
- *additional Feasibility studies*
- Procurement/tendering
- Financial structuring

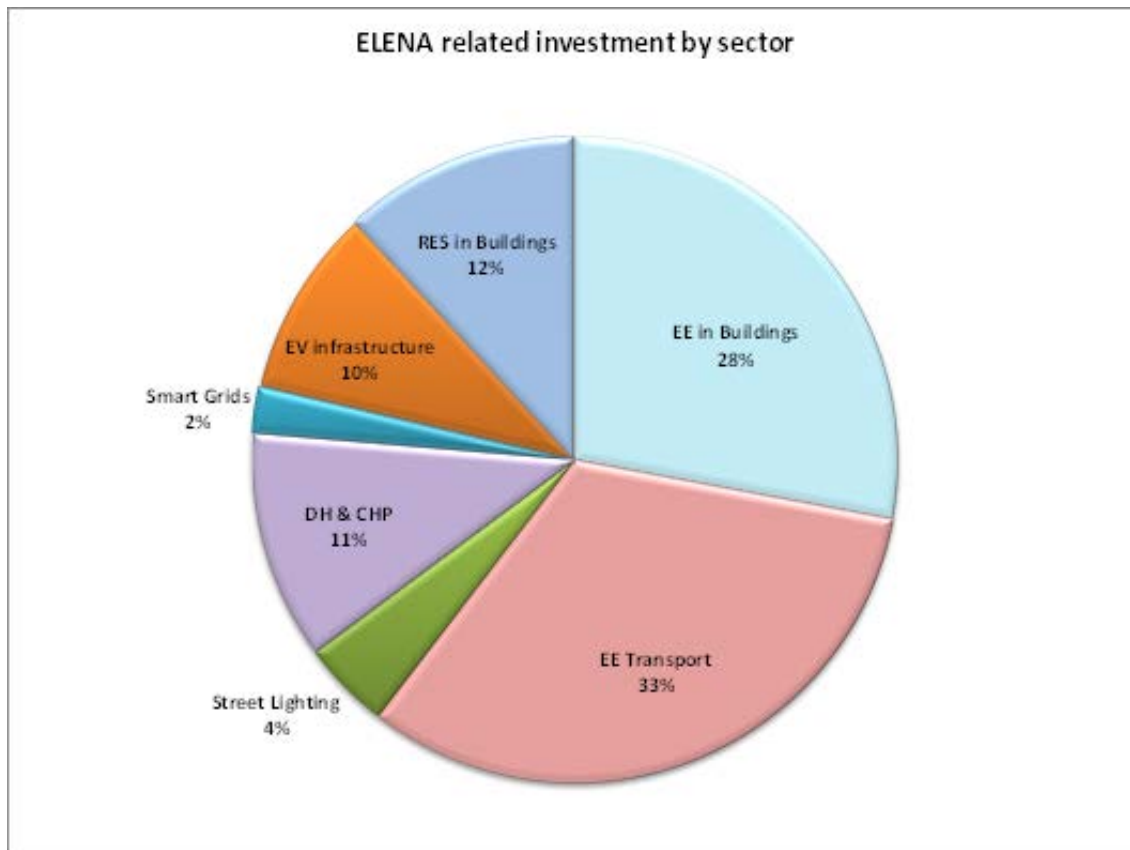
INVESTMENT PROGRAMMES/PROJECTS

- **EE and RES investment in public and private buildings**, including social housing and street and traffic lighting;
- **Urban transport** to support increased energy efficiency and integration of renewable energy sources;
- **Local energy infrastructure** to support developments in above sectors including smart grids, ICT, etc.

First Results

- Facility operational since January 2010
- 28 projects signed/approved for a total ELENA grant of EUR 49.7 million
- Foreseen supported investments around EUR 2.8 billion
- Average targeted leverage factor: 60
- All the possible investment areas have been covered
- Two projects already finalised: district heating in NL and e-vehicles development in ES
- Projects target more than 500 municipalities in 11 European countries including two projects in the New Member States

Sectors of investments



CHP/District Heating – Stadsverwarming of Purmerend B.V.

Beneficiary	District heating company of Purmerend (SVP), Purmerend, The Netherlands
CoM signatory	-
Sector	EE & RE, district heating
ELENA contribution	EUR 1 791 900
Project development services	<ul style="list-style-type: none"> • Preparation of tender documents for energy retrofitting of the district heating network • Development of a business plan for new geothermal and biomass RE heat production facilities • Design and realisation of legal and financial set-up for a special project vehicle (SPV) to be in charge of investment • Contracting of investment partners for the SPV and preparation of long term biomass supply contract
Description of ELENA operation	<ul style="list-style-type: none"> • Set-up of a dedicated project implementation unit: • External experts for the preparation of the construction of the RE plants • Legal, financial expertise for tender documents and set-up of the SPV externalised
Timeframe	2010 - 2013
Basis for investment identification	Development vision of the district heating company to reduce losses and switch to RE supply
Investment programme description	District heating network improvement: substation replacements, elimination of unnecessary loops, improvement of “just-in-time” heat production Construction of a geothermal heat plant (18 MWth) and of a biomass heat plant (26 MWth, if financially viable upgraded to a cogeneration plant) including all the connection work to the heat grid and the necessary logistic components
Investment to be mobilised	80 MEUR
Expected results	<ul style="list-style-type: none"> • Energy savings: 50 GWh/y • RE heat generation: 264 GWh/y • CO₂ reduction: 56 500 t/y
Leverage factor	45

CHP/District Heating – Stadsverwarming of Purmerend B.V.

