

## **European Financial Instruments for the implementation of Sustainable Action Plans**

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### **Agenda**

- 1. Background and Local Energy Leadership (IEE)
- 2. ELENA (EIB)
- 3. EEEF (Recovery Fund)
- 4. ELENA MLEI (Mobilising Local Energy Assistance-EACI (small investment)



## **EACI: Executive Agency**What do we do?

#### Management of the following EU programmes:

#### **Competitiveness and Innovation Programme (CIP) 2007-13**





**Entreprise Europe network** 



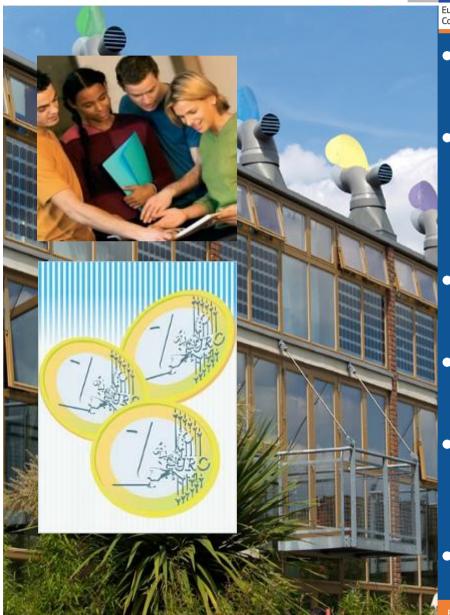
**Eco-innovation** 



**Marco Polo** 



#### In a nutshell



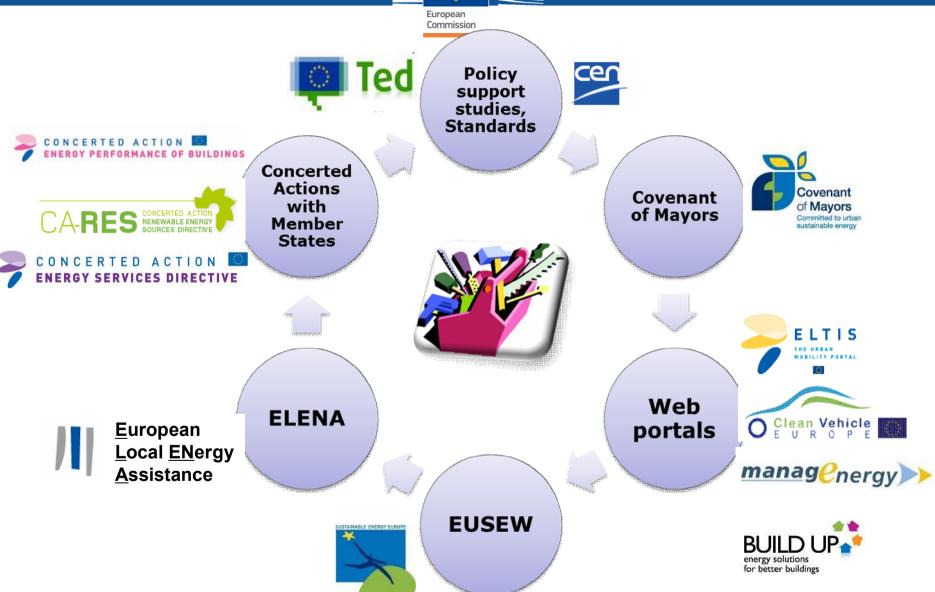


- Eligible countries: EU-27 +
   Norway, Iceland, Liechtenstein,
   Croatia & the Former Yugoslav
   Republic of Macedonia
- Promotion and Dissemination programme
- not 'hardware' investments or R&D
- 3 fields of action energy efficiency, renewables and energy in transport
- approx 250 ongoing projects

