How to finance climate and energy plans

TUESDAY 1ST JUNE / 9.30 – 12.00 CET

The session will start at 9:30 CEST sharp. You can already join us on slido using the event code #GRF2050. Do not forget to turn off your webcam and microphone.
How to finance climate and energy plans

TUESDAY 1ST JUNE / 9.30 – 12.00 CET

Welcome speech

Hadrien Michel, DG ENER
How to finance climate and energy plans

Discover the CoM-Europe Financing guide

TUESDAY 1ST JUNE / 9.30 - 12.00 CET

Mariangela Luceri
Covenant of Mayors for Climate and Energy – Europe Office
mariangela.luceri@eumayors.eu
CoM-Europe Interactive Funding Guide
Support to financing

Webinars and Networking events dedicated to EU financing instruments for municipalities

Upcoming webinars on LIFE and Horizon Europe calls

E-learning modules on financing

Developed by the Covenant of Mayors - Europe Office and by the Joint Research Centre of the European Commission in cooperation with the Global Covenant of Mayors

Peer learning opportunities for signatories, coordinators and supporters

On innovative financing instruments, EPCs, citizen finances, etc.

Case studies and guidelines on public and private financing instruments

Good practices coming from signatories, coordinators and supporters

Publications of the Covenant of Mayors – Europe Office
Stepping up action for a fairer, climate-neutral Europe

Join the movement!

www.eumayors.eu
Thank you!
Mariangela Luceri
Info@eumayors.eu
coordinators@eumayors.eu
mariangela.luceri@eumayors.eu
How to finance climate and energy plans

Market engagement in public procurement of innovation: the example of Kindergarten Loptica

TUESDAY 1ST JUNE / 9.30 – 12.00 CET

Denis Premec, denis.premec@rea-sjever.hr
Market engagement in public procurement of innovation: the example of Kindergarten Loptica
Every PPI process begins with

**GENUINE UNMET NEED**

In our case: *Internal and external transformation of the kindergarten to modernise childcare conditions and improve energy efficiency*

**What led us to this unmet need:**

- low energy performance causing cold sensation in winter and hot rooms in summer time
- water supply and drainage system leaks and destroys internal walls
- low level of natural light illumination
- same problems on numerous similar buildings in CRO
A quick overview of the challenge and the result

- **The challenge:** energy retrofitting of the kindergarten. Before the start of the project, the building was considered to be near the end of its useful lifetime.

- **The goal** – finding an innovative solution to:
  - avoid the demolition of the kindergarten and construction of a new one (both = substantial cost),
  - enhance the building and extend its lifetime,
  - get a replicable solution for same or similar buildings in the country = a benefit for both procurer and bidder + easier to involve suppliers in PPI.

- **Innovative, External and Internal replicable** solution for energy efficient and functional transformation of a 35 year old prefabricated wooden kindergarten.

- **300.000,00 [€ without VAT]**

- The innovation resulted from the combination of existing materials and basic construction techniques not previously offered or used in the market.
3-stages approach

IDENTIFICATION
Customers need an accurate understanding of their unmet and future needs

MARKET ENGAGEMENT
Customers need to communicate requirements and market opportunities early in an accurate & convincing way to suppliers

PRO-INNOVATION TENDERING
Suppliers need an opportunity to offer new solutions on an equal playing field
Outcome based requirements

Outcome based requirements rather than detailed specifications during the market engagement

Outcome based specifications only at the tendering stage

Avoid specifying solutions' or specifications' details or requiring technology approach (technology neutral)

This is how we make a room for innovative solutions
Outcome based requirements, example

1) The thermal protection of the building exterior walls
2) Remediation of all inadequate water supply and drainage system of the building
3) Increase of the daylight illumination of rooms by increasing the transparency the canopy
4) Didactic and learning elements as a part of new envelope
5) Damaged internal walls remediation
6) New final floor layer in children's rooms
7) High-efficiency heat energy production system
8) Ventilation system with recuperation
Market analysis & credibility

- Analysis of the market potential for prefabricated old kindergartens in Croatia: 127 cities' all over Croatia analysed
  - The result: min 25 similar prefab buildings found (dots)
    - we decided this could be attractive enough to suppliers (replicability)
- 60+ Letters of interest collected – cities, local authorities, faculty, ministry
- Additional funding from City of Koprivnica budget
- All building technical documentation published, including Analysis of building construction health
Market sounding – tools used

