



# NEW FINANCIAL INSTRUMENTS

TOPIC REPORT — SEVILLA, 30<sup>th</sup> JUNE 2017

**BUILD2LC Project  
Boosting Low Carbon  
Innovative Building  
Rehabilitation in  
European Regions**

The topic report is a communication action for the general public to show the main conclusions and results of the events being held with stakeholders in relation with BUILD2LC topics.

More info: [interreurope.eu/build2lc](http://interreurope.eu/build2lc)

# CONTENTS

## 1. ABOUT BUILD2LC

## 2. FOREWORD

## 3. INTRODUCTION TO THE TOPIC NEW FINANCIAL INSTRUMENTS

## 4. INTRODUCTION TO THE SEMINAR LITHUANIA

**Lithuania:** Warm & Well  
Museum of Energy And Technology  
Jonava municipality

## 6. BENCHMARKING FICHES

**Andalusia:** Reconstructed public buildings in City of Zagreb under the ZagEE project

**Andalusia:** Innovation in Financial Instruments

**Lithuania:** Warm & Well

**Lithuania:** Reconstructed public buildings in City of Zagreb under the ZagEE project

**Gloucestershire:** Innovation in Financial Instruments

**Gloucestershire:** Standardization and Simplification in Public Buildings Modernization

**Gloucestershire:** Reconstructed public buildings in City of Zagreb under the ZagEE project

**Gloucestershire:** croenergy.eu

**Gloucestershire:** Sustainable Campus- Green University

**Gloucestershire:** Financing and delivery of energy saving measures

**Gloucestershire:** Energy efficiency refurbishment in a multi-dwelling residential building in Sofia, Bulgaria

**Podkarpackie:** ENSVET - Energy Advices for Citizens (Slovenia)

**Podkarpackie:** Smart procurement

**Croatia:** Innovations in Financial Instruments

**Croatia:** Carrot-and-stick game in multi-apartment building modernization

**Jämtland Härjedalen:** croenergy.eu

**Slovenia:** Quality in multi-apartment building modernization

**Slovenia:** croenergy.eu

## 7. CONCLUSIONS

## 8. APPENDICES

**Seminar Agenda** attached

# 1

## ABOUT BUILD2LC

The recent framework strategy of the “Energy Union” of the European Commission indicates that 75% of European households are energy inefficient. There is also great potential for energy savings in public buildings of the EU. The BUILD2LC project will contribute decisively to achieve the EU energy goals, with its overall objective to increase the energy rehabilitation of buildings, and pave the path that facilitates the transit towards the new standard of nearly Zero Energy Buildings (nZEB).

The key innovative aspect of BUILD2LC is its multidisciplinary approach, that counting on different complementary expertise at Local (Gloucestershire County UK, and Gorenjska SI), Regional (Andalusia ES, Rzeszow PL, North West Croatia HR and Jämtland-Härjedalen Region SE) and National (Lithuania LT) level, will allow achieving the energy goals and a sustainable development of the construction sector, based on improving the competitiveness, generating qualified employment, promoting innovation, and alleviating fuel poverty, in line with the European objectives for smart, sustainable and inclusive growth.

The project, with a high replicability impact will design innovative financial instruments, adapted to the needs of citizens, new mechanisms that contribute to a more competitive business network, special programmes to support innovation, and innovative collaboration actions, focusing on vulnerable groups. Homeowners, business sector, policy makers, local authorities, knowledge institutes and vulnerable groups will benefit from the project.

BUILD2LC will develop a complete learning process to facilitate an effective knowledge flow among regions, with a bottom-up approach methodology, counting on the regional stakeholder groups. More than 70 best practices and almost 70 events involving nearly 400 stakeholders, will establish 7 different Regional Action Plans covering a population of more than 15 million inhabitants and improving energy efficiency over 25% at the participating regions.

## — AIMS

The main objective of the BUILD2LC is **to increase the energy rehabilitation of buildings to reduce energy consumption and enhance policies to favour the creation of a market of specialised companies in this sector**. To achieve this objective, it is necessary to reinforce the competences of partners in the following sub-objectives:

1. Encourage the demand and promotion of investments, facilitating that citizens undertake energy rehabilitation activities.
2. Promoting the competitiveness of the business network: reformulating business models (ES-COS) and integrating all actors in the value chain of the energy rehabilitation sector.
3. Improve the skills of workers aimed at new market niches of energy rehabilitation of buildings.
4. Encourage innovative solutions, the use of new materials, boosting public procurement, and the cooperation between companies and knowledge institutes.
5. **Eliminate barriers that impede the rehabilitation of buildings, especially those of a normative or administrative nature.**

Therefore, the exchange of experiences between partners, some of them occurred during this Interregional Thematic Seminar will be aimed at:

- Designing new, more flexible, transparent and innovative financial instruments, adapted to the needs and expectations of society, and considering the cost-benefit effectiveness of the measures, accompanied by innovative collaboration actions with citizens.
- Enhancing public private partnership for higher leverage of public funds.
- Promoting guarantee and operating mechanisms that contribute to the development of a higher quality and more competitive business network.
- Boosting mechanisms to support innovation in equipment and systems of higher energy efficiency in buildings with special relevance to the role of public administration and promotion of innovative strategic projects, demonstration projects and pilot projects in buildings.

# 2

## FOREWORD



**Mr Tsvyatko Velikov, Directorate-General Regional and Urban Policy of the European Commission (DG Regio)**

The EU Cohesion Policy is channelling a tangible part of the public budget for energy efficiency in Europe's regions and cities. During 2014-2020 it provides about 17.000 million Euro from the EU Budget for energy efficiency renovation of public and residential buildings, enterprises and SMEs.

These investments are bringing important benefits. The EU Cohesion Policy is supporting Member States to achieve the EU climate and energy targets as reconfirmed in the Energy Union Strategy and further framed by the energy efficiency legislation.

The EU Cohesion Policy is also supporting the national regional development, competitiveness, growth and jobs, for tackling energy poverty and enhancing energy security of supply. In the shared management mode, the regions can make sure the availability of a stable budgetary support, tailored to regional needs and synchronized with overall national development policy.

To deliver these benefits on a sustainable path, the Commission is encouraging a wider use of financial instruments that mobilize private investments and allow the financing to revolve.

The Commission services are working with the Member State to deliver. Our common success is demonstrating the added value of the Cohesion Policy investments on the ground!



**Mr Gvidas Dargužas,  
Public Investment Development Agency of Lithuania (VIPA) CEO**

The goal of the BUILD2LC project is creating new financial instruments that are necessary for the formation of efficient energy market for boosting energy efficiency in the region.

On the other hand, the main goal of the project participants and organizers is to rehabilitate buildings in the EU states, thus increasing energy efficiency and decreasing its consumption. It will be also sought to form energy consumption policy that would help to make better conditions for creating a specialized company market in this sector, applying successful practices of other EU states for that purpose.

This project is relevant for all EU as it will help to create and identify new financial means of efficient energy, encourage innovative solutions and investment in the construction sector, as well as significantly increase public awareness in the field of energy and define or remove potential obstacles related to legal limitations.

It is greatly important to highlight the environment and energy issues: By participating in this project we will become a part of interregional collaboration, improve regional development policy in the field of innovation, knowledge economy, environmental and hazard prevention, and also contribute to the European economic modernization and boosting of its greater competitiveness.



## Mr Cristóbal Sánchez, Andalusian Energy Agency General Manager

BUIDL2LC project is an initiative that has been created taking into account previous experience of the work carried out by the Andalusian Energy Agency on the development of the Sustainable Construction. As a consequence of the important challenges that we faced in Andalusia, we contacted other regions and local and national European entities, who share with us the interest through the BUIDL2LC project, to learn and exchange common experiences in this sector.

Important resources have been dedicated in Andalusia to these purposes. Most of the incentives and investments schemes have been aimed at the building sector, setting up in 2014 a specific programme aimed at Sustainable Construction.

Since 2009, more than 136.000 projects have been promoted within the framework of the incentives for the sustainable energy development of Andalusia and Sustainable Construction, with a public contribution of 397 million Euro (70% ERDF).

Significant advances have been made thanks to these economic incentives, with measurable economical, energy, environmental, social, territorial, and market impact.

In short, we continue taking advantage of the opportunities offered by energy to foster a model that favors the growth of an innovative and competitive productive economy network, concentrating efforts in sectors or areas with greater potential for growth and employment generation.

# 3

## INTRODUCTION TO THE TOPIC NEW ENERGY FINANCIAL INSTRUMENTS

The main objective of the BUILD2LC project is to increase the energy rehabilitation of buildings enhancing the implementation and change of policies. The project is focused on four different topics:

- New financial instruments
- Professionalization of the construction sector
- Activation of demand and combating energy poverty
- Innovation

BUILD2LC addresses the topic New Financial Instruments focusing on the development of new, flexible and innovative financial instruments. Across the seven regions involved in BUILD2LC project, there is a common starting scenario of regulatory uncertainty and unreliable energy retribution scheme that directly endanger investments in energy rehabilitation of buildings.

It is required to elaborate cost-effective measures gathering the needs and expectations of beneficiaries, increasing the effectiveness of public funds with the use of Public-Private Partnerships (PPP) and promoting business models for the contracting of energy services, such as ESCO & EPC models. Nevertheless, lessons learned show that only large projects investments were realized through the ESCO model, since in most regions it is obligatory to produce technical documentation for each building separately which increases the price of the investment per property and extends the period for the return of investment. The replication of some solutions is limited also because objects purpose and energy efficiency investments payback periods vary drastically.

It shall be pointed out that, especially for the residential and domestic sector, there is a general reluctance to use financial instruments instead of subsidies. These beneficiaries got used to traditional grants and subsidies, a kind of “subsidy culture” so they are reluctant to the idea of getting indebted for a good investment choice. In fact, there are proven experiences showing that subsidies push the demand of energy efficiency products and services. According to this, the statement “no subsidy, no activity” turns to be true.

Even more at present times when after the global economic crisis, domestic debt burden is too high in most regions of Europe, which makes more difficult to get new loans.

On the other hand, commercial private banks have generally low confidence towards energy efficiency projects and they use the same due diligence process for all the projects, regardless of the topic. It is a fact that energy rehabilitation of buildings and retrofiting is not seen as a priority for the private financial sector. Also, it is often required small but additional public funding support to ensure bankability of the projects. Moreover, there is a lack of credit availability as a consequence of harder financial markets that endanger the demand of sustainable building due to its capital intensive nature.

It is also the case that promoter companies are usually quite small and financially weak so they have limited capital access to afford the required investments or they cannot carry a high burden debt in their balance sheet. This is especially important for ESCOs as they work in an undeveloped market.

In short, there is a clear need across Europe for new financial instruments to boost energy rehabilitation of buildings, and these financial instruments must be adapted to the needs of diverse beneficiaries and different social classes with processes that should be shortened.



The 2014-20 European Cohesion policy is a comprehensive policy that allocates significant funding for sustainable energy investments. This includes more than 18.000 million Euro financing for more energy efficient buildings across Europe. Cohesion policy is financed by the European Structural and Investment Funds (ESIF).

The ESIF allocation for energy efficiency for the period 2014-2020 offers a substantial budget of some 35.000 million Euro that is three times higher than the 2007-2013 allocation. And it is not the only EU support for energy investments.

Other Financial Instruments are channeled via Horizon 2020 (5.700 million Euro for research and innovation in “Secure, clean and efficient energy”); Connecting Europe Facility (5.350 million Euro for TEN-E energy infrastructure of highest European added value), LIFE and COSME (also relevant for certain aspects, in particular for energy efficiency, including ‘PF4EE’ financial instrument under LIFE) and European Fund for Strategic Investments (EFSI, also known as Juncker Plan).

This financing is insufficient to cover all the needs for energy investments as stated by the European Commission<sup>1</sup>:

*The scale of investment needed to meet the EU's 2020 energy efficiency target is estimated at around €100 billion per year. The EU has increased the amount of public funds available for energy efficiency, but there is a need to boost private energy efficiency investments through a targeted use of public funds, the development of robust investment solutions and support activities for project developers.*

A wider use of financial instruments is encouraged also by the Juncker Plan and the Energy Union roadmap.

The ESIF allocation for energy efficiency is delivered under shared management through Managing Authorities and Line Ministries and covers a large scope of interventions and a high number of different activities, with different levels of implementation and responsibilities.

It is interesting to highlight that the ESIF allocation for energy efficiency is facing similar implementation challenges as other financing for energy efficiency, such as investments of small scale, technically complex, with needs of high upfront financing, with payback periods that could be long, standardisation often missing, market not visible for investors... and also needs a proper fix of suitable financing products, dedicated and technically capable institutions, new policies and regulation and also should be carefully planned, allocated and monitored.

<sup>1</sup> European Commission: Energy.

# 4 INTERRE- GIONAL SEMINAR IN VILNIUS, LITHUANIA

The first BUILD2LC Interregional Seminar titled *Challenges in setting up new financing and supporting instruments with EU funds for energy rehabilitation of buildings: feedback for successful projects* was held in Vilnius on 10-11 of January 2017 in accordance with the annexed Agenda. The Seminar attracted about 120 attendants and speakers

from different regions and various institutions, agencies, ministries, the European Commission, companies, municipalities and the other institutions. The following summary collects the main conclusions and outcomes of the seminar, split by sessions and roundtables.



## — SUMMARY OF THE SESSION 1 "New strategies to allocate EU funding to energy renovation of buildings"



**Mr Tsvyatko Velikov**

**Tsvyatko Velikov, Directorate-General Regional and Urban Policy of the European Commission (DG Regio)** gives a presentation titled *ESIF support for sustainable energy efficiency financing at European level*. Explains the EU context for energy efficiency initiatives and policy proposals and how various EU funding schemes work.

In particular, Mr Velikov insists in reminding that ESIF allocation for energy efficiency well supports the

smart finance for smart buildings initiative: an initiative for more effective use of public funding, projects assistance, aggregation and de-risking. It is true that ESIF allocation for energy efficiency is *facing similar implementation challenges as other financing for energy efficiency*. It shall be stressed that Investments are of small scale, can be technically complex, need high upfront financing, payback period can be long, standardisation is often missing, market are not visible for investors... and also need a proper fix of suitable financing products, dedicated and technically capable institutions, information, policies and regulation. In addition, the initiatives should be carefully planned, allocated and monitored.