Project ended in September 2013,

Results obtained:

- Investment preparation was targeted at biomass boiler and DH network optimisation, geothermal heat supply was abandoned.
- Revised total investment: around 53 MEUR.
- Leverage factor achieved: 29
- Expected impacts: 40 GWh energy saved,
- 260 GWh renewable heat generation
- and 39,100 t CO₂ avoided.
- Increased competitiveness of the district heating network (reduced losses, better image through biomass heat supply etc.).

Energy efficiency - Province of Milan

Beneficiary	Province of Milan, Italy
CoM signatory	Yes
Sector	EE
ELENA contribution	EUR 1 944 900
Project development services	Development of the investment programme to develop the energy efficiency potential of a group of public buildings of the province and to be implemented through involvement of ESCOs considering the municipalities' limited capacity to finance the investments.
Description of ELENA operation	<p>PIU to be formed with existing and additional staff with the following objectives:</p> <ul style="list-style-type: none"> • to promote and analyse the proposals of potential projects by municipalities, • to provide technical support in the implementation of the projects. <p>The financing put in place with the support of the EIB and involving local financial institutions will be used to finance the projects.</p>
Timeframe	2010 -2013
Basis for investment identification	<p>Building auditing programme (2006-2008) in 101 Municipalities with less than 30.000 inhabitants.</p> <p>Roughly 1.000 public buildings audited, of which 800 light audits and 200 detailed audits, providing an estimate of the saving potential and of the financial needs to realise identified measures.</p> <p>SEAPs carried out or expected to be carried out in municipalities of the Province</p>
Investment programme description	Refurbishment of existing school buildings located in selected municipalities in the province through the tendering of standard contracts for energy performance contracting for selected groupings of public buildings.
Investment to be mobilised	90 MEUR
Expected results	<ul style="list-style-type: none"> • 22.400 MWh/year decrease in natural gas consumption (1.925 Toe/y) • 4.950 MWh/year decrease in electricity consumption (850 Toe/y equivalent) • 1.100 MWh/year of electricity, equivalent to 200 Toe/year of primary energy avoided
Leverage factor	46

Energy efficiency - Province of Milan

Progress:

- First contract signed
- ~100 buildings from 16 municipalities
- Two tenders without results concerning 231 buildings from 31 municipalities
- Two tenders under preparation

Outlook:

- The two unsuccessful tenders will be re-tendered and two additional tenders are under preparation
- ~ 40 buildings from the City of Milan
- ~ 130 buildings from the Province of Milan

Financing schemes encountered

- Public bodies' own resources
- Loans from commercial banks (and/or EIB)
- Energy performance contracts with financing through ESCO or specific project vehicles (SPV) or forfeiting with commercial banks
- Public Private Partnership using for example SPV's
- Grants when available (e.g. European structural funds or national grant schemes)

Advice for preparing good investment programmes

- Strong political commitment from the public body to the implementation of the programme
- Good understanding of the project background – legal and organisational issues, relevant assets
- Sound approach to the implementation of the investment programme with a clear time frame
- Common understanding of the investment project and consensus on the means to implement it at all relevant levels and across relevant sectors
- Capacity in the different fields of project preparation and implementation: technical aspects, financing structure, legal aspects (e.g. tendering etc.)
- Precise identification of the needs for external Technical Assistance, if considered necessary

ELENA contact details

How to contact European Investment Bank (EIB)?

- By fax, letter or e-mail (best way through e-mail to elena@eib.org)
- English or French is required
- Information available on ELENA web site (www.eib.org/elena):
 - ELENA brochure
 - Frequently Asked Questions
 - Application form
 - Short presentation of supported projects

Thank you very much for your attention!

Eligible investment areas

- public and private buildings,
- including social housing
- street and traffic lighting,
- integration of renewable energy sources (RES) into the built environment
- investments into renovating, extending or new district heating/cooling networks including networks based on combined heat and power (CHP);
- decentralised CHP systems (building or neighbourhood level);

Eligible investment areas

- urban transport to support increased energy efficiency and integration of renewable energy sources, such as:
 - high energy efficiency buses, including hybrid buses,
 - electrical or low-carbon propulsion systems; investments to facilitate the introduction of electric cars,
 - investments to introduce new more energy efficient concepts to improve freight logistics in urban areas;

Eligible promoters/Final Beneficiaries/Costs

- **Final beneficiaries of project development services:**
 - Local or regional authority or
 - Other public body or
 - Groupings of such bodies
 - Established in an IEE participating country
- **Implementation of investment programme:**
 - Local or regional authorities or other public bodies or
 - entities such as holder or operator of a concession or an ESCO
- **Eligible costs:**
 - Additional staff hired for ELENA project by beneficiary
 - External experts and services

Project maturity

- Preparatory studies carried out and main decisions taken before ELENA support request
- Set up of dedicated project implementation vehicles can be risky
- Leverage performance measured after 3 years
- In case leverage of 20 not achieved : grant may be clawed back
- ELENA proposal should demonstrate high implementation probability

ELENA application process

Two stage application procedure:

- 1. Pre-Application: short presentation for first clearing
- 2. Application: detailed presentation of investment programme and preparation and implementation activities
 - Including European Commission approval

Important programme management aspects

- No submission date for applications
- Continuous appraisal/selection
- First come, first served; within the budget limits
- No international project consortium required