## Intelligent Energy - Europe: Delivers on ...



# IEE-tailored package of activitites







## **EU Policy context fostering local actions**

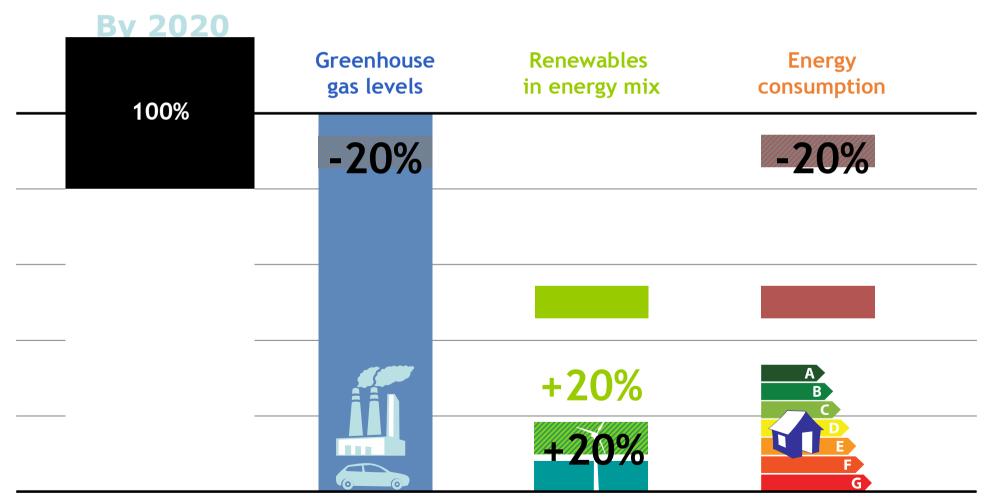
 Recognition of role of cities and regions in the EU energy policy:

Action plan on Urban mobility (2009), SET-Plan - Smart Cities(2009), EU Renewable Energy Directive (2009), Energy Strategy 2020 (2010), Energy Efficiency Directive (2012)

- Public authorities have a key role to play for the 20/20/20!
- Local authorities can provide strong market signals through their policies!
- Multi-level governance



### THE 20-20-20 EU ENERGY POLICY



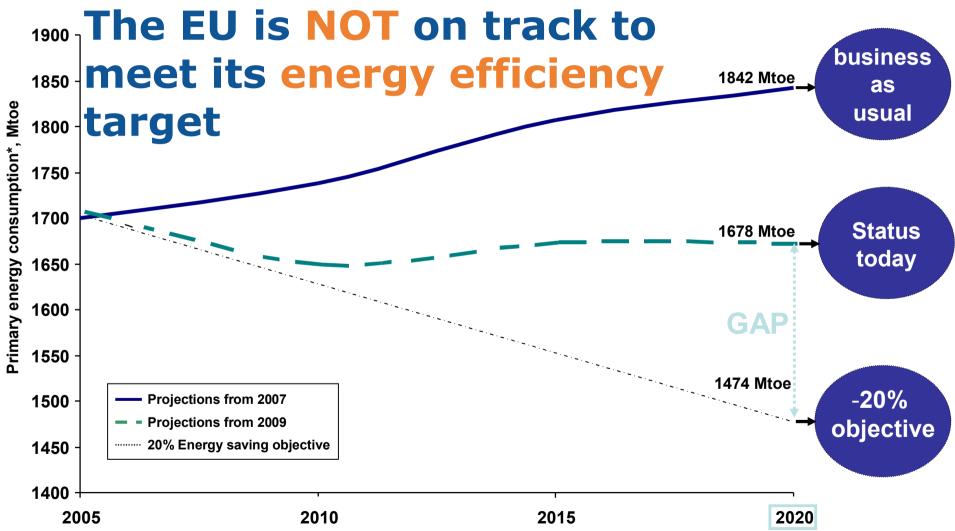




## The EU is on track to meet its renewable energy target

- Directive on the promotion of the use of energy from renewable sources (2009) sets national mandatory targets
- Total renewable energy consumption will double from 99 Mtoe (2005) to 245 Mtoe (2020)
- 1/2 of Member States to exceed their national targets
- Planned growth leading to 20.6% by 2020





<sup>\*</sup> Gross inland consumption minus non-energy uses



## Challenges faced by local authorities

### **Covenant of Mayors' initiative**

- Local authorities go beyond the EU's 2020 targets
- Prepare a Baseline Emission Inventory
- Set up a Sustainable Energy Action Plan
- Submit regular Implementation Reports
- Organise Local Energy Days
- 4,795 SEAPs submitted
- Need to implement Sustainable Action Plans.
- Financial crisis and cuts in administration budgets

Covenant



## Challenges faced by local authorities Exemplary role of local authorities: 3 % of the public total floor area used, renovated each year.