Mr. Velikov invites to use DG Regio's assistance, encourages to continue good governance and partnership on all levels, and to learn from good practices. Indeed, the EFSI comes with various tools to support the implementation, as TAIEX REGIO PEER 2 PEER, JASPERS, operational programmes technical assistance, the Smart Specialisation Platform on Energy, the Energy Managing Authorities Network, FI compass, Additional technical assistance mobilised by DG REGIO, etc. so we are not alone in applying for this financial instrument.



**Mr Marius Vaščega**

**Marius Vaščega, Economic Governance Officer of the European Commission in Lithuania**, makes the presentation titled *European Fund for Strategic Investment (EFSI), opportunities in Lithuania (in the new context)* and gives a view of economic policy priorities, stressing the importance of using financial instruments as EFSIs to foster energy efficiency investments in Lithuania.

According to Mr Vaščega words, EFSIs can be used to counter-fight pro-cyclical financing, in more sectors than the traditional ESIF funds, and this way stabilize economic growth. Among other advantages, EFSI funding takes partial risk for the project (project financing features are applied), State aid rules are not

applied to the projects, and can be used by more potential beneficiaries than ESIF. Indeed, expenditure eligibility criteria are not applied to the funded projects. Also, the European Investment Advisory Hub support can be used to structure projects.

The major identified challenge in any country is to actually have possibility to implement financial instruments and harmonize legislation with EU regulations. The Lithuanian government has addressed this question since establishment of the first financial instruments in 2007 by assessing and harmonizing legislation that conflicts with financial instruments established using public funds and developing special legislations (with continuous adjustment) for new financial products which can be trusted by all stakeholders.



**Ms Rūta Dapkutė-Stankevičienė**

**Rūta Dapkutė-Stankevičienė, Deputy Director of the EU Investment Department of the Ministry of Finance of Lithuania**, presents *Financial instruments in Lithuania: lessons learned about the development of financial instruments in Lithuania*, main aspects, problems, and solutions. Ms. Dapkutė-Stankevičienė explains how several initiatives, such as JESSICA, JEREMY, INVEGA works and stresses the importance of attracting private financing. Also she states that the ESCO model is in the development stage yet in Lithuania.

When analyzing the key success factors of the financial instruments application in Lithuania, she outlines a good knowledge of market conditions and the needs

of final recipients, ex-ante consultations with relevant stakeholders (financial institutions, central and regional governmental institutions, non-governmental sector, etc.), the combination of financial instruments with other means of support (coverage of non-viable part of the project, interest rate subsidies, backing support) or other positive incentives (capacity building trainings), the attraction of private resources encoded at the set-up of the financial instruments, and a quick reaction to changing market conditions.

The main challenges identified in the next 2014-2020 framework period are a Late adoption from the European Commission guidance vs. the implementation of the financial instruments, the need of ex-ante assessments, several strong requirements for the financial instruments selection, the combination of financial instruments with other forms of support, the phased payments together with relevant management costs and fees and the potential Combination of EFSI and ESIF – needed to be simplified at the implementation process of national level, not only at the EU level.

The Session 1 included a Roundtable discussion titled **Good practices in innovative financing of projects for energy efficiency** with three introducing guest speakers:



**Mr Hrvoje Maras**

**Hrvoje Maras, ZagEE Project Leader from North-West Croatia Energy Agency (REGEA)** introduces *ZagEE project: Reconstructed public buildings in Zagreb.*

Zagreb – Energy Efficient City (ZagEE) is a good practice of BUILD2LC<sup>2</sup>, an ambitious public municipal building renovation program in the city of Zagreb, in collaboration with REGEA and many related stakeholders, with the aim of refurbishing 87 public buildings and 3.000 public lighting luminaries, but also to perform capac-

ity building activities (technical, financial, managerial) of city office employees and building managers. The project is an answer to the poor state and high energy consumption of public infrastructure (90% of buildings below F energy class). It was launched in 2012 and funded under the Intelligent Energy Europe programme - Mobilizing Local Energy Investment Project Development Assistance (MLEI PDA).

One of the primary ideas behind ZagEE project was to assess and test different financing instruments or schemes that were available in Croatia since there was no relevant experience within the city with use of instruments such as soft loans, EPC and ESI Fund grants.

PDA for development of specific energy renovation plans in cities and regions provides necessary financial spark to initiate large capital investments. Although financial structuring of the project should ideally be set before signing of the PDA contract, ZagEE proved that on underdeveloped markets where there are no tailored financial instruments for energy renovation cities, it is needed to take a first step and create the demand for energy renovation instruments. A mandatory three-year period within which

the investment has to be launched can be considered as a positive feature that creates an obligation and higher commitment level from local governments. PDA also offers very good opportunities for capacity building and training for public authorities so they can undertake similar capital investments in the future. Actually, the municipality acquired valuable information regarding expected investment costs for refurbishment of buildings and financial structuring of future renovation plans.



**Mr Inesis Kiškis**

**Inesis Kiškis, Director of European Union Assistance Management Department of the Lithuanian Ministry of Environment** makes the presentation

<sup>2</sup> See *Good Practices: Reconstructed public buildings in City of Zagreb under the ZagEE project.*

titled *Renovation of Multi-Apartment Buildings in Lithuania*. to illustrate the history of building renovation programs since the 1990's and the success of the JESSICA program in Lithuania. She insists on the need for the political will to reduce state support and shift to financial instruments.

The Multi-Apartment Buildings Renovation (MABR) in Lithuania is a complex and huge project that has been split into several good practices<sup>3</sup> for the sake of a good adoption and smooth transfer among the BUILD2LC partners.

Regarding the shift to financial instruments, Ms. Kiškis, explained the development and adoption of innovative financial instruments as a way to raise high interest from stakeholders, since standard financial instruments do not meet expectations of final beneficiaries, nor financial intermediaries neither investors. Lithuania faces the problem that usual or standard financing sources are traditionally risk averse and conservative. Financing periods proposed by banks are too short for the investments in the non-commercial infrastructure (including deep renovation of buildings). Therefore, there is a need

for non-standard financial instrument. This way, the Public Investment Development Agency of Lithuania (VIPA) VIPA has developed non-standard guaranty product, which is fast to launch, the investment percentage guaranteed is increasing over and it does not affect NPL's indicators up to guaranty amount. This innovative financial instrument is based on a securitization model to attract financing to MABR program even from international capital market.



**Mr Joaquín Villar Rodríguez**

**Joaquín Villar Rodríguez, Head of Internationalization and Prospective Department of the Energy Agency (Andalusia)**, performed the presentation *Programme for Sustainable Construction in Andalusia*. Mr.

Villar explained the concept of sustainable construction program in Andalusia and discussed its results<sup>4</sup>.

The *Programme for Sustainable Construction in Andalusia*, awarded with a Regio Star 2015 prize, seeks through energy saving and renewable energy to promote the energy refurbishment of buildings, rehabilitate urban areas, improve the competitiveness of companies of the construction sector, create skilled employment and reduce energy poverty. The Programme consists of three main actions: An incentive scheme funded with 116 million Euro and 48 possible actions to facilitate the energy refurbishment of existing buildings, mobilizing 258 million Euro of total investment outcome a financing line based on, revolving funds for companies and the "Sustainable Construction Round Table" involving more than 70 experts and stakeholders from different disciplines.

As a part of the Programme for Sustainable Construction in Andalusia, the financing tool relied on the Incentives Programme for Sustainable Construction in Andalusia, managed by the Andalusian Energy Agency. The financial incentives had the aim of the facilitating the rehabilitation of existing buildings through ener-

<sup>3</sup> See *Good Practices: Lithuania*. | <sup>4</sup> See *Good Practices: Andalusia*

gy saving and efficiency and renewable energy measures and to promote a culture based on the sustainable energy rehabilitation of buildings.

The Incentives Programme for Sustainable Construction in Andalusia was fully developed with the collaboration of 8.300 private companies, “collaborating partner companies” liaising in integrative public-private collaboration with the Agency in the management and processing of incentives in a de-centralized way, which facilitated the administrative procedures to request incentives by end users. Most of the collaborating partner companies are SMEs, which contributes to generating economic activity in the weaker business environment. The Agency’s website included an interactive online mapping tool showing the geographical location of the collaborating companies, to ease the process to find a company freely.

At the **Q&A discussion** following these presentations it was found through debate that:

**There were indicated commonalities in energy efficiency innovative financing practices that could be applied universally among partners:**

- It was commonly agreed that overreliance on grants is harmful and the government’s role is to be a catalyst and to provide incentives, but at some point, projects must increase the share of financial instrument and decrease or eliminate subsidies, which is a common denominator for all countries.
- It was highlighted the need to increase awareness among the citizens about the program, energy savings, quality and comfort.
- The focus should be on innovation and energy efficiency, but the main goal is to improve professional competence of the collaborating companies.

**Suggestions how to improve the scale of the projects because the pace of the implementation in some countries is slow were provided:**

- It was proposed to start with a good campaign in order to raise awareness among citizens. In particular, Multi-apartment building residents need to realize that they will get a higher level of comfort and cumulative savings.

**Some reasons for the project’s success in Andalusia:**

- It was stressed the role of collaborating partners in spreading the knowledge about the project and underscored the importance of improving energy culture of the citizens.

**The main insights were identified about the prospects of ESCO in the coming five years:**

- ESCO system is well-developed in the Spanish market.
- At first conditions, it must be created in Croatia for it to develop.
- ESCO will work in Lithuania if an opportunity to make the business profitable is created.

## SUMMARY OF THE SESSION 2 “Challenge for Managing Authorities in financing energy renovation of buildings”



**Ms Isabelle Seigneur**

**Isabelle Seigneur from the Joint Research Centre of the European Commission** makes the presentation titled *State of play of Energy Efficiency in the Operational Programmes*. Ms Seigneur performs a practical presentation throughout the ESIF viewer and other online tools to learn to navigate among the huge number of available funding possibilities in Europe. Explains the overall sustainable energy context and EU related funding sources, providing useful resources to get more information and explains.



**Ms Inmaculada Periañez**

**Inmaculada Periañez from the Joint Research Centre of the European Commission** makes the presentation *The Energy and Managing Authorities Network* on behalf of the Energy and Managing Authorities (EMA) Network. She presents information about the members of the network, its scope, tasks, and operation.

The EMA supports Member States to make best use of Cohesion Policy funding for energy by strengthening connections, cooperation and exchange of information, knowledge and practices among all the authorities dealing with the integration of the energy dimension within the ERDF and CF, in particular with the implementation of energy related programmes and projects.

As well, EMA acts as an informal platform of exchange among Member States, but also between the Commission and the representatives of the Member States.

Among its members it can be found representatives of national energy authorities and of Cohesion Policy Managing Authorities dealing with energy. DG ENER and DG REGIO ensure the operation of the network. The representatives of relevant organisations representing International Financial Institutions (IFIs), industry or coalition of NGOs active on Cohesion Policy and on energy issues, are invited as appropriate to participate as observers in specific meetings.

The main tasks of the EMA Network are informing DG ENER and DG REGIO about relevant developments linked to energy policy and regional policy, to inform and share with national Energy and Managing Authorities the Commission and other members progress and issues at national and regional level as regards energy related programmes and projects, sharing of good practices and addressing specific concerns and needs which would request more in-depth work.

Inmaculada Periañez from the Joint Research Centre of the European Commission makes also the presentation titled *Smart Specialization Platform on Energy* and invites to use the Joint Research Centre's resources, to ask questions and to interact during the session and dinner.

The Smart Specialization Platform on Energy is joint initiative that engages DG REGIO, DG ENER and Joint Research Centre with the objectives of getting a optimal uptake of the Cohesion Policy funds for energy, supporting energy innovation at all levels and their alignment with EU priorities within a bottom-up approach working directly with the regions on targeted activities. The launch of this initiative was on May 2015 in Spain and the first regions conference gathered in June 2016 more than 700 participants.



**Mr Francisco Tovar**

**Francisco Tovar from the Ministry of Finance of Spain** makes the presentation *REBECA: the Spanish Network on Low Carbon Economy*. Explains how cooperation between Managing Authorities and national regional administration works in Spain.

After these speeches there was a round table discussion by the **Policy Board** members incorporated by the **managing authorities of the BUILD2LC partners**.

**The main conclusions and outcomes of the Session 2 round table discussion *Challenges in implementing programmes with ESI Funds***, moderated by Isabelle Seigneur from the Joint Research Centre, European Commission, were as follows:

Members of the Policy Board:

- **Norbert Tomkiewicz**, Director of the Department for Regional Development, Marshall's Office of Podkarpackie Region - Rzeszów (Poland).
- **Tilen Smolnikar**, Energy Directorate, Ministry of Infrastructures - Gorenjska (Slovenia).
- **Rūta Dapkutė-Stankevičienė**, Deputy Director of the EU Investment Department, Ministry of Finance (Lithuania).
- **Damir Gubić**, Head of Department for the Implementation of Financial Instruments, Ministry of Regional Development and EU Funds - Croatia.
- **Joaquín Villar**, Andalusian Energy Agency - Andalusia (Spain).
- **Dr. Erik-Widar Andersson**, Senior Advisor, Financial issues within regional development - Region Jämtland Härjedalen (Sweden).
- **Barry Wyatt**, Strategic Head of Development Services, Stroud District Council - Gloucester (United Kingdom).

The moderator proposes to discuss three main topics. The first one is the **rationale for ESIF investment in energy efficiency in public and residential buildings**.

- One of the justifications to invest heavily in energy efficiency in buildings in Lithuania is founding very high rates of energy consumption, because most of buildings were constructed during the Soviet era and were not meant to be energy efficient.

- Nine million m<sup>2</sup> need to be renovated in Slovenia by 2023 and, in this financial perspective, the Ministry of Infrastructure is the only institution that prepares calls for proposal for all types of buildings.
- The United Kingdom has lowered the influence of the Ministry of Environment. The focus currently is on business and enterprise, innovation and skills. It was expressed hope that CO<sub>2</sub> objectives will be re-integrated alongside business objectives.

