

3rd CAPITALIZATION MEETING AND CAPITALIZATION LAB

Ljubljana, Slovenia – 11 June 2014

Minutes

Participants list:

LP AREA Science Park (AREA)	Fabio Tomasi (FT) Elena Banci (EB) Anja Starec (AS) Manuela Masutti (MM)
PP 2 Instituto Andaluz de Tecnologia (IAT)	Pablo de la Rosa Tudela (PDR)
PP 3 CAPENERGIES (CAP)	Vincent Morfouace (VM)
PP 4 Jožef Stefan Institute (IJS)	Gašper Tavčar (GT) Jure Čižman (JC) Robert Kocjančič (RK) Tomaž Ogrin (TO)
PP 5 Foundation CIRCE (CIRCE)	Miguel Marco Fondevilla (MMF)
PP 6 Regional energy agency Kvarner (REA)	Sandra Hunjak (SH) Darko Jardas (DJ)
Presentation of MARIE Project (GOLEA)	Rajko Leban (RL) Nejc Božič (NB) Vanja Cencič (VC)
Presentation of ELIH-MED Project: focus on the contents of the guideline on innovative financings Presentation of ECOFUNDING Project: focus on the facilitation of financing for SMEs in the field of energy efficiency, clean energies and green businesses (IJS-CEU)	Matevž Pušnik (MP)
Presentation of TRANSPARENCE Project: focus on Energy Performance Contracting (IJS-CEU)	Damir Staničič (DS)
Presentation of GO ECO Project: development and implementation of integrated energy concepts in SMEs (IJS-CEU)	Peter Bevk (PB)
Presentation of ODYSSEE MURE 2012 Project: focus on the database of funding opportunities (IJS-CEU)	Fouad Al-Mansour (FAM)
Presentation of BEI and ELENA funding opportunities: the lesson learnt by the Province of Chieti	Roberto Di Gennaro (RDG)
University of Ljubljana – Faculty of Mechanical Engineering	Uroš Stritih (US)
University of Ljubljana – Institute for Innovation and Development (IRI)	Jure Vetršek (JV)
Slovenian Chamber of Commerce (GZS)	Jože Renar (JR)
Friuli Venezia Giulia Region	Gustavo Zandanel (GZ)
Energap (Regional Energy Agency Podravje)	Branka Mirt (BM)

Mr. Gašper Tavčar welcomes all participants and introduces FT, who explains the objectives of EMILIE capitalization strategy and presents the project Emilie (presentations are here attached).

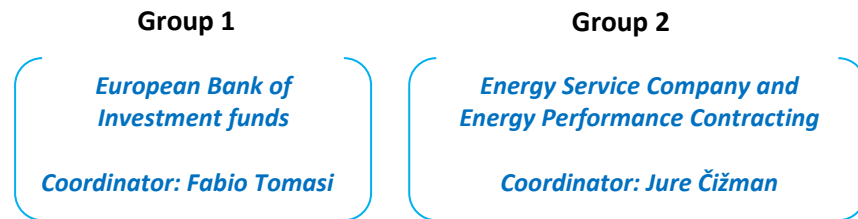


Afterwards some brief presentations of local stakeholders and project coordinators were ensured in the following order (presentations are here attached):

- Presentation of MARIE project: pilot projects implemented in Brda and on an ESCO model
Mr. Rajko Leban, GOLEA
- Presentation of ELIH-MED project: contents of the guideline on innovative financings - Mr. Matevž Pušnik, IJS-CEU
- Presentation of ECOFUNDING project: facilitation of financing for SMEs in the field of energy efficiency, clean energies and green businesses - Mr. Matevž Pušnik, project partner, IJS-CEU
- Presentation of TRANSPARENCE project: Energy Performance Contracting (EPC) - Mr. Damir Staničić, project partner, IJS-CEU
- Presentation of GO ECO project: development and implementation of integrated energy concepts in SMEs - Mr. Peter Bevk, project partner, IJS-CEU
- Presentation of ODYSSEE MURE 2012 project: database of funding opportunities - Mr. Fouad Al-Mansour, project partner, IJS-CEU
- Presentation of BEI and ELENA funding opportunities: the lesson learnt by the Province of Chieti - Mr. Roberto Di Gennaro, Province of Chieti



These presentations represented a useful starting point for the 2 following interactive workshops. Participants were then divided into 2 groups on the basis of their expertise which tackled a specific discussion theme in the field of funding opportunities for innovation for energy efficiency in buildings



At the end of the discussion, each table coordinator presented the **conclusions to all the workshop participants**. The conclusions of the meeting are available on the EMILIE website and will ultimately be merged in the EMILIE Collaboration Methodology.