- Reduce energy use,
- Perform Energy Audits,
- Promote energy services, green procurement
- Develop financial instruments and incentives

# Challenges faced by local authorities





## Challenges faced by local authorities

# Local authorities contribute at local level to National targets: achieved at local level

- share of RES in gross final energy consumption to 20% RES
- share of RES in transport: 10%
- Procurement of clean vehicles for public fleet

## National action plans: Drafted with local input



### **IEE fostering local actions**



Small / medium projects (MLEI)
Mobilising Local Energy Assistance

EU Technical assistance facilities for project financing (IEE budget)

- key to bankability -:
  - Large projects (ELENA EIB)
  - Medium size projects (ELENA –KwF)
  - EBRD (new entrants in EU)
  - Medium size projects (ELENA -CEB)









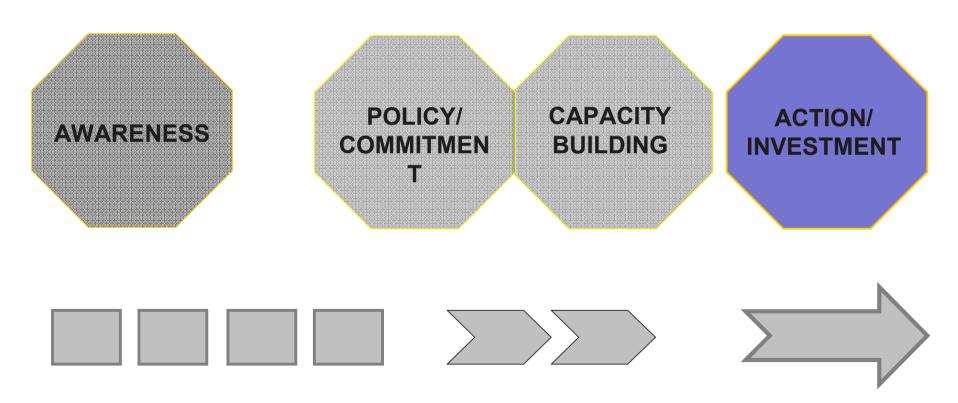
## **Objectives of LEL key action Main objectives of LEL key action:**

Boost the number of sustainable energy communities in Europe and support the local and regional authorities in meeting the EU 2020 targets

- 1. Empowerment and capacity building of public authorities on SEAP development, implementation and financing
- 2. Efficient cooperation between public authorities and local consumers/stakeholders
- 3. Multi-level governance



## **Local Energy Leadership: Bridging the way from awareness to action**

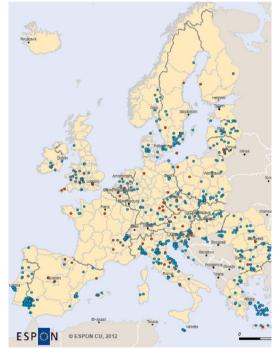




## 33 projects under IEE 2 reaching over 1,000 communities

#### **Some results:**

- 800 Sustainable Energy Action Plans (SEAP) and Baseline Emission Inventories (BEI) developed
- 275 Covenant Coordinators & Supporters established including 12 national Covenant clubs established
- 1240 new Covenant signatories triggered
- 500 sustainable energy measures implemented
- Development of peer-to-peer exchange
- Piloting the integration of EMS and SEAP







#### MFF 2014-2020:

Means for implementation of sustainable activities:

- Cohesion funding to allocate some 17 billion € to energy efficiency and renewable energy (doubling current allocations)
- Horizon 2020:
   6.5 billion € to be allocated to research and innovation in "Secure, clean and efficient energy".
   Includes an IEE-III follow-up programme in low carbon economy & Energy efficiency



#### MFF 2014-2020:

Means for implementation of sustainable activities:

- Cohesion policy:
   Shift to a competitive low carbon economy
- Improving resource efficiency and reducing greenhouse gases emissions
- Paving the way -role of Public authorities (public building renovation, use of EPC...)
- Creating cost-effective access to energy



- EU Funds should provide opportunity to attract
   & leverage funds from <u>private investors</u>
- However, the big bulk of EE/RES investments should come from <u>private sector</u>, EU and national funding to complement;
- Using market mechanism to avoid crowding out investors and increase leverage;
- Such as Financial Engineering Instrument and EPC;
- Grant to address primarilly market failures, innovative technologies and beyond cost-effective EE projects (deep renovation)



### How can the EU support help?

#### **ELENA Facility:**

- 97 million € for technical assistance to mobilise investments
- To scale up projects and reduce transaction costs and support Project development phases