- In Poland the justification is the high cost of heating low insulation parameters and outdated used technology; in addition, Poland is one of the most polluted areas in Europe. The targets are to increase energy efficiency, reduce greenhouse gases and dust and eliminate energy poverty.
- The construction sector is strong, even though it was affected by the economic crisis, the energy efficiency measures were meant to boost this sector. It is important to conduct pre- and post-analysis of potential projects.
- Fossil-free energy production dominates in Sweden. Notes that each generation of housing was up to standard at the time. But construction of new multi-apartment buildings is growing recently, so energy efficiency standards are in the spotlight.



After the discussion and questions provided from the audience, the general insights are:

- There is a need in Croatia, Slovenia and other regions to increase capacity building of standard banks about energy efficiency projects, so that they get actively involved in financing these projects.
- Banks are not active in Slovenia, because households are not interested in loans. There is also a good practice named “Eco Fund”<sup>5</sup> that gives grants and loans for such projects.
- Poland counts on the BGK bank, which is a special bank that gives loans to SME’s, energy efficiency projects, etc.
- The Green Investment Bank is a financial entity that finances large projects by mean of the Green Deal, which is a government-sponsored loan scheme for renovations in UK.

After the Part 2 of discussion: **Interventions to support energy efficiency in buildings** it was highlighted the main outcomes:

- The use of financial instruments were considered in regional programs in Poland, but they were not used because beneficiaries were not interested in them because the cost of investments was high and, in addition, there is a *National Fund for Thermal Modernization*, which offers more competitive conditions.
- It was expressed that the important actions are related to communication and information. As solutions it was mentioned the simplification of the process and a more complete catalogue of actions. It was stressed the need for certification of the impact before and after the action (ex-ante and ex- post) and to improve energy culture among the citizens while raising awareness. Notes more efficient technical and administrative management as the main challenges.

- The main challenges in Lithuania are to attract more private resources, combine different support mechanism, to develop ESCO model and establish a national promotional institution.
- Specific objectives are being considered in Croatia, such as a combination of grants and financial instruments. Notes that it is important to finish the first projects and use them as examples of good practice. The challenge is the balance between grants and financial instruments.
- Andalusia indicates the need to improve energy management, incentives schemes, selection, evaluation and monitoring of the projects. Notes the interest in the next meeting about professionalization and the sector clusterization, which will take place in Poland ending March.
- EU competitive funding is a complicated process and Sweden has not done a proper homework about.

<sup>5</sup> See chapter *Good Practices: Eco Fund*.

After the Part 3 of discussion: **Coordination and synergies with other regions, useful tools, EE partnerships, platform, interregional cooperation:**

- The UK needs a holistic approach and a common national strategy; there is no strategy at the local level, stresses the need for a bottom-up model.
- Improved governance, preparation for the next period, innovation and energy poverty deserve to be more pronounced topics in the next operational program in Croatia -under development-.
- The main benefits are the access to examples of good practices from other countries and regions, which Slovenia will try to implement in the Operational Programme in this or next period.
- Participation in common European projects help to find solutions regarding energy efficiency and CO<sub>2</sub> reduction by experience sharing. Main problems and difficulties are technical and organizational knowledge.

Moderator Isabelle Seigneur thanks all the participants for the fruitful roundtable discussion.

<sup>6</sup> See *Good Practices: Standardization and Simplification in Public Buildings Modernization*.

## — SUMMARY OF THE SESSION 3 "Innovative financing tackling by end-users in energy efficiency projects"



**Ms Gintarė Burbienė**

The Session 3 started with **Gintarė Burbienė, Head of project implementation division, Housing Energy Saving Agency (BETA)** making the presentation *Public awareness of the multi-apartment building renovation process in Lithuania technical assistance, promotion, construction works*.

The Public Company Housing Advisory Agency was established on 2001. After a reorganization in 2013, the public company was renamed Housing Energy

Efficiency Agency (BETA). The Agency provides consulting services and assistance for homeowners on matters related to the renovation of multi-apartment buildings. It also evaluates and approves submitted investment plans and procurement documents, cooperates with municipal authorities, engineering consultancy companies, educational institutions, non-governmental organizations, etc. BETA also implements the project which purpose is to encourage the owners of the apartments and other premises in multi-apartment buildings to participate in the multi-apartment Building Renovation Programme.

Moreover, BETA participates in EU-funded international projects, which in turn strengthens cooperation with housing partners from other countries, and enhances skills and experience in developing projects related to the application of alternative energy resources in multi-apartment buildings, and in generating ideas for the construction of passive houses. It also performs activities related to encouraging homeowners to renovate multi-apartment buildings. In the near future the Agency is planning to coordinate the Programme for Energy Efficiency Improvements in Public Municipality Buildings<sup>6</sup>.

Quality of works regarding buildings modernization is one of the main issues to be tackled, because investments for the modernization are relatively high. Bad examples are usually more visible, save less energy, create important concerns among the citizens and are escalated in the media<sup>7</sup>.

The multi-apartment building renovation process in Lithuania is considered to be a success after an estimated total energy savings (kWh) of ~500.000 kWh up to the date a reduction of emissions of ~116.000 ton CO2 equivalent. 1.500 buildings already renovated and ca. 400 million Euro investment materialized. The consequences are +37.000 households with improved energy consumption classification, over 120.000 engaged in support programmes and 272.000 kWh estimated annual final energy savings.

The Session 3 included a Roundtable discussion titled **Good practices in informing citizens on the use of innovative financing instruments**, based on these three speeches:



**Mr Barry Wyatt**

**Barry Wyatt, Strategic Head of Development Services at Stroud District Council, Gloucestershire, United Kingdom**, makes a presentation titled *Warm & Well – Energy Efficiency Advice and Installation Scheme* with background information about energy efficiency and the buildings renovation situation as well as the typology of buildings prevailing in Gloucestershire.

Mr Wyatt explains the Warm & Well concept, which was launched in 2001 that focuses on public health,

fuel poverty, and energy efficiency improvements. Warm and Well is considered to be a good practice of BUILD2LC project.<sup>8</sup>

Warm & Well was launched in October 2001 to install energy efficiency improvements in the homes of domestic householders. In 2012 the Warm and Well scheme opened the Warm and Well advice line, allowing clients to access free energy efficiency advice and information on grants and funding available both nationally and locally. This advice line had been running in parallel to Warm & Well previously but then became integrated in order to ensure provision of a holistic programme.

The Warm & Well scheme aims to improve energy efficiency in the home and reduce the risk of fuel poverty and associated health problems by raising public awareness, providing specific and appropriate advice to all householders, making referrals into grant and discount schemes and addressing central links between energy efficiency, affordable warmth, cold living conditions and health risks, such as cardiovascular illness and condensation damp related respiratory illness.

<sup>7</sup> See *Good Practices: Quality in Multi-Apartment Building Modernization*. | <sup>8</sup> See *Good Practices: Warm & Well*.

The target groups for the project are households vulnerable to health problems associated with, or exacerbated by, low indoor temperatures, households likely to be living in fuel poverty, and unable to afford adequate heating and, the general public, to promote awareness of energy efficiency and the related issues of ventilation and the avoidance of condensation damp.

Grants are available through the Warm and Well scheme and over the years have covered a variety of measures from solid wall installation, first time central heating systems and cavity and loft insulation. The funding has come from different sources, including government departments, local authorities, fuel supplier obligations and client funding. The scheme has been required to quickly adapt to changes in funding opportunities and explains the current funding available to clients in a clear manner.



**Ms Moa Breivik**

**Moa Breivik, municipal energy and climate advisor from the Jämtland-Härjedalen Region (Sweden),** makes the presentation titled *Grant for municipal energy and climate advisors* (see chapter "Good Practices").

Ms. Breivik explains how regional agencies work in Sweden providing background information about the Jämtland-Härjedalen region and the energy efficiency projects that are being carried out there.

All Swedish municipalities can apply for a grant for a municipal Energy and Climate Advisor. The size of the grant and the assignments for the advisors has evolved over the last 40 years as energy issues in society has changed.

The advisors target group is SMEs, organizations and individuals. The advisors provide information on relevant energy efficiency measures, technical solutions and relevant investment aids available as well as on renewable energy production and transport issues. The advisors have knowledge about regional conditions.

The advisors consult those who seek help, but also actively contact energy intensive target groups offering advice. The service is free of charge and commercially independent. The regional energy agencies coordinate the advisors. The grant is provided by the Swedish Energy Agency. The size of the grant is 28.000 – 43.000 Euro/year depending on the number of residents in each municipality. Many municipalities are small and it is common that the grant covers approximately a 40% of the service.

The main success factors are the credibility of the independent advice, the national coverage with a local base that constitute a channel for the various efforts energy efficiency and reduced environmental impact, as well as the broad and good the skills of the advisers.

A survey conducted by Statistics Sweden on behalf of the Swedish Energy Agency shows that public awareness on energy and climate advice is about 30% of single-family owners and about 18% have been in contact with the energy and climate advisors. Once the information arrives through the advisers, a third of the single-family owners say that it has affected in their investment decisions in fairly large degree.



**Mr Piotr Pawelec**

**Piotr Pawelec, President at the Institute of Good Eco-solutions “Alternative” (Poland)**, makes the presentation titled *Rehabilitation of buildings and removal of asbestos* (see chapter “Good Practices”). He presented the situation in Poland, where asbestos had been widely used in construction sector from 1952 un-

til 1997, noticing also that burning waste and low quality coal is still a serious problem in the Subcarpathian region, which is one of the poorest regions in the EU.

In 2002 there was about 15 million tons of inventoried asbestos in Poland. In addition, only 30% of asbestos products in Poland are thought to have been inventoried, meaning that it is uncertain as to where the asbestos is located. Most of asbestos was used as roofing in private households. People do not always realise how serious the problem of asbestos is. On the other hand, even if they do they often do not have will funds to remove asbestos (as it requires special treatment and processing). The total cost of their dismantling and transport as well as disposal of produced waste containing asbestos is estimated to amount to approx. PLN 40 billion (ca. 10.000 million Euro).

As an answer to this huge problem, in 2010 the National Government adopted in 2010 the *Programme for Asbestos Abatement in Poland 2009-2032* targeting the removal and disposal of products containing asbestos, trying to minimize adverse health effects and eliminating negative effect of asbestos on the environment. It is advised by Mr Pawelec that **this Programme of asbestos removal could be an opportunity to**

**renovate buildings according to the European energy policies.** The main problem for program’s beneficiaries is that they receive support for the removal of asbestos but do not receive support for new elements such as for example a new roof.

The main conclusions and outcomes of the Session 3 round table discussion **Good practices in informing citizens on the use of innovative financing instruments** are:

- Without knowledge citizens may not know what measures are available. We can help to find the alternatives and evaluate the risks. The main challenge is to make citizens change their habits by raising awareness.
- It was noted the importance of identifying the markets and the needs to be satisfied, which then should be aligned with national and regional programs.
- It was stressed the need to listen first to the people’s needs, because the people usually know their problems well, and only then after to present ideas in the context of real needs.

## — SUMMARY OF THE SESSION 4 "Other Interregional experiences to boost innovative financing in energy efficiency projects"



Ms Violeta Greičiuvienė

**Violeta Greičiuvienė, Head of EU Assistance Division, Ministry of Energy (Lithuania),** presents *Boosting innovative financing in energy efficiency projects in public buildings*. She speaks about financial instruments, the ESCO model for the renovation of government-owned buildings and street lighting and introduces several pilot projects.

Because of the legal restrictions in Lithuania, most central government buildings users are not able to borrow capital on their behalf. In order to address this issue it was decided to apply the ESCO model and start to develop ESCO market in Lithuania<sup>9</sup>.

VIPA Agency from Lithuania signed an ELENA (technical assistance facility managed by EBRD) agreement to create project pipeline and to involve a certain number of stakeholders (Lithuanian ESCOs, public authorities and building owners participating in actual EnPC activities) big enough that they can then build on this experience and replicate the ESCO concept further. Transparent and secure framework conditions and sufficient demand of ESCO projects would allow a national ESCO industry to develop. Some requirements are ESCO must operate in EU territory, the energy class of a building must be D or lower, centrally owned public building must be managed by budgetary or public institutions (state enterprises are not eligible applicants), 51% of a building must belong and be used by the State to be considered public buildings.

There were no specific requirements for certain pay-back period or financial viability of the project, yet a minimum requirement for economic performance indicators was needed: after renovation to reach 30% minimum savings, at least energy class C and building usage by purpose not shorter than 10 years.



Mr Carlos Serra

**Carlos Serra from the Andalusian Energy Agency (Andalusia, Spain)** makes the presentation *FINERPOL: Financial Instruments for Energy Renovation Policies and REHABILITATE projects* on behalf of the FINERPOL project partner from Extremadura region (Spain).

The Financial Instruments for Energy Renovation Policies (FINERPOL) Project aims to increase the rate

<sup>9</sup> See *Good Practices: Standardization and Simplification in Public Buildings Modernization*.

of refurbishment of buildings to increase their energy efficiency, by improving access to investment finance. It is supported by ERDF provided through the Interreg Europe Programme.

Increasing investment in energy efficiency and renewable energy for buildings is a major challenge to meet European Union and UK targets to reduce carbon emissions. However, austerity measures and a more riskaverse investment climate have slowed the rate of investment considerably.

FINERPOL partners aim to develop regional Action Plans to overcome these barriers, making use of EU funds, and national and other sources as appropriate, to attract investment finance from a range of sources for energy efficiency renovations.



**Mr Ignacio Contreras**

Carlos Serra from the Andalusian Energy Agency (Andalusia, Spain) makes the presentation *Innovative financial experiences in interregional projects to foster energy rehabilitation* on behalf of the Andalusian stakeholder **Ignacio Contreras, from The Spanish Institute of Financial Analysts.**

He stresses that every different situation needs a different financial vehicle depending on many factors as solvency, project size, kind of initiative, the existence of public funding, etc. It is important to attract private capital to increase the leverage of the public funding and, on the other hand, providing the project with public sources increase the bankability of the projects.



**Mr Joaquín Villar Rodríguez**

**Joaquín Villar Rodríguez, Head of Internationalization and Prospective Department Energy Agency (Andalusia),** makes the presentation *European Partnership of regions to promote investment on energy efficiency in buildings*. Mr. Villar explains the aim, role and function of this Partnership inviting other actors to join the initiative of buildings in Europe initiative.