- Not the tender beginning – basic info and a signal for suppliers that things are getting serious from now on
- Simultaneously the **Market Sounding Prospectus** has been published
- Much more important document, containing pilot description, OBR's, further OMC process
- Simply publishing PIN is not enough – suplemental and comprehensive market action is needed
Market sounding – tools used

- An e-mail campaign launched immediately after
- **15,600 emails** sent *(prior to GDPR 😊)*
- Informing about the PIN, MSP and the…

**PILOT PROJECT**

**MARKET SOUNDING WEB PAGE**

to show professionalism, dedication and visualise credibility

- simple and intuitive design
- direct and clear information
- in national and ENG language
Tools offered for supply side:

• Complete pilot project technical documentation
• Site visit reservations
• Market Consultation Workshop registration
• Questions and Answers
• Suppliers connecting tool
• Expressions of interest
Please read the Market Sounding Prospectus below before expressing the interest.

JOIN US IN OPEN MARKET CONSULTATION

During this market sounding phase all potential suppliers have the chance to present their products and services, connect with other suppliers and influence the procurement process.

We welcome expressions of interest from all parts of the supply chain including manufacturers, innovators, renovators, designers, architects, educators.

We are interested to hear ideas, information, new concepts and innovation that could contribute to achieving improvements in one or more aspects of the requirement:
30 expressions filled out by suppliers and sent to us

Many received expressions were quite detailed, with a very clear wish to cooperate

3 site visits arranged and conducted

Supply chain feedback, intense communication
We succeeded

Turn-key contract

Design & Build

24th April, 2019
How do you understand the term „innovation procurement”, looking from a public procurement perspective?
Thank you
E-FIX Energy Financing Mix

Testing innovative financing instruments for energy efficiency in the EU and the Eastern Neighbourhood

TUESDAY 1ST JUNE / 9.30 – 12.00 CET
Andreas Karner, ConPlusUltra GmbH/Austria
Creating an Innovative Financing Mix for Energy Efficiency

E-FIX aims at triggering private finance for sustainable energy projects by focusing on three specific financing mechanisms:

- Energy performance contracting
- Equipment leasing
- Crowdfunding/investing

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 735681. Disclaimer: The content of this material does not reflect the official opinion of the European Union. Responsibility for the information and views expressed lies entirely with the author(s).
How would you describe the status of innovative financing mechanisms for sustainable energy projects in your country?
E-FIX is moving along 3 directions

1. **TRANSFER KNOWLEDGE**
   - Within the Project Partnership: AT, CZ, HR, PL, GE, AM

2. **BUILD CAPACITIES**
   - Increasing the competencies of market actors, in regard to energy and financing requirements
   - Training of “Ambassadors” for innovative financing of energy projects

3. **ROLL OUT**
   - Strengthening national/regional structures for the innovative financing of energy projects in the partner countries
   - Test and disseminate tailored innovative energy financing mechanisms
   - Thereby increasing the investments in the energy sector
Multi-Stakeholder Engagement is a Key

Network of ~ 120 E-FIX Ambassadors
❖ Ambassadors are acting as multipliers for the ‘E-FIX approach’
❖ Offer to participate in free energy financing trainings
❖ Support in implementation of pilot financing campaigns
❖ Involvement in setting up national financing actions plans and competence centres for energy financing
❖ International networking opportunities via the Ambassador platform
❖ E-FIX Ambassador Platform online at www.energyfinancing.eu
E-FIX pilot financing campaigns – Austria
Crowdfunding for sustainable energy projects

Types of Crowdfunding

- Donation
- Reward
- Pre-selling

Crowdfunding

A successful Crowdfunding campaign

- Your crowd
  - Analyze your crowd
  - Establish a relationship with them
  - Understand who is your target

- The right platform
  - Platforms can look similar
  - After determining your crowd, analyze platform offerings

- Your campaign
  - Use a strategy!
  - Pay attention to the rewards!

Non-financial return

Crowdfunding

CROWDFUNDING
E-FIX pilot financing campaigns – Austria
Crowdfunding for sustainable energy projects

Why Crowdfunding?