Conclusions

Group 1: European Bank of Investment Funds

Participants: FT (Coordinator), EB, PDR, TO, MP, VM, FAM, RDG, JR, BM, DJ



European Bank of Investment Funds: how to start up the funding project

- Feasibility studies and preliminary audits are the first steps to be undertaken
- “Savings costs” is the key words to persuade local authorities to apply to ELENA/BEI
- Involve key actors from the very beginning
- All partners should be very committed in the project
- Describe clearly the benefits of these funding for local authorities and local economy
- *Domino effect* among local authorities (or “*my neighbour has a new car*”)

Hints for the implementation

- Legal issues are the key factors (development and timing for call for tenders etc.)
- In deep audits have to be performed to identify the most promising building
- It is better to avoid conflict of interest between energy efficiency and energy supplies (for instance it is preferable to split the calls into 2 different lines)
- Aggregate local authorities to identify common needs (this allows economies of scale but requires considerable management effort)
- Sign a “Framework agreement” between larger authorities (regions/province, county etc.) and then a much operative “single agreement” between local municipalities and ESCOs
- Bear in mind that big ESCOs are more likely to apply to tenders
- The project must be constantly supported by political power
- The project management has to follow a strict schedule (signing the agreements and preparing calls is time consuming).

Impact: Do these funds represent useful tools to promote the local entrepreneurship and impact on the local economic systems or is it just a funding tool fostering big external ESCO players?

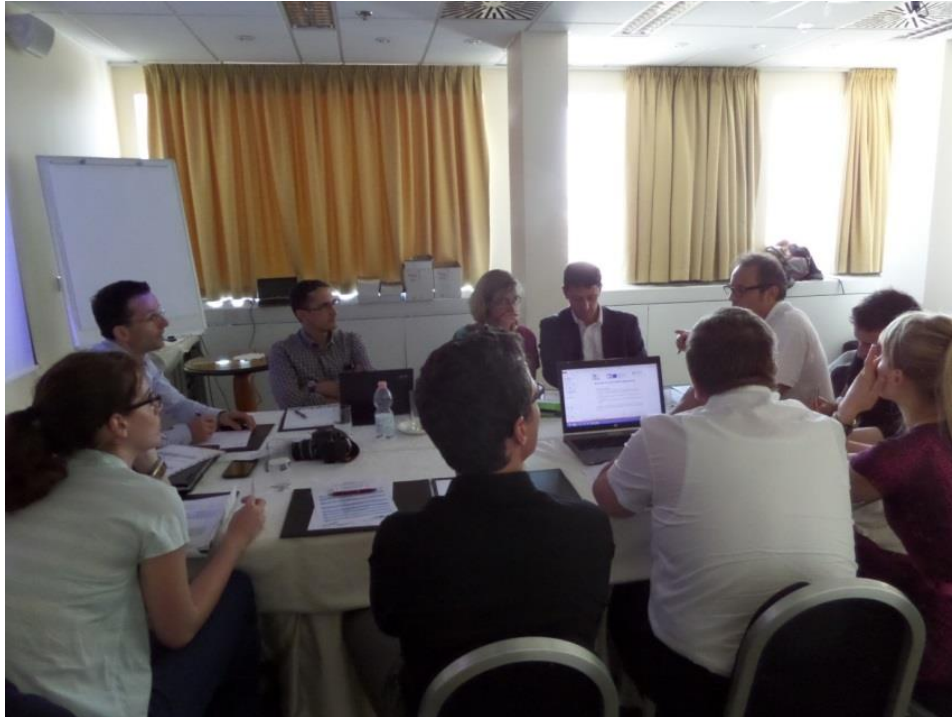
- The implementation of lots of “small on site audits” in spite of the “whole package” foster the involvement of local key actors (for instance the “Energy agency of the Province of Modena” implements a EBI funds by means of a bottom up approach and therefore small call for tenders were organized by each municipality. On the other hand, Chieti has a top-down approach that is more time consuming, but ensures a bigger control and bigger economies of scale).
- Local SMEs can provide know how (engineering consultancy for audits) technology and implementation of actions
- Tenders could somehow promote local companies (rewarding for example “0km products”). This approach depends on the local market: for instance in Slovenia there are only big players, mainly from Austria, therefore any incentive for local ESCO can be introduced.
- New technologies could be considered by local authorities only if they could improve quality or save costs

Cooperation

- It is crucial to involve ESCOs in EMILIE technical workshops, study visits, disseminate the technology roadmap, data collected from pilot plants monitoring, tendering know -how with innovative technologies,
- Further cooperation and capitalization of results with **ELIHMED** has to be searched (project funding opportunities, best practices examples)
- **Odyssee-Mure** database (on energy efficiency technologies, analysis of effective energy efficiency of different technologies per sector, data on diffusion of new technologies) could be complementary to the contents provided by Emilie

Group 2: Energy Service Company and Energy Performance Contracting

Participants: JC (Coordinator), AS, GZ, MM, MMF, SH, PB, RL, NB, VC, DS



ESCO for local authorities: how to select them and hints to draft effective agreements

The key steps in the process of entering into an EPC are as follows:

1) Developing of the request for proposals which will be put out to bid for potential ESCOs.