He presents as well a list of regions that have confirmed their participation in the project and next steps for the network to be developed.

*The seminar ends at 13:30.*

# 5

## STUDY VISITS

During the interregional seminar in Vilnius, partners of the BUILD2LC project also accomplished two study visits.

### — MUSEUM OF ENERGY AND TECHNOLOGY



The first study visit was held in the Museum of Energy and Technology which is in a unique object of heritage – the first Vilnius central power plant. The spaces of the former power plant have been adapted for visitors. It displays various objects of technical heritage and tells the story of the old power plant.

**Gedas Janėnas, Representative of Šiaulių Bankas Project Manager at Department of Development of Financial Services**, made a presentation titled *Experience in implementing financial instruments*. It was introduced the activities of Šiaulių Bank which has been participating more than 15 years in multi-apartment buildings renovation (modernization) programme and takes a leading position in this area. In 2010, Šiaulių Bankas became the first financial partner of the EIB in Lithuania implementing the JESSICA facility.

Actively cooperating with the EIB as well as Lithuanian ministries, municipalities and other institutions, inhabitants and apartment building administrators, Šiaulių Bankas provides more than only credits to housing renovation. The bank acts as the nationally important project investor - during 2014-2016 it has contributed 80 million Euros of its own funds to the Renovation Programme. Housing modernization is one of the priority areas of Šiaulių Bankas. Mr. Janėnas shared their successful experience in housing renovation programme, explained financing conditions and requirements for applicants and how the scheme of state subsidy and loan repayment works.

## — JONAVA MUNICIPALITY



Jonava's mayor reception and BUILD2LC delegates.



An example of successful multi-apartment building renovation.

The second study visit was held in **Jonava municipality** which is a real example of good practice in implementing financial instruments of energy efficiency projects in renovating multi-apartment buildings with a huge potential to continue with other projects, like renovation of public building with ESCO model, complex renovation, streets lighting projects and development of eco transport with an innovative approach both in the technical solutions chosen and the financing schemes.

After the Jonava mayor welcome<sup>10</sup>, **Lineta Jakimavičienė, Head of strategic planning and the investment division**, introduced Jonava city and explained the history and stages of multi-apartment building renovation progress in Jonava municipality and shared their experience in issues and challenges which had to be solved at the starting point of renovation process, like: resistance and reluctance of inhabitants to start renovation of multi-apartment buildings. She provided data of stand-

ard project, which showed price of renovation of square meter per flat, savings, state support and the average amount of credit repayment. Later on, the BUILD2LC partners also had the opportunity to visit Jonava city and to see “in situ” examples of multi-apartment buildings before and after renovation. In order to foster the multi-apartment building renovation process, the Lithuanian government decided to stipulate and simplify the process at the level of the final bene-

ficiaries by involving municipalities<sup>11</sup>. At the beginning, the process of modernization was administratively intensive, challenging because required to conciliate many owners, and these home owners were averse (did not want to borrow) and poorly organized. Therefore, the National Government set a plan based on municipalities' capacity building to draw lists of the worst energy performing buildings and appointment of renovation administrators.

<sup>10</sup> Find it at the local news | <sup>11</sup> See Good Practices: Municipalities involvement in Multi-Apartment Building Modernization.

# 6

## BENCH-MARKING FICHES

Benchmarking Fiches are provided by BUILD2LC partners as a consequence of the learning and exchange of common experiences. Based on the effective exchange of Good Practices, partners were asked to identify which practices they are willing to adopt in their region.

A Benchmarking Fiche has been designed in the frame of the project to show the interest of the partner in adopting a specific Good Practice. Hence, partners are required to complete questions about main needs in their region (related to the topic) that the good practice will address, issues that could be improved in the region by adopting the good practice, problems that could arise when adopting or once adopted the good practice or policy instruments in place that could implement the good practice.

AEA from Andalusia region is interested in two good practices:

- On one hand is interested in adopting the extensive experience on renovating public buildings from the Croatian Good Practice *“Reconstructed public buildings in City of Zagreb under the ZagEE project”*, particularly in the Specific parts: Buildings stock database, financial instruments and capacity building. The AEA states that the convergence of dedicated public funding, experience in managing funds, the alignment with the Andalusian policies and Operational Programme outlines and the existence of a Energy Management Network of the Andalusian Regional Government (REDEJA) as the tool designed to promote the principles of energy saving and diversification in the Andalusian Administration would make the adoption process a likely success.

- On the other hand, Andalusia needs to leverage their current public funding sources by the adoption of new financial instruments. Combined with the use of existing incentives program managed by the AAE, they would give an extraordinary boost to the investment amount in sustainable energy initiatives and would very likely encourage the participation of private financing actors. The Lithuanian GP called: Innovations in Financial Instruments would fit the Andalusian needs.
- Andalusia also needs a new financial instrument where funding from the Operational Programme for investments for jobs and growth will be leveraged with EIB funds and private funding to respond to the need of renovating thousands of public buildings. This is likely to be addressed by a capitalization activity from another on-going Interreg project: FINERPOL.

As VIPA partner concerns, Lithuania may use:

- Part of *Warm & Well – Energy Efficiency Advice and Installation Scheme* experience from UK partner. This practice would be incorporated to respond to the huge pipeline of projects in multi-apartment buildings which needs implementation, but counting with limited funding possibilities.
- Also, Lithuania shows interest for the Croatian Good Practice *Reconstructed public buildings in City of Zagreb under the ZagEE project*, although currently there are no local policy instruments which might help to transfer such good practice to Lithuanian public buildings sector.

UK partner, SWEA, has shown interest in adopting seven Good Practices for Gloucestershire Region:

- In first place, they are also willing to incorporate the Croatian Good Practice *Reconstructed public buildings in City of Zagreb under the ZagEE project* as Lithuanians are. UK partner claims that in order to incorporate this Good Practice, some finance could come from local authorities but additional funding will also need to be sought through other avenues.
- Secondly, SWEA partner is interested in another Croatian GP: *croenergy.eu* as they see this experience as an interesting opportunity to give greater ownership to local communities.
- In third place, SWEA is willing to adopt the Lithuanian GP called: *Innovations in Financial Instruments* and they would like to learn more about how VIPA worked with government on a local and national scale.

- Gloucestershire is willing also to adopt some aspects of *Standardization and Simplification in Public Buildings Modernization* from the Lithuanian partner VIPA in order to know more of the structure of the application process and related documentation, how the loans are administered and the process is staffed, the general methodology for public procurement and the documentation related.
- UK also wants to embrace the German GP being proposed by the BUILD2LC Advisory Partner IAT titled: *Financing and delivery of energy saving measures*. With this GP, UK partner wants to provide a funding option for households with appropriate payback times and a low payback rate.
- Additionally, the GP brought from IAT entitled *Sustainable Campus- Green University* will be studied to provide low cost energy to vulnerable consumers within the county. For example, this could come from solar installations on public buildings for example with the aim of Creating an energy bank to provide a local cost energy tariff and education programme for people in fuel poverty.

- For last, the *GP Energy efficiency refurbishment in a multi-dwelling residential building in Sofia, Bulgaria* will help to get financing to retrofit domestic properties, some of which will be in multi-apartment blocks (often run by registered social landlords) or in individual properties which have been let by social or private landlords. These renovations are likely to occur in high need areas hence engagement of citizens, funding and high quality installations are required.

The Polish partner RRDA, from Podkarpackie region (South Carpaths), shows interest to:

- Adopt the Slovenian GP called *ENSVET*, responding among others to the needs for independent energy consulting.
- Also, they would be willing to incorporate the *Smart Procurement* GP from Sweden, as a new strategy and approach to the procurement of new construction projects in their region.

The Croatian partner RGEA, highlights two Lithuanian practices:

- On the one hand, the GP entitled *Innovations in Financial Instruments*, due to the fact that currently in Croatia there are no revolving financial mechanisms for energy renovation of either private or public buildings causing the ESI funds to be depleted in short time and not used in a sustainable way.
- RGEA is interested as well in the *Carrot & Stick Game in Multi-apartment Building Modernization* to respond to the fact that existing renovation schemes in Croatia are turning the apartment owners into borrowers (possibly) against their will, which is a huge issue at this moment.

The Swedish partner, RJH, would like to incorporate in the Jämtland Härjedalen region:

- The *croenergy.eu* practice, focused on a specialized crowdfunding platform for financing projects in the field of energy efficiency, renewable energy sources and environmental protection.
- As well, RJH needs a new financial instrument where the money from the Operational Programme for investments for jobs and growth is levered with EIB funds and commercial banks to respond to the need of stimulating energy savings investments due to the rural nature of the region. This is likely to be addressed by a capitalization activity from another on-going Interreg project: FINERPOL<sup>12</sup> from which AEA is interested as well.

Partner from Slovenia, LEAG, is interested in:

- *Quality in multi-apartment building modernization*, practice in place in Lithuania, responding to the need of restoration of private multi apartment buildings in Slovenian municipalities that are of wider public interest.
- Also, the *croenergy.eu* practice is highlighted by Slovenian LEAG, stating that this model is very suitable to implement in Slovenia, because Slovenia and Croatia have similar laws.

Hence, we present the compilation of **20 Benchmarking Fiches** showing the interest of partners to embody the already identified Good Practices for the topic 'New Financial Instrument'.



<sup>12</sup> FINERPOL fiches are not provided yet since the interchange is pending from more advanced project stages.

## — BENCHMARKING FICHES FOR 'NEW FINANCIAL INSTRUMENTS'

	AEA	VIPA	SWEA	RRDA	RGEA	RJH	LEAG
<i>Warm &amp; Well</i> SWEA		*					
<i>ZagEE</i> RGEA	*	*	*				
<i>Croenergy</i> RGEA			*			*	*
<i>Innovation in Fls</i> VIPA	*		*		*		
<i>Carrot &amp; Stick</i> VIPA					*		
<i>Quality in MARB</i> VIPA							*
<i>Financing &amp; Delivery</i> IAT			*				

	AEA	VIPA	SWEA	RRDA	RGEA	RJH	LEAG
<i>Sustainable Campus</i> <i>Green University</i> IAT			*				
<i>Refurbishment @ Sofia</i> IAT			*				
<i>ENSVET</i> LEAG				*			
<i>Smart Procurement</i> RJH				*			
<i>Standardization and</i> <i>Simplification</i> VIPA			*				
<i>Capitalization from</i> FINERPOL	*					*	

## BENCHMARKING FICHE REGION: ANDALUSIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Reconstructed public buildings in City of Zagreb under the ZagEE project

*Specific parts: Buildings stock database, financial instruments, capacity building.*

#### Main needs to respond to

The existing public building stock of the Regional Administration of Andalusia (Junta de Andalucía) consists of around 4.800 buildings including hospitals, primary and secondary education schools, universities, retirement homes, sport facilities, general office buildings, etc. Only a tiny fraction of them are considered to be energy-efficient. It is noticeable the high potential for energy and economic savings that could be obtained in different public centres, in many cases over 40%.

The exemplary role of the public sector towards the development of future energy sustainable buildings is fundamental. In the context of transforming the public sector, public buildings renovation plays an important role. Most Andalusian public buildings are +30 years-older and, therefore, they are not harmonized with recent energy directives. They possess a high energy-saving potential which can be achieved through the implementation of technical solutions.

Also, the efficiency of public services depends on workers' productivity which is directly affected by indoor comfort and air quality conditions.

For this reason, in 2007 was created *The Energy Management Network of the Andalusian Regional Government (REDEJA)*<sup>13</sup> as the tool designed to promote the principles of energy saving and diversification in the Andalusian Administration, as well as implement renewable energies in their buildings. REDEJA, integrated into the Andalusian Energy Agency (AAE), manages the energy consumption of up to 62 regional public bodies, including the regional ministries and other 49 public entities. As a result, REDEJA conducted and accomplished several energy optimisation programs. However, and after ten years, the retrofitting and energy rehabilitation rate in Andalusian public buildings is still very low due to several existing barriers and, therefore, needs to be accelerated.

One of these barriers is the low collaboration power between public bodies, a key requirement that was

fulfilled successfully by ZagEE and from which we can learn how. In addition, it is clear that the REDEJA optimisation and retrofitting projects are extremely dependant on public financing and lump sums subsidies. Most of them reach at least 80% ERDF co-financing, coming the rest of the investment budget from regional or national public sources. The private financing rate in these initiatives is simply zero, and there are nor ESCos involved neither a similar formula of energy securitization to manage the potential energy savings profits. No mention the use of financial vehicles to leverage the available public funds, totally absent. ZagEE tortuous financial path along the project life will help us to identify the different available choices. More innovative methods need to be explored. Therefore, we need to:

- To set a rigorous regional plan of public buildings rehabilitation and retrofitting that involves all the needed public bodies collaboration and estimates the financial requirements and needs to boost our current rehabilitation rate.
- To provide funding mechanisms which target the public sector. If we follow a similar project to ZagEE then any saving made could be directly managed

by a third party and the financial burden could be securitized.

- To increase the leverage of the existing public financing, either European either regional or national using financial vehicles. Up to now the leverage level is null.

### **Main objective to transfer the good practice to your region**

---

The ZagEE initiative was explained by our Croatian colleagues during the good practices exchange meeting in Zagreb, September 2016, where it raised a high interest on us. Andalusia, as the lead partner, detected among the rest of the partnership that ZagEE is very popular too, so we expect to have multi-lateral meeting in this case.

We would like to find out more about:

- Their experience with different and innovative financial mechanisms and how these worked alongside existing structures and mechanisms for the retrofitting of public buildings
- The application process to ELENA programme to cover technical spending.

- How the project was planned and developed.
- The development of the buildings stock register and the update of the energy audits.
- How the stakeholders were engaged, particularly how the public bodies were animated, enrolled or enforced to collaborate with each other.
- What were the challenges and how were these overcome?
- The capacity building for facility managers to develop and apply management and learning tools in order to improve energy management of newly renovated buildings.