#### **Intelligent Energy Europe Programme(2007-2013):**

- 735 million € for 'soft' energy efficiency/renewables projects
- Mobilising Local Energy Assistance, around 10 projects/yr

#### **European Energy Efficiency Fund (EEE-F):**

- 265 million € for investments into mature, bankable efficiency/renewables projects
- 20 million € for technical assistance

#### **Cohesion Fund(2007-2013):**

• 5,1 billion € for energy efficiency (up to 8 billion € if all MS reallocate 4% for housing under ERDF



## How to trigger energy efficiency investments?

- Energy saving obligation schemes (e.g. UK, Demark, Italy, France, Poland and Ireland)
- Enhanced use of ESCOs
  (steps taken to set proper regulatory framework and tailored financing products but the full potential largely unexploited)
- Energy auditing schemes and agreements with industry
  - (e.g. Poland, Sweden, Finland and the Netherlands)
- Training and information campaigns (e.g. EU's BUILD-UP and BUILD-UP Skills initiatives)
- Covenant of Mayors



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## ELENA European Local ENergy Assistance

EC-EIB cooperation to support local and regional authorities to reach 20-20-20 targets.

**Link to Covenant of Mayors.** 

Funds provided by DG ENERGY under (CIP/IEE II programme).

Managed by EIB.

Only Public Bodies from IEE countries can apply.



## ELENA European Local ENergy Assistance

Grants to prepare investment programmes covering up to 90% of eligible costs.

**Area: Renewable Energy and Energy Efficiency.** 

Sector: buildings, transport, urban infrastructure.

Local character (city, municipality, region)

3 years to implement the programme.

Minimum leverage factor of 20 (to be verified at the end of the financing period).

Replication potential (going beyond BAU, minimum project size of 30 MEUR).



### **ELENA** - briefly

## **ELENA**(Project Development Services)

Support to Final Beneficiaries with:

- Refine Feasibility studies
- Business Plans
- Technical studies (energy audits)
- Procurement/tendering/contracting
- Additional technical staff
- Financial structuring

#### **INVESTMENT PROGRAMME**

- EE and RES investments in public and private buildings, including social housing and street and traffic lighting
- DH networks
- Decentralised CHP
- Urban transport to support increased energy efficiency and integration of renewable energy sources
- Local energy infrastructure to support developments in these sectors

Energy 27



#### **ELENA-EIB**

Large scale investments
Direct contracts with EIB
Open call, no deadline
Leverage 20
All IEE MS
>€50m

TA for Project

Development

Services

#### **ELENA-EBRD**

Mid-size investments
Direct contracts with EBRD
Open call, no deadline
Leverage 20
IEE/EBRD MS
< 650m

#### **ELENA-KfW**

**ELENA-CEB** 

**Mid-size programmes** 

**Direct contracts with CEB** 

or Intermediated via PFIs

Open call, no deadline

Leverage 20

**IEE/CEB MS** 

< €50m

Mid-size programmes
Intermediated via PFIs
Open call, no deadline
Leverage 20
All IEE MS
< €50m

#### **MLEI**

Small-scale investments
Direct contracts with EACI
IEE call, standard deadline
Leverage 15
All IEE MS
> €6m

### **ELENA EIB**



## **Programmes**

No	Beneficiary	Country	Sector	ELENA support	Total investment [EUR]
1	Diputacio De Barcelona	Spain	RES in buildings, EE in buildings, Street Lighting	1,999,925	50,000,000
2	Stadsverwarming Purmerend	Netherlands	RES in buildings, DH & CPH	1,791,900	80,000,000
3	Provincia de Milano	Italy	EE in buildings, RES in buildings	1,944,900	90,000,000
4	Fundacion Movilidad Municipality of Madrid	Spain	EE transport 1,148,083		53,400,000
5	La Ville de Paris	France	EE in buildings, RES in buildings	1,377,000	180,000,000
6	Municipality Vila Nova de Gaia	Portugal	EE in buildings, EE Transport, Street Lighting, RES in buildings	920,315	73,411,000
7	Transports de Barcelona	Spain	EE transport	1,921,000	163,880,000
8	Municipality of Malmo	Sweden	EE transport	2,970,472	170,500,000
9	Greater London Authority	United Kingdom	EE in buildings	2,884,680	114,950,000
10	DAFNI Network of Sustainable Aegean Islands	Greece	Smart Grids, RES in buildings, EV infrastructure	688,670	52,820,000
11	Greater London Authority	United Kingdom	DH & CHP	2,904,744	111,370,000
12	Agenzia per l' Energia Sviluppo Sostenibile di Modena	Italy	EE in buildings, Street Lighting, RES in buildings	1,316,700	54,000,000
13	Province of Chieti	Italy	EE in buildings, Street Lighting, RES in buildings	1,809,000	80,000,000
14	City of Sittard - Geleen	Netherlands	DH & CHP	668,000	55,400,000
15	Region of Zealand	Denmark	EE in buildings, RES in buildings	2,495,520	62,400,000
16	The City Council of Bristol	United Kingdom	EE in buildings, DH & CHP, RES in buildings	2,612,207	161,055,283
17	Birmingham City Council	United Kingdom	EE in buildings, RES in buildings	1,509,942	67,195,000