❖ CF is still a niche market compared to conventional bank lending
❖ Focus primarily on energy efficiency projects (public/private sector) since “community-financing” models for renewables (solar PV, wind parks) are largely in place
❖ Well established legal framework in Austria (“Law on alternative financing”)
❖ CF platform solutions are growing, mainly for start-up businesses, real estate and sustainable businesses (health, food, partly energy & environment services)
❖ Crowdfunding offers outreach to the market and non-financial benefits:
  ◆ market validation of new products/technologies
  ◆ increased awareness
  ◆ marketing project towards a dedicated audience/target group
New crowdfunding platform launched for Austria – crowd17.at

- Initiated and operated by CONDA, one of Austria’s CF pioneers and largest platform operators
- crowd17.at is solely to promote energy efficiency, renewable projects as well as sustainable initiatives (with focus on SDG17)
- New projects can be easily submitted, considering the major eligibility criteria:
  - Energy impact (energy savings or RE production)
  - CO₂ impact
  - Funding demand (at least 100,000 EUR)
  - Other: USP, business model, financial appraisal, market & sales targets
- Preliminary assessment, legal due diligence, terms and conditions by platform
Project cases

Projects under appraisal:

❖ LED Street lighting – City of Telfs
  • change of ~ 800 lamps from mercury vapour to LED, total CF invest target ~300,000 EUR
  • energy savings of approx. 235 MWh/year, 60 tCO2/year

❖ Building renovation and green roof/PV at Vienna International School
  • total investment ~1.2 mill EUR (CF target ~130kEUR), roof renovation, greening roof, PV system, window sealings, renovation of changing rooms and heating system,
  • energy savings of approx. 330 MWh/year, plus RE production of 80 MWh/year

❖ Green roof and façade – CAPE10 foundation
  • House of Future and Social Innovation, Vienna
  • financing demand of approx. 50,000 EUR, under appraisal
Lessons learnt - Austria

❖ Municipalities can usually rely on variety of ‘traditional’ financing sources

- mainly commercial bank loans and public funds (zero-interest loans, grants),
- CF is sometimes hard to sell due to its increased cost (especially for the “non-visible” energy efficiency measures)
- However, CF is considered a useful complementary financing source
- CF advantage: the “crowd” is known and usually linked to the local community
Thank you

Andreas Karner
Andreas.Karner@conplusultra.com
Audience Q&A Session

Start presenting to display the audience questions on this slide.
How to finance climate and energy plans

STEPPING PLUS – Energy Performance Contracts in Public Buildings

TUESDAY 1ST JUNE / 9.30 – 12.00 CET

Lisa Sentimenti, lsentimenti@aess-modena.it
How easy is the EPCs implementation for public buildings in your region? (1= very hard 5= very easy)
**STEPPING project results**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved buildings</td>
<td>70</td>
</tr>
<tr>
<td>Municipalities involved in Investment Plans</td>
<td>170</td>
</tr>
<tr>
<td>Investment Plans</td>
<td>16</td>
</tr>
<tr>
<td>EPC Tenders launched</td>
<td>4</td>
</tr>
<tr>
<td>Total investment expected from IP</td>
<td>19 M€</td>
</tr>
<tr>
<td>Total investment expected from Tenders</td>
<td>9.5 M€</td>
</tr>
<tr>
<td>EPC MED Guidelines</td>
<td>1</td>
</tr>
<tr>
<td>EPC simulation tool</td>
<td>1</td>
</tr>
<tr>
<td>Trained people</td>
<td>300</td>
</tr>
</tbody>
</table>

Project co-financed by the European Regional Development Fund
STEPPING outcomes

1. 9 Partners, from 8 regions of 7 EU countries of MED area testing and transferring EPC implementation at local level

2. 1.6 M€ of ERDF for delivering:
   - 16 Investment Plans involving more than 170 Local Authorities
   - Engagement of largest audience with dissemination and training activities

3. 4 Procurement Tenders for awarding energy efficiency works transferring results into ordinary tender procedures of partners.
PILOT CASES - EPC awarded

Case study from Italy - Piemonte
• 4 Investment Plans bundling 39 buildings (schools, office buildings and gyms), 20 Municipalities
• 3 tender procedures (public calls) for an overall investment of 3M€ (leverage factor of about 20) by an EPC with Third Party Financing and PPP
• Average energy savings > 40%
• Typical contract duration 12-15 years

Case study from France – Auvergne Rhône Alpes
• 5 municipalities and 1 aggregation of municipalities
• 5 schools renovation plans
• 2,2 M€ investments, average energy savings >45%
• Economic interest for local SME’s and market sourcing
• local public society to take the role of a public ESCO

Case study from Italy – Emilia Romagna Region
• 1+1 Investment Plans, bundling 9 + 63 buildings (schools and office buildings, 3+7 Municipalities
• 1 tender procedure (public call) launched and awarded, overall investment of 6.3M€ by an EPC with Energy Service contract.
• Average expected energy savings: 30%
• Typical contract duration is 9-15 years.
EPC can be a solution for deep renovation of public buildings

There is not one solution anywhere applicable, but a case by case approach must be followed.