### **Factors that might hamper the transfer**

---

- Funding sources and availability
- Engagement of stakeholders, particularly public bodies
- Complexity of technical preparation

## Policy instrument

The sustainable construction sector is one of the priorities of Smart Specialization Strategy (S3) of Andalusia. Its strategy in this field passes through the redefinition of sustainable construction in terms of energy rehabilitation of buildings, the physical, social, economical and environmental recovery of urban environments, the reuse of consolidated urban lands and the rehabilitation of cities. The opportunities are based on the development of new designs and materials for construction and the sustainable processes.

AAE has managed the public incentive programme of the Regional Government, *Andalucía A+*. Specifically, in the buildings sector, AAE launched in 2014 a *Programme to Promote Sustainable Construction*, an initiative which is a finalist in the Regio Stars Award 2015, and also has also coordinated a *Plan for Sustainable Construction, Horizon 2020 for the Regional Government*.

➡ REDEJA is perfectly suitable to adopt this good practice.

First REDEJA's tasks were related to the specific, coordinated and effective management of the energy billing of the Andalusian Regional Government, which was highly fragmented and in many cases unknown. The optimisation of energy supply **contracts** and the unified management of the energy service allow for economies of larger scale and a greater efficiency in the coordination of the management of the supplies lowering this way the billing costs, though it does not help to save energy.

In addition, REDEJA works on public buildings **energy audits** in order to identify energy saving and efficiency measures and the possibility of implementing the use of renewable energy technologies. It offers **advising** to the adhered public entities in the contracting of energy supplies and the investments to be undertaken as a result of the audits, as well as in new construction projects to obtain the highest energy rating. For this reason, REDEJA also has a **training line** targeted to the public buildings energy and maintenance managers, aimed to reducing energy demand, the search for a greater rationality in the contracts and in the applicability and use of renewable energy technologies.

Regarding specific REDEJA retrofitting projects, we highlight:

- **Agreement between the Budget and Public Administration Regional Ministry and the Economy, Innovation, Science and Employment Regional Ministry** (holding the Andalusian Energy Agency as Technical Secretariat) to conduct the energy rehabilitation of three different administrative buildings. Based on a 6,2 million Euros budget, coming totally from public authorities and with a +80% ERDF contribution, +428 toe and 357k€ are saved per year.
- **Agreement between the Andalusian Energy Agency and the Andalusian Health Service (Regional Public Health System).**

Energy consumption to maintain the quality requirements in a hospital is very high, both to achieve the thermal levels that are needed in each area, as well as to guarantee the electricity supply necessary for the development of the different activities carried out 24 hours a day, 365 days a year. It is for this reason a few well-designed systems, with efficient technologies and a correct maintenance, are essential to ensure the service without increasing the energy bill of the centre.

It carries out energy saving and efficiency actions and the deployment of renewable energy sources in 14 public hospitals as:

- **Fuel shift from diesel to natural gas** in the boilers to produce hot water more efficiently and with lesser emissions, as well as the replacement of heating and air conditioning equipment of low performance by other more efficient systems.
- **Generation of power and heat of high performance**, covering up to 60% of the hot water, heating and cooling needs.
- **Renewable energy** for the production of hot water through solar thermal installations and use of biomass.

From 20.1 million Euros invested, 17.9 million comes from the Andalusian Energy Agency, most of them ERDF funding, and the remaining 2.2 million Euros were allocated by the Andalusian Health Service. 20 energy audits were previously conducted and estimated a total energy demand of 45.000 toe. The initiative saves 700 toe per year (1.570 ton CO<sub>2</sub>) and 3.2 million Euros (simple pay-back period less than 7 years).

#### Existing financing funds

The main finance policy instrument addressed is the **Andalusian Operational Programme for investments for jobs and growth, 2014 – 2020**, a Structural Funds operational programme (Objective T.O. 4. Priority Line 4.c: Support the Energy efficiency and use of renewable Energy in public infrastructure, including public buildings and housing to improve energy efficiency and increase the use of renewable energy for electricity production and thermal uses in buildings) whose objective is to improve energy efficiency and increase the use of renewable energy for electricity production and thermal uses in buildings.

Regarding the public field, this programme is allowed to fund:

- Investments in public buildings of the Andalusian Regional Government and municipalities, prior audit and subsequent monitorization;
- High quality energy audits.

In full collaboration with the managing authority of the Operational Programme, AEA will be responsible for the management of funds for energy in the new framework 2014-2020, including among its activities the definition of the regulatory bases of the support programmes, the selection of the projects, and the verification and follow-up. Equally, AEA is also actively involved in national ERDF monitoring committees, contributing to the adaptation and monitoring of the ERDF OP Andalusia for AEA.

AAE has managed the public incentive programme of the Regional Government, *Andalucía A+*. Specifically, in the buildings sector, AAE launched in 2014 a *Programme to Promote Sustainable Construction*.

The incentive model used at present in Andalusia has been based on incentives aimed at stimulating the demand of energy projects. However, the new framework requires a reorientation of the previous model that together with energy saving and the reduction of emissions, allows better exploiting the opportunities of employment generation associated with energy rehabilitation and, this way, to obtain a greater leverage of public funding. This might be achieved by introducing new financing instrument that facilitate the development of energy efficiency projects, besides other additional measures.

### Relevant stakeholders

---

**Andalusian Energy Agency** – to plan and coordinate and promote the objectives established. Collaboration with public administration in the design of planes and programmes and management of energy incentives.

**The Energy Management Network of the Andalusian Regional Government (REDEJA).**

**Directorate General of European Funds** – Operational Programme managing authority.

**Andalusian Regional Government** – decision-making body.

**The General Administration of Andalusia and other public bodies** – holding the potentially target public buildings.

### Main beneficiaries

---

**Communities and taxpayers** – Savings made by the public sector are direct benefits for them.

**The General Administration of Andalusia and other public bodies** – Improved building stock; financial savings which can be redirected into communities.

**Public workers and citizen users** – will enjoy the benefits of an increased comfort and better cooling and heating conditions.

**Businesses** – Dinamization of the sustainable building sector.

### Further information

---

We are interested to work with REGEA for a bi-lateral meeting to get more information.

## BENCHMARKING FICHE REGION: ANDALUSIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Innovation in Financial Instruments

#### Main needs to respond to

The Andalusian Energy Agency (AAE) has been long managed public incentives schemes based largely on subsidies and lump sums incentives to support sustainable energy initiatives as thermal renewable energy, renewable energies at buildings, energy saving and efficiency, smart mobility, etc. Specifically, in the buildings sector, AAE launched in 2014 a *Programme to Promote Sustainable Construction* which has been really successful, granted in 2015 with the Regio Star award.

The incentive models used so far in Andalusia has been based on lump sums incentives aimed at stimulating the demand of energy projects, with zero leverage. However, the new framework requires a reorientation of the previous model that together with energy saving and the reduction of emissions, allows better exploiting the opportunities of employment generation associated with energy rehabilitation and, this way, to obtain a **greater leverage of public funding**.

This might be achieved by introducing **new financing instrument** that facilitate the development of energy efficiency projects based on leasing entities, besides other additional measures.

We need sustainable funding mechanisms, easy to understand by citizens, the installation industry and the financial entities. A new financial instrument, combined with the use of existing incentives program managed by the AAE to support and “refresh” the financial burden of these innovative financial vehicles, would give an extraordinary boost to the investment amount in sustainable energy initiatives and would very likely encourage the participation of private financing actors.

#### Main objective to transfer the good practice to your region

We learnt a lot from our Lithuanian partners during the meeting in Vilnius in January. We are interested in learning more from our Lithuanian partners about:

- How they engaged the financial institutions.
- What preparations were made in advance to establish the financial vehicles.
- How the financial instrument could work alongside other incentives or policies.
- How VIPA and Lithuania overcame challenges.
- To increase the leverage of the existing public financing, either European either regional or national using financial vehicles. Up to now the leverage level is null.
- To study the adoption of non-standard and ad-hoc financial instruments.
- To know better how the securitization model to attract financing is being developed in Lithuania to renovate multi-apartment buildings. If we follow a similar model then any saving made could be directly managed by a third party, as ESCOs or financial institutions, mutual funds, etc, and the financial burden could be securitized.

### Factors that might hamper the transfer

---

- Difficult behavioural citizens transition from lump-sum and subsidy culture to financial vehicles usage. Small market players are not familiar with.
- Little trust from citizens to get indebted through innovative financial instruments to renovate the buildings.
- The need of highly qualified employees to develop innovative instruments.
- Some innovations generate high initial costs, (although relatively low compared to the attracted amounts).

### Policy instrument

---

The sustainable construction sector is one of the priorities of Smart Specialization Strategy (S3) of Andalusia. Its strategy in this field passes through the redefinition of sustainable construction in terms of energy rehabilitation of buildings, the physical, social, economical and environmental recovery of urban environments, the reuse of consolidated urban lands and the rehabilitation of cities. The opportunities are

based on the development of new designs and materials for construction and the sustainable processes.

AAE has managed the public incentive programme of the Regional Government, *Andalucía A+*. Specifically, in the buildings sector, AAE launched in 2014 a *Programme to Promote Sustainable Construction*, an initiative which is a finalist in the Regio Stars Award 2015, and also has also coordinated a *Plan for Sustainable Construction, Horizon 2020 for the Regional Government*.

### Existing financing funds

---

The main finance policy instrument addressed is the **Andalusian Operational Programme for investments for jobs and growth, 2014 – 2020**, a Structural Funds operational programme (Objective T.O. 4. Priority Line 4. c: Support the Energy efficiency and use of renewable Energy in public infrastructure, including public buildings and housing to improve energy efficiency and increase the use of renewable energy for electricity production and thermal uses in buildings) whose objective is to improve energy efficiency and increase the use of renewable energy for electricity production and thermal uses in buildings.

In the **private field**:

- a. incentives for the energy rehabilitation of buildings (residential and tertiary), prior energy audit and subsequent monitorisation;
- b. support for initiatives of business development associated to energy services.

In the **public field**:

- a. investments in public buildings of the Andalusian Regional Government and municipalities, prior audit and subsequent monitorisation;
- b. high quality energy audits.

In full collaboration with the managing authority of the Operational Programme, AEA will be responsible for the management of funds for energy in the new framework 2014-2020, including among its activities the definition of the regulatory bases of the support programmes, the selection of the projects, and the verification and follow-up. Equally, AEA is also actively involved in national ERDF monitoring committees, contributing to the adaptation and monitoring of the ERDF OP Andalusia for AEA.

AAE has managed the public incentive programme of the Regional Government, *Andalucía A+*. Specifically, in the buildings sector, AAE launched in 2014 a **Programme to Promote Sustainable Construction**. The incentive model used at present in Andalusia has been based on incentives aimed at stimulating the demand of energy projects. However, the new framework requires a reorientation of the previous model that together with energy saving and the reduction of emissions, allows better exploiting the opportunities of employment generation associated with energy rehabilitation and, this way, to obtain a greater leverage of public funding. This might be achieved by introducing innovating financing instruments.

#### Relevant stakeholders

---

**Andalusian Energy Agency (AAE)** – public entity that manages the public incentives and subsidies for sustainable energy programmes. Also to engage stakeholders and provide some additional funding.

**Andalusian Innovation and Development Agency (IDEA)** – public agency with extensive expertise in designing and managing financial instruments to boost investment in Andalusia, would provide advice about

financial mechanisms or even supporting a scheme.

**Business associations, professional clusters and ESCos** – targeted to collaborate in the definition and design of the financial vehicles

**Private banking** – open to discussing proposals for financial mechanisms.

#### Main beneficiaries

---

**Regional government** – Boost to the sustainable construction and energy policies and targets.

**Landlords, either citizens, companies, civil society** – Able to renovate their buildings with little upfront costs and enjoying long term financial gains.

**Businesses** – Dinamization of the sustainable building sector.

**Financial sector** – Entering a virgin and promising sector counting on public sector co-funding.

#### Further information

---

We would be interested to work with VIPA for a bilateral meeting to get some more information before planning.

## BENCHMARKING FICHE REGION: LITHUANIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

##### Warm & Well

*Lithuania may use part of experience in adopting Energy Efficiency Advice and Installation Scheme.*

#### Main needs to respond to

In Lithuania there is a huge pipeline of projects in multi-apartment buildings which needs implementation, but there are limited funding possibilities. The funding obligated parties might provide a significant proportion of capital funding.

#### Main objective to transfer the good practice to your region

The new financing sources and financial instruments schemes are needed to target this challenge. This experience might be further expanded to other sectors (public buildings modernisation, street lighting modernisation, etc.). With experience of **Energy Company Obligation scheme** there is possibility to cover part of the funding gap.

#### Factors that might hamper the transfer

- Resistance from obligated parties.
- Mistakes in financial instruments schemes design and process implementation.
- Some amendments to the legal system might be needed.

#### Policy instrument

Recently, in the of 2016 Lithuanian parliament adopted the law on energy efficiency which included targeted obligations for energy companies.

#### Existing financing funds

Public Investment Development Agency (VIPA) is managing Apartment building modernisation fund, which is providing loans to buildings modernisation projects. VIPA might be interesting in developing scheme and expanding current activities and implementing good practice in the region.

## Relevant stakeholders

---

**Ministry of energy** – initiator of Obligation system in Lithuania, responsible for energy efficiency results. Ministry might be helpful in facilitating legal changes required for FI scheme implementation.

**Ministry of environment** – project pipeline development facilitator.

**Obligated parties** – capital funding of works

**Lending parties** – financial institutions or other parties willing to lend for the scheme.

## Main beneficiaries

---

The final beneficiaries are parties implementing energy efficiency projects. It is planned, that in the first phase it will be multi-apartment buildings owners.

## Further information

---

Lithuania needs more information about experience in adopting Energy Company Obligation scheme from UK partners as well as other countries representatives in EU which adopted similar law. Bilateral meeting might be the best option of sharing such experience.

## BENCHMARKING FICHE REGION: LITHUANIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Reconstructed public buildings in City of Zagreb under the ZagEE project

#### Main needs to respond to

In last programming period of 2007-2013 public buildings were renovating using subsidies schemes. Current programming period it was decided to use FI's. Project owners are not active in developing projects and usually lack of funding for technical documentation development.