### **Current situation: February 2013**

**Total Technical Assistance: 37 MEUR** 

**Average TA:** 1.8 MEUR/programme

**Total Investments:** 2.4 bisEUR

**Average leverage:** 57

Under adproval (TA): 14 MEUR

Budget 2009-2012: 71 MEUR

Budget available: (71 - 37 - 14) = 20 M

**Budget 2013: 22 MEUR** 



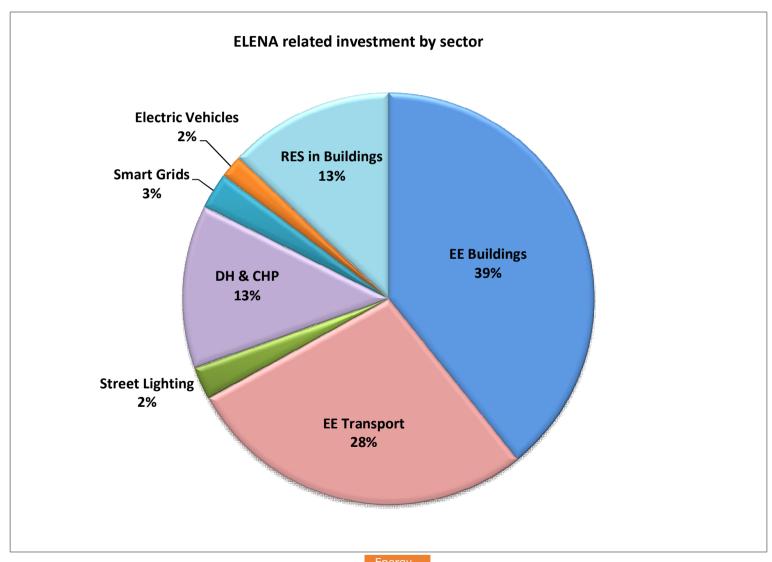
### **Current situation February 2013**

year	No Programmes TA	Financing	investments	Leverage factor
2009	9	13.423.473	554 εκ	<i>57</i>
2010	7	14.504.683	660 εκ	
2011	5	8.434.379	847 εκ	

## **ELENA EIB**



### **Investments**





### **Application procedure**

**Contact with EIB** 

By fax, letter or e-mail (best way through e-mail to <a href="mailto:elena@eib.org">elena@eib.org</a> ) English or French is required

Available information in website ELENA (www.eib.org/elena):

**ELENA** brochure

**Frequently Asked Questions** 

**Application form** 

**Presentation** 

**Project fiches** 



### Features of successful applications

- Firm Sustainable Energy Action Plan (SEAP)
- Strong political commitment
- Project maturity
- Clear objectives
- Good understanding of the challenge
- Sound management structure and cooperation of the relevant staff
- Precise estimation of TA needs



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## European Energy Efficiency Fundeet

- Established:
  2010 by amending the European Energy Programme for Recovery (EEPR)
- Launched: 1 July 2011 with 265 M€ (EC, EIB, CDP, DB)
- Objective:
   Addressing financial needs of <u>commercially viable</u> EE
   and RES projects
- Scope: 70% EE, 20% RES, 10% Clean urban transport

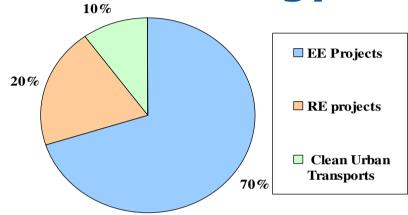


## European Energy Efficiency Fundeet EUROPEAN ENERGY

- End user: local/regional public authorities
- Tailored financing: Senior/junior loans, convertible debt, equity participation, forfeiting loans
- Technical assistance:
   20M€ (grants) for project development services