Generally two phases to the overall EPC process: first, the responding ESCO will enter into an audit contract and then, post-audit, will enter into the full EPC. The RFP should include an overview of the project, a proposed schedule, submission requirements, evaluation criteria, and articulation of all the phases of the process, including the following:

- ESCO selection
- Investment grade (‘pay back’) audit
- Energy efficiency (EE) measure identification and implementation proposal
- Performance contract and financing
- Implementation of EE measures
- Measurement and verification

2) *Select ESCO and Contract ESCO for investment grade audit:* specific goals for the project, including any energy reduction targets that the local authority has adopted, should be provided; ESCO shall clearly define in the contract the methodology to be used for calculating energy savings estimates from EE measures - the local authority may wish to have a third party review the methodology (if it does not have in-house expertise to ensure savings are being estimated appropriately).

3) *Finalize ESP contract with ESCO and coordinate financing:* based on the findings of the investment grade audit, the ESCO will develop a list of EE measures for implementation (accompanying energy savings estimates, project costs, implementation details, financing...); ESCO shall define (a) guaranteed annual energy savings that will result from the implemented EE measures - ESCO is

financially accountable for any shortfall of savings, (b) guaranteed maximum cost for the project that includes installation costs.

4) *ESCO implements energy improvements*: including training staff on proper operation and maintenance, putting measurement and verification mechanisms in place.

5) *Measure and verify*: this step is critical to the success of an EPC! (It ensures that the ESCO is fulfilling its responsibilities and that any shortfall in energy savings will be covered by the ESCO.)

Key barriers to EPC and ESCO business model adoption and operation

Difficulties/obstacles for the introduction of contractual savings or energy supply occur at various levels:

- *Market*: poor understanding and misconceptions of the ESCO model has limited demand for energy service contracts; lack of standardized energy service contracts makes sales process lengthier and more resource intensive; limited skills to provide energy service contracts and lack of experience of establishing ESCOs and delivering energy service contracts; conflict of interests (e.g. ESCO sells equipment).
- *Economic*: lack of appropriate finance to support energy service contracts; weak investment potential of local communities; recession has reduced the number of property developments, reducing opportunities to provide ESCOs to new-build.
- *Regulatory*: procurement rules make procuring energy service contracts lengthy and resource intensive for both, ESCO and customer; lack of local authority support to engage with ESCO projects; unstable, unpredictable, complex and incoherent regulatory framework makes ESCO development difficult.
- *Infrastructural & Technological*: high cost of some low-carbon energy technologies and energy infrastructure can make energy service projects financial unviable; risk associated with immature low-carbon energy technologies (examples in EMILIE project) limits investment.
- *User practices*: customer preference of certain technologies even though they may not provide the most cost-effective solutions; lack of consumer awareness of the ESCO model; lack of capacity of public institutions for autonomous implementation of sustainable energy projects.

ESCO and EPC: how to overcome barriers and maximize the benefits?

- To increase attractiveness of energy refurbishment of buildings (the implementation of rational use of energy and/or introduction of renewable energy sources) to potential investors: at least some share of funding has to be provided/ensured in the form of grants.
- In order to introduce energy contracting models: the adoption of appropriate mechanisms for energy efficiency and the establishment of appropriate financing and guarantee schemes are essential.
- Adoption of financial mechanisms which combine public funds (acquired from various public funding programs, primarily from the Cohesion Policy Funds and independent financial institutions e.g. EIB, EBRD...) with assets of ESCOs through a model of Public - Private Partnership (PPP).
- With the support (or under the patronage) of relevant authorities/ministries, a clear guidance on implementation of investment projects in sustainable energy, using the ESCO model is to be drawn-up (e.g. how to prepare project, take into account procurement issues, implement project and measure/verify the EE results). Note: Helpful guidance on energy efficiency in public buildings was prepared by European PPP Expertise Centre (EPEC), www.eib.org/epec.
- The implementation of energy contracting requires corresponding financial or guarantee schemes through which financing of ESCO companies would be arranged. Such schemes (presuming

establishment of ESCO Bank or ESCO Fund, being the contractual partner of the EIB) would enable ESCOs access to funds through local commercial banks. Involvement of funders is crucial!

- Establish the network of qualified market facilitators providing (technical, legal...) support to clients. In some countries local energy agencies act as EPC-project facilitators taking overall or partial responsibility for successful realization of EPC-project activities at regional level.

Example of initiative in support of EPC: TRANSPARENSE Project - aiming to acceptance and usage of the EPC code of conduct among the EPC market actors in order to increase transparency, quality and trustworthiness of the EPC services.



At the end of the Capitalization meeting in Ljubljana a visit to the “InfraSun” pilot plant at IJS was held.

Ljubljana, 11 June 2014