#### Main objective to transfer the good practice to your region

The new PDA facility for development of concrete energy renovation plans for public buildings might spark necessary developments in this area. Technical assistance might foster project pipeline development and energy efficiency project in public sector.

#### Factors that might hamper the transfer

- Project owners are still willing to receive subsidies, therefore its necessary to educate and help them with project development.
- There is no funding sources foreseen for PDA facility.
- The quality problems might jeopardise PDA facility.

#### Policy instrument

Currently there are no local policy instruments which might help to transfer such good practice to Lithuanian public buildings sector.

### Existing financing funds

---

Currently no funds are foreseen for PDA facility for public buildings sector.

### Relevant stakeholders

---

- **Ministry of energy** – responsible for central government owned public buildings renovation.
- **Ministry of environment** – responsible for municipalities public buildings renovation.
- **BETA** – technical assistance facility targeting multi-apartment buildings, owned by ministry of environment.
- **Technical and financial consultants** – willing to provide technical advice and help to prepare technical and financial documentation.

### Main beneficiaries

---

Central government and municipalities buildings owners and users.

### Further information

---

Lithuania needs more information about experience in adopting such good practice. Bilateral meeting might be the best option of sharing such experience.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Innovation in Financial Instruments

#### Main needs to respond to

The UK had a national financial support scheme for retrofit known as the 'Green Deal'. This offered a loan for people to be able to retrofit appropriate installations. The rate of interest attached to this loan was in the order of 7%. At a time where it is possible to secure mortgages against properties at a far lower rate, the level of take up of Green Deal was exceptionally low. As such the scheme never became truly established.

The Green Deal loan scheme was a good idea in principle but was poorly planned hence the government stopped supporting the finance company in July 2015 and no new Green Deal loans are currently granted. According to Which? (2017) "the scheme saved only negligible amounts of CO2 and households did not see these loans as an attractive proposition".

Therefore its success was very limited. Some areas have tried to arrange their own localised schemes but again with relatively high interest rates required to facilitate administration, the uptake is relatively low.

The Green Deal, combined with the national use of financial incentives to support those in fuel poverty to pay their bills (reducing the desire to retrofit properties), high interest rates for locally offered retrofit loans compared to low mortgage rates, alongside uncertainty regarding grant funding, means that more innovative methods need to be explored.

We need to provide funding mechanisms which are sustainable, engender the trust of residents, the installation industry and lenders. These mechanisms need to be able to work independently of central government and work within the region.

## Main objective to transfer the good practice to your region

---

We learnt a lot from our Lithuanian partners during the meeting in Vilnius in January. We are interested in learning more from our Lithuanian partners about:

- How they engaged stakeholders and financial institutions
- What preparations were made in advance to establish the mechanism
- How VIPA worked with government on a local and national scale
- How the financial instrument works alongside other mechanisms and policies
- How VIPA and Lithuania overcame challenges

## Factors that might hamper the transfer

---

Any mechanism needs to work on a regional scale and work alongside central government activities.

We are undergoing a period of political change and we are currently unsure what government will choose to do regarding energy policy in light of the UK's withdrawal from the EU.

Mortgage rates are very low hence any mechanism needs to account for other loan options.

Many of the homes in fuel poverty are isolated and 'hard-to-treat' so adaptations will need to be made to account for this.

There is little trust in the incentives already offered so stakeholder engagement will be important.

Financial institutions are not keen to lend directly to householders and so alternative avenues need to be explored. For example, providing mechanisms to help manufacturers or installers to reduce costs, brokering deals between financial organisations and social or private landlords.

The accountability of landlords is gradually increasing but will take time. Landlords will need to be positively encouraged to adopt options and be able to see the longer term benefits.

## Policy instrument

---

Other financial policy instruments exist, for example, the national Energy Company Obligation (ECO); this could potentially link with any new policy. Severn Wye Energy Agency also runs the Warm & Well programme which could support any mechanisms introduced.

## Existing financing funds

---

There is potential funding from the Clinical Commissioning Group or local authorities to support work if it links closely with their priorities. Energy Companies may be able to focus ECO funding on Build2LC targeted areas/groups. It is crucial that the financial instrument created becomes self-sustaining.

## Relevant stakeholders

---

**Severn Wye Energy Agency** – working with other stakeholders to plan, implement and oversee and financial mechanisms introduced.

**Energy companies** – potentially directing ECO funding to support specific areas or stakeholders

**SWIG Finance** – providing advice about financial mechanisms on the Steering Group and potentially supporting a scheme.

**Lloyds Bank** – open to discussing proposals for financial mechanisms targeted at social housing providers, larger landlords or manufacturers.

**County Council and Local Authorities** – potential to engage stakeholders, manage financial instruments, develop mechanisms and provide some additional funding.

**National Landlords Association and Social Housing Providers** (e.g. Two Rivers Housing) – possible targets for large scale retrofit and associated financial mechanisms.

**Manufacturers** (e.g. insulation) – possible targets for large scale retrofit and associated financial mechanisms.

**NHS Clinical Commissioning Group** – Much of the drive to improve housing quality and associated well-being is coming through the need for preventative care. The CCG is a potential source of some funding to establish mechanisms and their influence in far-reaching.

---

### Main beneficiaries

Residents experiencing fuel poverty, particularly in the rental sector – lower bills, better quality of life, less illness.

The action plan may focus more efforts on some targeted locations, hence impact on these locations is expected to be high – lower bills, better quality of life, less illness.

Social and private landlords – long term financial gains, meeting demands to improve EPC ratings and avoid fines for Category 1 hazard homes.

Manufacturers and installers – higher demand for installations supports business and training.

The National Health Service – reduced fuel poverty should reduce the number of visits to General Practitioners and hospital admissions; this saves both time and money.

Local authorities and the County Council – Levels of poverty should reduce, the quality of existing housing stock should increase putting less demand on new housing.

---

### Further information

We would be interested to work with VIPA for a bi-lateral meeting to get a little more advice before planning in detail and then to review plans once drafted.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Standardization and Simplification in Public Buildings Modernization

#### Main needs to respond to

The UK had a national financial support scheme for retrofit known as the 'Green Deal'. This offered a loan for people to be able to retrofit appropriate installations. The rate of interest attached to this loan was in the order of 7%. At a time where it is possible to secure mortgages against properties at a far lower rate, the level of take up of Green Deal was exceptionally low. As such the scheme never became truly established.

Stroud District Council established their own loan scheme but, due to the high administration costs and need to have a large 'pot' of money to support the loan, the interest rate was again too high and uptake was low. We need to provide funding mechanisms which are sustainable, engender the trust of residents, the installation industry and lenders. For any funding mechanism to be successful we need to make sure that we have a clear and focused methodology and minimise bureaucracy.

We are also keen to make sure that quality assurance is accounted for in all aspects of retrofit. This good practice would provide some additional support in this area.

#### Main objective to transfer the good practice to your region

We are interested in learning more from our Lithuanian partners about:

- The structure of the application process and related documentation (plus reasons for changes)
- How the loans are administered and the process is staffed
- The methodology for public procurement
- Documentation related to public procurement (plus reasons for changes to previous methods)

### Factors that might hamper the transfer

---

- Any mechanism needs to work on a regional scale and work alongside central government activities.
- An ability to establish a loan scheme.

### Policy instrument

---

Other financial policy instruments exist, for example, the national Energy Company Obligation (ECO); this could potentially link with any new policy. Severn Wye Energy Agency also runs the Warm & Well programme which could support any mechanisms introduced.

### Existing financing funds

---

There is potential funding from the Clinical Commissioning Group or local authorities to support work if it links closely with their priorities. Energy Companies may be able to focus ECO funding on Build2LC targeted areas/groups. It is crucial that the financial instrument created becomes self-sustaining.

### Relevant stakeholders

---

**Severn Wye Energy Agency** – working with other stakeholders to plan, implement and oversee mechanisms introduced.

**Robert Owen Investment Bank** – providing advice about financial mechanisms and potentially supporting a scheme.

**Lloyds Bank** – open to discussing proposals for financial mechanisms targeted at social housing providers, larger landlords or manufacturers.

**County Council and Local Authorities** – potential to engage stakeholders, manage financial instruments, develop mechanisms and provide some additional funding.

**National Landlords Association and Social Housing Providers (e.g. Two Rivers Housing)** – possible targets for large scale retrofit and associated financial mechanisms.

**NHS Clinical Commissioning Group** – Much of the drive to improve housing quality and associated well-being is coming through the need for preventative care. The CCG is a potential source of some funding to establish mechanisms and their influence in far-reaching.

### Main beneficiaries

---

- **Local authorities and the County Council** – Lower administrative costs, readily available documentation which can be adapted, lessons learnt, ability to provide lower cost loans and ensure housing standards increase in their areas.
- **Residents experiencing fuel poverty, particularly in the rental sector** – Ability to easily access funds using simple processes.
- **Social and private landlords** – Ability to easily access funds using simple processes. A reliable procurement process.
- **Manufacturers and installers** – higher demand for installations supports business and training.
- **The National Health Service** – reduced fuel poverty should reduce the number of visits to General Practitioners and hospital admissions; this saves both time and money.

### Further information

---

We would be interested to work with VIPA for a bilateral meeting.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

#### **Reconstructed public buildings in City of Zagreb under the ZagEE project**

#### Main needs to respond to

The UK had a national financial support scheme for retrofit known as the 'Green Deal'. This offered a loan for people to be able to retrofit appropriate installations. The rate of interest attached to this loan was in the order of 7%. At a time where it is possible to secure mortgages against properties at a far lower rate, the level of take up of Green Deal was exceptionally low. As such the scheme never became truly established.

The Green Deal loan scheme was a good idea in principle but was poorly planned hence the government stopped supporting the finance company in July 2015 and no new Green Deal loans are currently granted. According to Which? (2017) 'the scheme saved only negligible amounts of CO<sub>2</sub> and households did not see these loans as an attractive proposition.'

Therefore its success was very limited. Some areas have tried to arrange their own localised schemes but again with relatively high interest rates required to facilitate administration, the uptake is relatively low.

The Green Deal, combined with the national use of financial incentives to support those in fuel poverty to pay their bills (reducing the desire to retrofit properties), high interest rates for locally offered retrofit loans compared to low mortgage rates, alongside uncertainty regarding grant funding, means that more innovative methods need to be explored.

We need to provide funding mechanisms which either target the domestic sector or the public sector. If we follow a similar project to ZagEE with the public sector then any saving made could be directed back into supporting the population.

## Main objective to transfer the good practice to your region

---

We learnt a lot from our Croatian partners when they presented at the meeting in Lithuania. However, we would like to find out more about:

- Their experience with different financial mechanisms and how these worked alongside existing structures and mechanisms
- How the project was planned and developed
- How stakeholders were engaged, successes and learning points
- What were the challenges and how were these overcome?

## Factors that might hamper the transfer

---

- Funding.
- Engagement of stakeholders.
- Political uncertainty.
- Managing any retrofit alongside daily work.

## Policy instrument

---

Work has already been completed with some public buildings including the Save@Work scheme which focuses on behavioural change.

Existing and previous projects have worked with businesses hence skills and experience could be applied to public buildings.

## Existing financing funds

---

Some finance could come from local authorities but additional funding will also need to be sought through other avenues.

## Relevant stakeholders

---

**Severn Wye Energy Agency** – working with other stakeholders to plan, implement and oversee any mechanisms introduced.

**County Council and Local Authorities** – Potential focus for building retrofit

**NHS** – Potential focus for building retrofit.

## Main beneficiaries

---

**Communities** – Savings made by the public sector could be diverted into communities to improve health and well-being

**Local authorities and the County Council or NHS** – Improved building stock; financial savings which can be redirected into communities.

**Businesses** – provides work for local construction and installation businesses.

## Further information

---

We would be interested to work with REGEA for a bi-lateral meeting to get more information. We would also be interested in their CROENERGY.EU project.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

**croenergy.eu**

#### Main needs to respond to

The UK had a national financial support scheme for retrofit known as the 'Green Deal'. This offered a loan for people to be able to retrofit appropriate installations. The rate of interest attached to this loan was in the order of 7%. At a time where it is possible to secure mortgages against properties at a far lower rate, the level of take up of Green Deal was exceptionally low. As such, the scheme never became truly established.

The Green Deal loan scheme was a good idea in principle but was poorly planned hence the government stopped supporting the finance company in July 2015 and no new Green Deal loans are currently granted. According to Which? (2017) 'the scheme saved only negligible amounts of CO<sub>2</sub> and households did not see these loans as an attractive proposition.'

Therefore its success was very limited. Some local authorities have tried to arrange their own localised schemes but again, with relatively high interest rates required to facilitate administration, the uptake is relatively low.

The Green Deal, combined with the national use of financial incentives to support those in fuel poverty to pay their bills (reducing the desire to retrofit properties), high interest rates for locally offered retrofit loans compared to low mortgage rates, alongside uncertainty regarding grant funding, means that more innovative methods need to be explored.

We need to provide funding mechanisms which are innovative, sustainable, engender the trust of residents, the installation industry, and lenders.

New mechanisms need to be able to work independently of central government and work within the region; the crowd-funding idea may work alongside other mechanisms.

## Main objective to transfer the good practice to your region

---

We are exploring different financial mechanisms and may use more than one mechanism, aiming to target each one appropriately. We would like any financial mechanism developed to eventually be self-sustaining and low cost. The mechanism needs to engender trust, ideally enable fuel poor homes to get cost-free retrofit, and the mechanism needs to work alongside other national programmes. CROENERGY.EU is an interesting opportunity as it has the potential to give greater ownership to local communities.

We would like to find out more about:

- The scale of the CROENERGY.EU project
- The engagement of stakeholders and marketing campaign
- Types of projects engaging with the website
- Costs and income
- Differences to other crowdfunding platforms
- Strengths, weaknesses and lessons learnt
- Ongoing management
- Ability to operate on a regional scale
- Legal issues which should be checked in the UK
- Time scales

## Factors that might hamper the transfer

---

- Any mechanism needs to work on a regional scale and work alongside central government activities
- Potential legal issues with crowd-funding
- Cost to establish and maintain the site
- Engagement of stakeholders (members of the community and those supporting the site)
- Ability to raise sufficient funds for projects

## Policy instrument

---

A range of crowd-funding sites already exist. We would need to explore whether a project in this field could connect with an existing platform.