## **Portfolio Strategy**



#### Επενδυσεις σε Ενεργειακη Εξοικονομηση:

- Public & private buildings
- CHP, incl. micro-cogeneration, and district heating/cooling networks, in particular from RE sources,
- Local infrastructure, incl.
   efficient street lighting,
   electricity storage solutions,
   smart metering, and smart grids,
   with full usage of ICT

#### Επενδυσεις σε ανανεωσιμες:

- Decentralised RE sources and their integration in local grids
- Smart-grids enabling higher RE sources uptake,
- Energy storage
- Microgeneration from RE sources

Επενδυσεις σε καθαρες αστικες μεταφορες:

 Clean urban transport to support increased EE and integration of RE sources, with an emphasis on public transport, electric and hydrogen vehicles



## **EEE F Eligibility criteria**

- At least 20 % primary energy savings for energy efficiency projects (higher for buildings)
- At least 20 % reduction of CO<sub>2</sub> equiv. for renewable energy and transport projects
- Comply with EU legislation (RES directive, CHP, etc.)
- Concrete objectives to mitigate climate change and multi-annual strategies in place



## **EEE F Eligibility criteria**

- Focus on proven technologies
- Strong support for ESCOs providing guaranteed energy savings
- Projects eligible as from 01.01. 2011
- Typical project size: up to 25M€



## **EEE F Technical Assistance (TA)**

### **Objective:**

Support project development services for technical and financial preparation of projects

- TA of total of 20M€ (provided by the EC),
- Grant (up to 90% of eligible costs)
- Min. leverage factor of 20
- Only for projects applying for funding to the EEE- F
- Based on ELENA structure



## **Application process**

- Initial screening (DB)
- Possible TA request (DB)
- **Due diligence process** (DB): financial, technical, legal review
- Investment Committee advisory opinion
- Management Board final decision based on IC opinion
- → Once project financed: Monitoring, reporting on financial and environmental performance



## Role of EEE F in mobilising private finance

## **Objective:**

Enhance viable EE and RES investments at local/regional level within multiannual strategies to mitigate CC

- Address market failures (information/awareness, TA...)
- Address lack of access to capital (specific financial products...)



## Role of EEE F in mobilising private finance

Confidence building around EE investment

**Develop and spread ESCO/EPC models** 

Offer innovative financing

For more information: www.eeef.eu

**Contact point at Deutsche Bank:** 

Lada Strelnikova +49(69)910-46444 lada.strelnikova@db.com



# **Example: Jewish Museum Berlin 1st project signed**

- Building upgrade: lighting, optimization of ventitilation, heating & AC and overall improvement of energy management system
- **55% of CO**<sup>2</sup> emission reduction compared to baseline (ca. 0.29M€ savings p.a)
- Guaranteed savings through EPC, 10 y. term
- Total Investment volume: 3.1M€
- No upfront cost
- Forfeting scheme: EPC serves as collateral to the loan.
   EEE F is buying part of the future receivables (energy savings) from the ESCO at a discount price



## **Example: Munich University**

The European Energy Efficiency Fund (EEEF) completed a second energy efficiency project on 15 November 2012 with the University of Applied Sciences Munich and Johnson Controls. University of Applied Sciences Munich and Johnson Controls Systems signed an Energy Performance Contract (EPC) of 1.1 mil € of energy efficiency measures on both buildings. Energy efficiency measures include the acquisition of a 49.5kW (CHP) plant, optimization of heating, energy efficient lighting, metering and optimization of the building management and pumping.

Results: € 118,860 savings per/a 11.6% cut of CO<sub>2</sub>.



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## **Technical Assistance(MLEI - PDA)**

MLEI-PDA to individual or groupings of local authorities or public bodies, to prepare, mobilise financing for and launch small to medium sized investments in sustainable energy projects.

#### **Proposals:**

- → <u>must</u> demonstrate EU added value (organisational innovation and/or ambitions beyond business-as-usual)
- → <u>must</u> launch investments (signed contracts) within the action (payback clause!)

Sectors covered: existing buildings; district heating/cooling; energy efficient street-lighting; clean urban transport.

"We are looking for shining examples with high replication potential!"