PDA is essential

PDA with an EPC facilitator is essential to develop investment plans that can find the fair balance among private and public interest.

Management phase is crucial

The management phase of the EPC is of paramount importance, even more important than the one related to works.

Include further incentives/grants in the IP

Whenever possible, especially for ESCO markets underdeveloped, a combination of public resources/grants supporting the investments should be searched for.

M&V is a key step, but few experience in MED countries

The measurement and verification of the performance is a key step, already to be tested in most of the cases.

Focus on impacts, not only financial ones

EPC can provide benefits to the public sector but those must not only be related to financial issues, but must be focused on impacts, in order to promote them.
The process leading to an EPC is rather clear

Approaches to EPC vary from country to country (different framework conditions, maturity of the ESCO market, climate conditions, financial framework constraints, etc). Nevertheless a clear step by step procedure as outlined in the EPC MED Guidelines delivered by STEPPING project. Standardized process:
- useful tips to avoid common mistakes
- reduce the workload of an EPC Investment Plan preparation.

Transnational added value

Within STEPPING project, different solutions and approaches innovative ways to solve specific issues.
i.e. in the end of the STEPPING project Italian and French models/ways to EPC converged more than at the beginning of the project. Achievements channeled in the EPC MED guidelines.

Renovation Wave Initiative

Europe calls urgently for the uptake of EPC in Member States upscale the rate of energy refurbishment and increase the leverage factor of public money. More and more EPCs to be implemented throughout Europe!
TIME for the action:
16 months (01/03/2021 – 30/06/2022)

OBJECT:
Transfer the MED EPC guidelines and the Simulation Tool

SUBJECTS:
3 GIVER Partners and 6 RECEIVERS

LEARNING-BY-DOING APPROACH
STEPPING PLUS - EXPECTED OUTCOMES

BUNDLING/AGGREGATION MODEL
(Municipalities and buildings)

- 56 public buildings refurbished
- 13 municipalities involved
- 9,5 M€ triggered
- 3 new EPC Investment Programmes
- 3 new EPC Action Plans (with regional stakeholders consultation)
https://stepping.interreg-med.eu/  
Twitter: @SteppingMed  
email  
l.sentimenti@aess-modena.it  
svio.denigris@regione.piemonte.it
Thank you
How to finance climate and energy plans

Development of mobility points in Riga metropolitan area with ELENA

TUESDAY 1ST JUNE / 9.30 – 12.00 CET

Liena Krumina
AC Konsultacijas
liena.krumina@ack.lv
Development of mobility points in Riga metropolitan area

Investment programme

Overall objective:
54 smart and sustainable mobility hubs’ system to encourage sustainable modal shift towards public transport

Main expected results:
improved or new railway and public transport smart and digital station infrastructure, new public transport, private car and micromobility charging infrastructure, improved accessibility and energy-efficiency

Modernisation, digitalisation
of public transport hubs, railway stations – smart stations, smart platforms, shared mobility infrastructure

E-charging infrastructure
for public transport, private cars in P&R and shared mobility areas and micromobility in B&R areas

Intelligent transport system
digital integrated real-time travel information system, smart ticketing system, smart-phone applications for mobility hub users, etc.

Smart energy infrastructure
smart / energy efficient lighting system, local renewable electric generation units, etc.
Development of mobility points in Riga metropolitan area with ELENA

ELENA - European Local Energy Assistance

Joint initiative by the EIB and the European Commission with the aim to support implementation of energy efficiency, distributed renewable energy and urban transport programmes

Main goal - supporting and accelerating the successful implementation of investments

Provides grants for technical assistance or Project Development Services for the preparation of eligible Investment Programmes
## Challenges and lessons learned

### Municipalities
- cooperation / individual work
- ELENA / other grants
- own involvement / outsourced consultants

### Application preparation
- Clear and detailed concept of investment programme necessary
- Pre-application stage can take up to 1 year
- Multi-stakeholder involvement: 80% time work with stakeholders, 20% time application preparation
- Global situation – uncertainty with possibilities while ELENA is looking for stability
Thank you
How many mobility hubs are planned to develop under presented ELENA project application?