The Cynefin project in Wales is community based and could be an avenue for this project.

One or more local authorities may be interested in supporting a specific project in their area.

## Existing financing funds

---

There is potential funding from the Clinical Commissioning Group to support work if it links closely with their priorities, however this project may not be sufficiently linked. Local Authorities may make a contribution, particularly to match funding or run the site. It is expected that grant money would need to be sought to establish the site, possibly funds such as the Lloyds Bank Community Fund, depending on start-up costs. We would also explore grants available for technological developments. It is crucial that the financial instrument created becomes self-sustaining.

## Relevant stakeholders

---

**Severn Wye Energy Agency** – working with other stakeholders to plan, implement and oversee and financial mechanisms introduced.

**SWIG Finance** – providing advice about financial mechanisms on the Steering Group and potentially supporting a scheme.

**Lloyds Bank** – runs a Community Fund and open to discussing proposals for financial mechanisms targeted at social housing providers, larger landlords or manufacturers.

**Welsh government** – a potential funding stream if the project was established within Wales.

**County Council and Local Authorities** – potential to engage stakeholders, manage financial instruments; develop mechanisms and providing some additional funding.

**NHS Clinical Commissioning Group** – Much of the drive to improve housing quality and associated well-being is coming through the need for preventative care. The CCG is a potential source of some funding to establish mechanisms and their influence in far-reaching. There is investment in ‘culture’ as a way to support well-being.

## Main beneficiaries

---

**Communities** – either via lower bills, better quality of life, less illness or through improved performance of local buildings and greater social and community engagement.

**Local authorities and the County Council** – Improvement in health and well-being; improved standard of buildings with the area.

**Businesses** – provides work for local construction and installation businesses.

## Further information

---

We would be interested to work with REGEA for a bi-lateral meeting to get more information. We would also be interested in their ZagEE project.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Sustainable Campus - Green University

#### Main needs to respond to

Gloucestershire would like to be able to provide low cost energy to vulnerable consumers within the county. For example, this could come from solar installations on public buildings for example.

#### Main objective to transfer the good practice to your region

We have identified 16 potential actions to pursue. This good practice could support the following action:

**Action 6: Create an energy bank** to provide a local cost energy tariff and education programme for people in fuel poverty

*How this GP could support the action:* The installation at Lisbon University provides energy back into the grid. It would be useful to learn how the installation was funded and implemented and whether there is an application for the excess energy produced.

#### Factors that might hamper the transfer

- Planning agreement for any installation (within the project time frame)
- Ability to secure funding for one or more installations.
- Ability to create a financial mechanism to disseminate savings.

#### Policy instrument

There are some potential projects in development at Gloucestershire County Council which could be a source of energy.

#### Existing financing funds

Some funding for the Gloucestershire County Council project may be available. Additional funding or pooling or funds may be needed to activate and manage a resulting financial instrument.

## Relevant stakeholders

---

**Gloucestershire County Council** – development of the energy source and support for a resulting financial mechanism.

**Severn Wye** – potential lead and facilitator for the financial mechanism.

**Registered Social Landlords** – RSLs may wish to use the system to provide evidence of installations within their properties and for procurement purposes. Will also need to commit to providing data.

**Local Authorities** – potential locations for installations and support for the financial mechanism.

**Installers** – installation of renewable technology.

**Energy companies** – involved in developing and targeting the financial mechanism.

**Residents** – need to be engaged to uptake financial support.

## Main beneficiaries

---

**Vulnerable consumers** – Lower energy costs.

**Councils** – Ability to demonstrate practical support for vulnerable residents. Good case study examples. Local investment.

**Installers** – local work provided for installations.

## Further information

---

We would like to see the system and then have a skype/call to discuss the installation, how it was funded, how it is maintained, and any application of finances from excess energy production.

At this stage we would not like a bi-lateral meeting visit.

We are unsure if we will adopt this good practice but it may inform the action identified.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

#### Financing and delivery of energy saving measures

#### Main needs to respond to

The UK had a national financial support scheme for retrofit known as the 'Green Deal'. This offered a loan for people to be able to retrofit appropriate installations. The rate of interest attached to this loan was in the order of 7%. At a time where it is possible to secure mortgages against properties at a far lower rate, the level of take up of Green Deal was exceptionally low. As such the scheme never became truly established.

The Green Deal loan scheme was a good idea in principle but was poorly planned hence the government stopped supporting the finance company in July 2015 and no new Green Deal loans are currently granted. According to Which? (2017) 'the scheme saved only negligible amounts of CO<sub>2</sub> and households did not see these loans as an attractive proposition.' Therefore its success was very limited. Some areas have tried to arrange their own localised schemes but again with relatively high interest rates required to facilitate administration, the uptake is relatively low.

The Green Deal, combined with the national use of financial incentives to support those in fuel poverty to pay their bills (reducing the desire to retrofit properties), high interest rates for locally offered retrofit loans compared to low mortgage rates, alongside uncertainty regarding grant funding, means that more innovative methods need to be explored.

We need to provide funding mechanisms which are sustainable, engender the trust of residents, the installation industry and lenders. These mechanisms need to be able to work independently of central government and work within the region. We are interested in the mechanism provided by kfW and how this has become effective.

## Main objective to transfer the good practice to your region

---

We need to provide a funding option for households in the UK which has appropriate payback times and a low payback rate. How any loan is managed during transfer of home ownership is also of interest. Any existing option has had a low uptake so we would be interested to see how this issue can be overcome. We would also be interested in offering a scheme to social and private landlords and it would be interesting to see if kW has considered this.

We would like to find out more about:

- How stakeholders were engaged
- The details of the financial mechanism
- The patterns of uptake and the nature and success of marketing strategies
- How the financial instrument works alongside other mechanisms and policies
- How challenges were overcome

## Factors that might hamper the transfer

---

Any mechanism needs to work on a regional scale and work alongside central government activities.

We are undergoing a period of political change and we are currently unsure what government will choose to do regarding energy policy in light of the UK's withdrawal from the EU.

Mortgage rates are very low hence any mechanism needs to account for other loan options.

Many of the homes in fuel poverty are isolated and 'hard-to-treat' so adaptations will need to be made to account for this.

There is little trust in the incentives already offered so stakeholder engagement will be important.

Financial institutions are not keen to lend directly to householders and so alternative avenues need to be explored. For example, providing mechanisms to help manufacturers or installers to reduce costs, brokering deals between financial organisations and social or private landlords.

The accountability of landlords is gradually increasing but will take time. Landlords will need to be positively encouraged to adopt options and be able to see the longer term benefits.

## Policy instrument

---

Other financial policy instruments exist, for example, the national Energy Company Obligation (ECO); this could potentially link with any new policy. Severn Wye Energy Agency also runs the Warm & Well programme which could support any mechanisms introduced.

## Existing financing funds

---

There is potential funding from the Clinical Commissioning Group or local authorities to support work if it links closely with their priorities. Energy Companies may be able to focus ECO funding on Build2LC targeted areas/groups. It is crucial that the financial instrument created becomes self-sustaining.

## Relevant stakeholders

---

**Severn Wye Energy Agency** – working with other stakeholders to plan, implement and oversee and financial mechanisms introduced.

**Energy companies** – potentially directing ECO funding to support specific areas or stakeholders

**SWIG Finance** – providing advice about financial mechanisms on the Steering Group and potentially supporting a scheme.

**Lloyds Bank** – open to discussing proposals for financial mechanisms targeted at social housing providers, larger landlords or manufacturers.

**County Council and Local Authorities** – potential to engage stakeholders, manage financial instruments, develop mechanisms and provide some additional funding.

**National Landlords Association and Social Housing Providers** (e.g. Two Rivers Housing) – possible targets for large scale retrofit and associated financial mechanisms.

**Manufacturers** (e.g. insulation) – possible targets for large scale retrofit and associated financial mechanisms.

**NHS Clinical Commissioning Group** – Much of the drive to improve housing quality and associated well-being is coming through the need for preventative care. The CCG is a potential source of some funding to establish mechanisms and their influence in far-reaching.

## Main beneficiaries

---

**Residents experiencing fuel poverty, particularly in the rental sector** – lower bills, better quality of life, less illness.

The action plan may focus more efforts on some **targeted locations**, hence impact on these locations is expected to be high -- lower bills, better quality of life, less illness.

**Social and private landlords**-long term financial gains, meeting demands to improve EPC ratings and avoid fines for Category 1 hazard homes.

**Manufacturers and installers** – higher demand for installations supports business and training.

**The National Health Service** – reduced fuel poverty should reduce the number of visits to General Practitioners and hospital admissions; this saves both time and money.

**Local authorities and the County Council** – Levels of poverty should reduce, the quality of existing housing stock should increase putting less demand on new housing.

## Further information

---

We would be interested to communicate with IAT to find out more details. We would also be interested in having our plans reviewed once drafted.

## BENCHMARKING FICHE REGION: GLOUCESTERSHIRE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Energy efficiency refurbishment in a multi-dwelling residential building in Sofia, Bulgaria

#### Main needs to respond to

The BUILD2LC action plan will involve the retrofit of domestic properties, some of which will be in multi-apartment blocks (often run by registered social landlords) or in individual properties which have been let by social or private landlords. These renovations are likely to occur in high need areas hence engagement of citizens, funding and high quality installations are required.

#### Main objective to transfer the good practice to your region

We have identified 16 potential actions to pursue. This good practice could support a number of these actions, most notably:

**Action 4: Pilot for Growth** – A partnership project will be developed to focus on Oakely, Cheltenham and Matson, Gloucester.

*How could the GP support this action?* This action focuses efforts on specific areas within the region. Once this

pilot has taken place, it is anticipated that the project will role out to other areas. The pilot will involve supporting private and social landlords within these areas to retrofit individual premises and also multi-apartment blocks. This GP could provide a methodology to support financing, citizen engagement and quality. Lessons could also be learnt about maintenance plans used within the project and training packages.

**Action 7: Develop a 0% loan to support landlords** for: a) EPC E, F and G rated properties; b) to support landlords within Matson, Gloucester and Oakely, Cheltenham.

*How could the GP support this action?* It would be useful to learn about the financial mechanisms which have developed from the project and see if something similar can be replicated. It would also be helpful to establish whether specific criteria should accompany any loan.

**Action 8: Provide/source grant funding to support landlords** to install energy efficient measures

within Matson, Gloucester and Oakely, Cheltenham.

*How could the GP support this action?* The GP could help to establish the nature of support and stipulations linked to any support. An understanding of evaluation methods would also support this action.

**Action 10: Create a formal partnership structure to support all RSLs and private landlords** in the area and increase communication with energy suppliers, public bodies and agencies to provide equal access to opportunities to support residents.

*How could the GP support this action?* The GP could be used as a case study to advise the partnership.

**Action 14: Review procurement processes** with the aim of: a) improving standards through contracting; b) not excluding smaller, local businesses,

*How could the GP support this action?* It would be interesting to learn how the procurement process worked for this project and the lessons learned.

### Factors that might hamper the transfer

---

- Finance to retrofit the properties or inability to secure a loan with sufficiently low interest.

- Ability to engage landlords and citizens.
- Applicability to the Gloucestershire context.

### Policy instrument

---

Some Registered Social Landlords (RSLs) already have finances available for refurbishment. Some financial support is available (see below) but the action plan will support greater roll out.

### Existing financing funds

---

Some Registered Social Landlords (RSLs) already have finances available for refurbishment. We also have some finance available via the Energy Company Obligation (ECO) and finance from the Clinical Commissioning Group. However, this is based on the residents meeting specific criteria. More funds may need to be secured either via a loan or grant to top up funding.

### Relevant stakeholders

---

**Residents** – residents will be directly impacted and involved.

**Gloucestershire Clinical Commissioning Group** – potential for financial support.

**Severn Wye** – potential lead and facilitator.

**Registered Social Landlords** – RSLs properties are likely to be involved, especially in the identified areas.

**National Landlords Association** – landlords within the target areas may be involved.

**Local Authorities and County Council** – potential financial support and some social housing is provided through Stroud District Council.

**Installers** – conducting the works.

### Main beneficiaries

---

**Residents** – Improved comfort, reduced energy costs.

**Landlords** – Higher quality buildings (adds value), meets legislative requirements, tenants are more able to pay rent if energy costs are reduced.

**Health service** – If buildings contain individuals with health issues, these could be improved due to the retrofit and result in reduced costs to the health service.

### Further information

---

We would like arrange a bi-lateral meeting.

## BENCHMARKING FICHE REGION: PODKARPACKIE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

#### **ENSVET - Energy Advices for Citizens, Slovenia**

#### Main needs to respond to

Needs of free energy advice for citizens - individual, independent energy consulting and information education and awareness activities for the promotion of energy efficiency measures and renewable energy sources for citizens in the local environment.

Needs of free tips and interviews assist in the selection, design and implementation of investment measures of energy efficiency and use of renewable energy sources in residential buildings.

Giving advices to the citizens, final customers of energy in the residential sector and offering free and commercially independent advices connected with training services in the field of RES and RUE.

Needs of free helping in planning and implementation environmentally friendly investments in the region, helping in identification available sources of funding, organizing training and information and education activities to help prepare, verify and implement low carbon economy plans.

Needs of training of municipal energy auditors.

Needs of different forms of support tailored to specific needs of different groups: the form of informational meetings, consultations in the office and outside of the office, answers by email inquiries, phone counseling, training and information and promotion activities, individual counseling as well as conferences or webinars.

#### Main objective to transfer the good practice to your region

- Environmental benefits such as reducing pollutant emissions, improving air quality and reducing the use of non-renewable natural resources,
- Increasing energy awareness of citizens, energy savings and reduction of greenhouse gas emissions and RES through providing local and regional information exchange and good practices on the implementation of Directive 2010/31 / EU, 2012/27 / EC and 2009/28 / EC and Directive 2008/50 / EC.