## **Local energy investment-Targets**

- Provide Project Development Assistance for public authorities to prepare, mobilise and launch investments in EE and RES
- Help overcome the lack of technical capacity for particularly small and medium sized municipalities
- Bridge Bridge the gap between planning and implementation of bankable actions
- Accelerating public energy investment projects through shining examples of smart and replicable actions that also demonstrate organisational innovation in mobilising the funds





## What is actually Technical Assistance?

All activities required to make an investment project ready to start (technically and financially mature):

- Technical design & feasibility studies
- Mobilisation of the stakeholders involved in the investments
- Financial engineering & business plans
- Procurement of services (technical, legal, financial) and works

EC funding to cover mostly staff costs and subcontracting

#### Not covered are:

- Hardware investments, basic research or technology development
- Any activity which is not required to launch the investments or to fulfil the additional criteria



## Specific eligibility criteria

- Submission by one or more legal entities
  - → "Single country" applications are eligible.
- Coordinated by a local or regional public authority (municipality, city, province, region), or by another public body. Private entities are allowed as partners or sub-contractors
- Minimum leverage factor of 15.
- PDA costs of min. EUR 400,000 must lead to investment of min. EUR 6,000,000 in RES and/or EE measures\*.
- 1 country projects are eligible so far no project with several countries
  - \*Exception for Convergence Regions:

PDA costs of min. EUR 200,000 must lead to investment of min. EUR 3,000,000.



## **Additional provisions**

- Pay-back clause
- Measurable performance indicators
- Investment projects must be prioritised in Sustainable Energy Action Plans, or similar energy/climate plans.
- Include a learning process and capacity building for relevant stakeholders at local/regional level
- Letters of support from public authority owner if submitted by public body



# Intelligent Energy Europe (2014-2020) as proposed by EC

- To form part of HORIZON 2020, the future EU framework programme for research and innovation (2014-2020)
- HORIZON (€90 billion) has 3 main pillars:
  - Excellent science (~ 31%)
  - Industrial leadership (~ 22%)
  - Societal challenges (~ 40%)



## Horizon 2020 / Societal challenges Proposed funding (million euro, 2014-20)

Health, demographic change and wellbeing	9 077
Food security, sustainable agriculture, marine and maritime research & the bioeconom	1 4 694
Secure, clean and efficient energy	6 537
Smart, green and integrated transport	7 690
Climate action, resource efficiency and raw materials	3 573
Inclusive, innovative and secure societies	4 317



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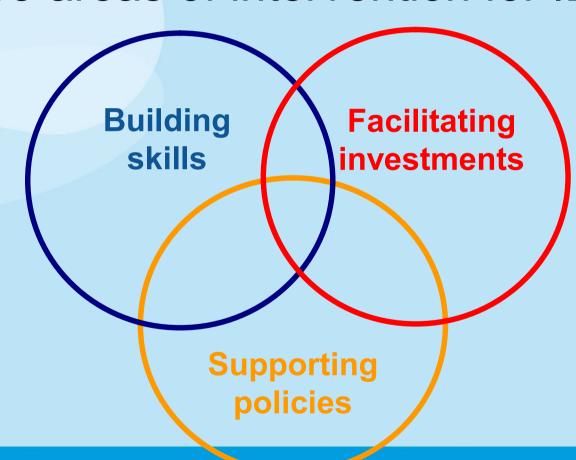


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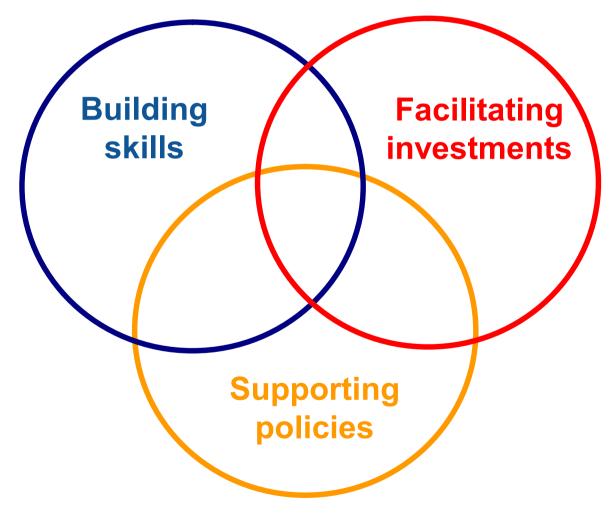


## Post-2013 areas of intervention for IEE





### Post-2013 areas of intervention for IEE





## Thank you for your attention