ℹ️ Start presenting to display the poll results on this slide.
Energy communities as game changer in the European energy market

TUESDAY 1ST JUNE / 9.30 - 12.00 CET

Silvia Assalini, ICLEI ES Local Government for Sustainability
What are energy communities?

• New legal entities (IEMD, RED II)
• Strengthen the Clean Energy Package
• Open up for active participation in the Energy Market
Citizens Energy Communities (CEC) and Renewable Energy Communities (REC)

### Purpose
Primary: to provide environmental, economic or social community **benefits** for **members** or the **local area**

### Membership
- **CEC**: Any
- **REC**: Natural persons, Local authorities, SMEs

### Control
- Effective control by: Natural persons, Local authorities, SMEs
- Located in the **proximity** of the projects
What Energy Communities CAN do?

Subject to appropriate **licencing** and **permitting** procedures
Transposition deadline 31 June 2021
Recast RED II to adjust to new EU target (fit to 55%)
Building on previous experiences

Figure 1  Approximate number of community energy initiatives from the nine countries of the 24 case studies

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1750</td>
</tr>
<tr>
<td>Denmark</td>
<td>700</td>
</tr>
<tr>
<td>Netherlands</td>
<td>500</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>431</td>
</tr>
<tr>
<td>Sweden</td>
<td>200</td>
</tr>
<tr>
<td>France</td>
<td>70</td>
</tr>
<tr>
<td>Belgium</td>
<td>34</td>
</tr>
<tr>
<td>Poland</td>
<td>34</td>
</tr>
<tr>
<td>Spain</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: JRC based on various sources, 2019
Local governments leading the way

• Take action!
• Make information accessible
• Aggregator of interested stakeholders
• Facilitate the CEC and REC initiatives (eg taxes and levies)
• Give political support to the CEC and REC initiatives
Which one of the following aspects do you think counts more for the uptake of Energy Communities?
DECIDE - Developing Energy Communities through Informative and collective actions

- How energy communities and energy efficiency services are established and managed?

- Which kind of communications and interactions work best to encourage participation in energy communities for specific types of individuals and groups?

- Test and transfer knowledge in pilot projects across Europe.
What is behind participation?

Main Motivators:
• Community trust
• Community identity

Main Barriers:
• Administrative barriers, the entrance condition.
• A low perceived value of energy.
• Personal and social barriers, mainly a lack of interest and involvement.
This may be caused by unawareness, ignorance, resistance to change, a desire to maintain the status quo, by inertia and skepticism.
For an effective uptake of energy communities I

Create a sense of collective efficacy and active participation

Foster collective emotion
Foster community trust

Co-create a narrative with clear collective goals

The complex interplay of motivators call for a collective narrative. Facilitating the creation of such a clear narrative can have the ability to tie all motivators together.
For an effective uptake of energy communities II

• No “one-size-fits-all” Approach.
  Tailor communication, information and intervention to the respective stakeholder group and the current phase of your project.

• Understand stakeholders.
  Carry out an analysis of your stakeholders’ needs and barriers at an early stage of the project.

• Build on the existing.
  Use existing local identity and existing local groups and their identity, build on these identities instead of creating new ones.

• Keep Rebound effects in mind.
  Keep a superordinate goal commitment focus and consider principles of goalsetting when deciding on superordinate goals and subgoals.

• Establish Trust.
  It is considered necessary to be continuously active at local level as building trust takes time and be transparent on goals, methods and actual possibilities to collaborate in decisions taken.

• Organize it collectively.
  Use different participatory methods and allow for involvement in decision-making as much as possible.
Further reading & resources

- Publication on innovative financing mechanisms
- Fact sheet on Municipalities funding their own Energy Cooperative in Neustadt an der Waldnaab County, German
- Policy brief recently published on the status of transposition
- An example of revolving fund from the city of Almada (not recent but still working very well)
- Tool that support to identify the most suitable format for meetings and event that can be used to enhance community engagement
Thank you

Silvia.assalini@iclei.org

decide4energy.eu/
iclei-europe.org/
Audience Q&A Session

ℹ️ Start presenting to display the audience questions on this slide.
BREAK

Back at 11:05 for breakout sessions