- Facilitating the implementation of certain measures and programs related to energy policy,
- Systematically combating pollution of the environment, energy poverty and dependency on energy imports,
- Preparation of well-qualified independent energy advisors,
- Promotion of low carbon economy,
- Generating of new jobs in the economy - increasing the number of municipal energy auditors,
- Facilitating access to EU and national funds for increasing energy efficiency and using of RES,
- Citizens - lower energy costs, energy efficient investments can become a potential source of revenue,
- Business - lower energy consumption, positive image, increased competitiveness,
- Support in the planning and implementation of environmentally friendly investments in the region,
- Increasing the quality of life and green jobs.

### Factors that might hamper the transfer

---

Problems with financing various activities for the comprehensive implementation of the model of Energy Advices for Citizens.

Problems with financing by municipalities municipal energy auditors.

Cooperation with interested local communities/municipalities/NGOs – lack of agreement or lack of willingness to participate in the project.

Shortage of qualified independent energy advisors.

### Policy instrument

---

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis “Reduction of emissivity of the economy”.

### Existing financing funds

---

Regional Operational Program of the Podkarpackie Region for the years 2014-2020.

Infrastructure and Environment Operational Program for the years 2014-2020 within the Priority Axis “Reduction of emissivity of the economy”.

### Relevant stakeholders

---

- National Fund for Environmental Protection and Water Management.
- Regional Fund for Environmental Protection and Water Management in Rzeszow.
- Marshall Office of Podkarpackie Region.
- Podkarpackie Energy Agency.

### Main beneficiaries

---

- Public institutions,
- Entrepreneurs planning to increase energy efficiency or the use of renewable energy sources in their facilities, especially those representing small and medium-sized enterprises,
- Community and housing co-operatives,
- Universities,
- Civil society.

### Further information

---

Too little information at this moment.

## BENCHMARKING FICHE REGION: PODKARPACIE



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

#### Smart procurement

#### Main needs to respond to

Needs of a new strategy for the procurement of new construction projects and renovation projects;

Too low knowledge and experience among public administration especially from small municipalities and villages about energy consumption in public buildings when they have to choose the best option/solution during new construction projects;

Lack of public procurement based on their best practices without imposing a solution;

Low innovativeness of enterprises due to the imposed solutions in the tender documents;

Lack of time or skills/knowledge to change the procurement strategy;

Needs a lot of knowledge and expertise to evaluate the various options and their technical solutions.

#### Main objective to transfer the good practice to your region

- Stimulating, developing and implementing innovations especially in rural and remote areas;
- New strategy and approach to the procurement of new construction projects;
- Procurements which let entrepreneurs choose their best practice in construction buildings – stimulating innovation in the construction market;
- This model allows the entrepreneurs a chance to be innovative;
- Receive the best possible energy solutions in the procurement of new and renovated buildings;
- Environmental benefits such as reducing pollutant emissions, improving air quality and reducing the use of non-renewable natural resources;
- Promotion of low carbon economy,

- Support in the planning and implementation of environmentally friendly investments in the region;
- Increasing the quality of life and green jobs.

### **Factors that might hamper the transfer**

---

Lack of time or skills/knowledge to change the procurement strategy;

Needs a lot of knowledge and expertise to evaluate the various options and their technical solutions in the institutions announcing the tenders;

Habits to demanding absolute energy demands for new or renovated buildings or requesting specific technical solutions;

Insufficient financial resources for promotion and dissemination of the model.

### **Policy instrument**

---

Regional Operational Program of the Podkarpackie Region for the years 2014-2020;

Tender documentations for various building and renovation activities in public buildings.

### **Existing financing funds**

---

Regional Operational Program of the Podkarpackie Region for the years 2014-2020.

Tender documentations for various building and renovation activities in public buildings.

### **Relevant stakeholders**

---

- Marshall Office of Podkarpackie Region.
- Podkarpackie Energy Agency.
- Public sector entities.

### **Main beneficiaries**

---

- Public institutions,
- Construction companies,
- Housing co-operatives,
- Universities,
- Entrepreneurs planning to increase energy efficiency or the use of renewable energy sources in their facilities, especially these which received support from eu funds.

### **Further information**

---

Not enough information at this moment.

## BENCHMARKING FICHE REGION: CROATIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

#### **Innovations in Financial Instruments**

*Specific points of interests include: techniques and schemes for involvement of commercial banks and development of a securitization model.*

#### Main needs to respond to

ESI Funds used in form of grants are not sustainable and sufficient to satisfy current demand for renovation of private buildings. FI's could leverage additional public and private sector finance to address this market gap.

#### Main objective to transfer the good practice to your region

Currently in Croatia there are no revolving financial mechanisms for energy renovation of either private or public buildings causing the ESI funds to be depleted in short time and not used in a sustainable way. Citizens and administrators of multi-apartment buildings have trouble securing their share of funding for energy renovation since bank loans are not automatically issued. Also, there are no special renovation loans on the market with favourable conditions (lower interest rates, grace period and longer repayment periods) which nullifies the benefit from grants due to high cost of capital.

### Factors that might hamper the transfer

---

Introduction of financial instruments is a complex process which largely depends on willingness and qualifications of key public and private stakeholders (managing authorities and financial institutions) to actively participate in its market development. Also, citizens might be hesitant to take on a loan instead of grant funding.

### Policy instrument

---

A study in support of the ex-ante assessment for the deployment of EU resources for energy efficiency during the 2014-2020 programming period has already been made. Ex-ante Assessment Report for Financial Instruments, Business Competitiveness, Employment and Social Enterprise has also been made and Financial Instruments for SMEs have been introduced.

### Existing financing funds

---

Funds for development of Financial instruments could be used from TA (Technical Assistance) component of the Operational programme Competitiveness and Cohesion 2014 – 2020.

### Relevant stakeholders

---

Public administration designated by the Croatian government to manage ESI Funds in Croatia (Managing Authority) is the Ministry of Regional Development and EU Funds which is the key stakeholder for introduction of Financial instruments. The supply of finance could be by ensured through Croatian Bank for Reconstruction and Development (HBOR) while commercial banks could be involved in disbursement of renovation loans for citizens.

### Main beneficiaries

---

Managing authority (wider uptake/impact of public funding), building administrators, home owners, financial intermediaries.

### Further information

---

Bilateral meeting would be beneficial in order to help Croatian Managing Authority to learn on how to get the renovation programme “off the ground” and avoid mistakes made by the Lithuanian Managing Authorities during implementation of Financial Instruments.

## BENCHMARKING FICHE REGION: CROATIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Carrot-and-stick game in multi-apartment building modernization

*Specific points of interests include: Activation of demand for energy renovation of multi-apartment buildings using financial instruments and combating energy poverty.*

#### Main needs to respond to

Home owners are mostly reluctant to undertake new long-term loans as they reduce their credit rating and require extra collaterals which they are not willing to provide. A large part of residents does not possess enough financial capacity to repay new loans since they fall in the category of energy poor citizens. Existing renovation schemes in Croatia are turning the apartment owners into borrowers (possibly) against their will, which is a huge issue at the moment.

#### Main objective to transfer the good practice to your region

Currently in Croatia there are no financial mechanisms for financing of technical support (awareness raising among vulnerable citizens) or for covering monthly instalments of long term renovation loans of low income households which fall into the category of energy poor citizens. Both aspects of energy renovation have to be tackled and experience from other project partners could be very useful and applicable.

#### Factors that might hamper the transfer

Most countries used their national budgets for introduction of such social measures and the biggest issue with such policy is its consistency. Social transfers have often been inconsistent, inadequate or even cancelled in times of budget crisis.

#### Policy instrument

Although energy poverty has not been legally defined, Ministry of Demographics, Family, Youth and Social Policy provides financial compensations to those vulnerable citizens who cannot pay their electricity bills to maintain the minimum level of living comfort.

#### Existing financing funds

Funds for financial support and awareness raising of vulnerable groups of people could be used either from state/regional budgets or from T04 component of the Operational programme Competitiveness and Cohesion 2014 - 2020.

## Relevant stakeholders

---

Public administration designated by the Croatian government to manage ESI Funds in Croatia (Managing Authority) is the Ministry of Regional Development and EU Funds while Ministry of Demographics, Family, Youth and Social Policy is in charge of introduction of social measures. Both ministries could assist with development of awareness campaigns (with specialized NGOs) for vulnerable groups of citizens and technical assistance for creation of project pipeline.

## Main beneficiaries

---

Managing authorities, building administrators, low income home owners, financial intermediaries.

## Further information

---

Bilateral meeting would be beneficial in order to help Croatian Managing Authority to learn how to address vulnerable groups of citizens that fall in the energy poverty category in regard to implementation of renovation programme and to avoid mistakes made by the Lithuanian Managing Authorities during implementation of Financial Instruments for energy renovation.

## BENCHMARKING FICHE REGION: JÄMTLAND HÄRJEDALEN



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

**[croenergy.eu](http://croenergy.eu)**

#### Main needs to respond to

Jämtland Härjedalen is lagging in energy savings investments due to the rural nature of the region.

Many existing buildings are located where market mechanisms fail, since rural areas typically are not profitable to invest in. Thus there is low interest from the market to provide loans here.

This calls for financial services that are complementary to market mechanisms.

#### Main objective to transfer the good practice to your region

The main objective is to improve the energy performance of existing structures to in the end lower emissions CO<sub>2</sub>.

Make funding more accessible for energy rehabilitation in rural areas and in particular common buildings not prioritized by public organizations.

Increasing the general public's awareness of crowdfunding as a way to finance energy rehabilitation projects and to contribute to their civil society.

### Factors that might hamper the transfer

---

Lack of financial resources. Development of a platform would require significant investment costs, and there is also need for a strong promotional campaign.

The Swedish legal framework regarding crowdfunding is possibly a barrier. Crowdfunding is a small but rapidly growing part of the financial markets. The Swedish laws are not adapted to this type of funding.

Generally low awareness levels of crowd funding.

### Policy instrument

---

Crowdfunding is mentioned in the Regional Innovation Strategy as an interesting tool for financing new investments. Although there is no direct policy addressing this opportunity.

### Existing financing funds.

---

Operational programme for investments for jobs and growth (TO4).

Interreg V-A Sweden-Norway.

### Relevant stakeholders

---

- Swedish Agency for Economic and Regional Growth
- County Administration Board of Jämtland
- Mid Sweden university
- Public real estate companies: They are to a large extent the “problem owners” and are thus essential stakeholders to understand the needs and frameworks.
- Private real estate companies.

### Main beneficiaries

---

Public and private real estate owners, but also village communities and similar types of associations.

### Further information

---

At the moment we are figuring out potential stakeholders’ roles in this endeavour, and need more time to work around the organizational matters before we need implementation assistance.

## BENCHMARKING FICHE REGION: SLOVENIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

### Quality in multi-apartment building modernization

#### Main needs to respond to

Restoration of private multi apartment buildings in Municipalities that are in wider public interest.

Financial gap for Slovenian RES and RUE projection for the period 2015-2020 (mil EUR) is:

- Restoration of private buildings 645 - 783.

#### Main objective to transfer the good practice to your region

In Slovenia these kinds of projects are supported by Eco Fund, Slovenian Environmental Public Fund, but there is space to improve investments into private multi apartment buildings, promotion of good practices and consequently quality of work.

Possibility to gain additional know how that would help Slovenian Eco Fund:

- Construction companies could be required to provide insurance, that they can perform works in accordance to the contract,

- Construction companies could be pre-checked before public procurement process,
- Construction works could be supervised by independent and certified specialists,
- Complaint system (there is no complaint system in place in slovenia),
- State territorial planning and construction inspectorate,
- Good examples of implemented projects could be promoted in the media.

#### Factors that might hamper the transfer

Eco Fund is overloaded with ongoing work, reviewing applications for subsidies, and therefore is not interested into having additional tasks.

#### Policy instrument

Policy system is already in place but with possibility to implement even better quality improvement cycle.

## BENCHMARKING FICHE REGION: SLOVENIA



### TOPIC: NEW FINANCIAL INSTRUMENTS

#### Good practice to be adopted

##### **croenergy.eu**

*– with crowdlending and crowdinvesting models –*

*Model is very suitable to implement in Slovenia, because Slovenia and Croatia have similar laws. Therefore the knowhow and experiences from implementing it in Croatia would be very useful in Slovenia.*

#### Main needs to respond to

Renovations of public buildings in Municipalities that are in wider public interest.

Financial gap for Slovenian RES and RUE projection for the period 2015-2020 (mil EUR) is:

- Renovation of public buildings 65 - 132.

#### Main objective to transfer the good practice to your region

Main objective would be to improve involvement of citizens and promotion of good practices on field of renovation of public buildings.

#### Factors that might hamper the transfer

Main problem will be Slovenian legislation. Crowdfunding is something new in Slovenia and therefore we will have to resolve some legal issues before implementing GP.

#### Policy instrument

There is no similar policy instrument on this topic in Slovenia.

#### Existing financing funds

Currently there are no funds available. But municipalities could be stimulated to gain support for this project if the idea would be proposed in document Local energy concepts that each Municipality has to have and is required by law.

### Relevant stakeholders

---

- Municipalities (with help of Association of Municipalities and Towns of Slovenia for promotion of idea and gaining support),
- Government (with help of Ministry of Infrastructure to properly implement actions with accordance of Slovenian law),
- City Municipality of Kranj (proposed as a municipality to test implementation of GP).

### Main beneficiaries

---

Municipalities and interested public.

### Further information

---

Additional information's about implementation of GP would be helpful. For implementation of GP in City Municipality of Kranj we propose to organise bilateral meeting.

# 7

## CONCLUSIONS

The BUILD2LC interregional seminar held in Vilnius was dedicated to the topic *New financial instruments*. Partners of the BUILD2LC project stimulated successful exchange of experience in the partner regions which can be easily seen in the benchmarking fiches. During the sessions, valuable presentations were introduced and some good practices were explained which led to fruitful debates and discussions on new policy developments and possibilities in setting up new financial instruments and best practices or ideas shared among partners.

The switch from grants to financial products will be a significant change and is still a huge challenge in the management of public funds. The role of the BUILD2LC project in the process is to exchange experiences and practical knowledge among themselves to increase the adoption of useful new approaches in their own policies. BUILD2LC Project also will significantly facilitate the adoption of lessons learned from each other and to use identified good practices of the different project partners.

# 8

## APPEN- DICES

### — SEMINAR AGENDA ATTACHED

All the Seminar presentations are available at the BUILD2LC project and VIPA websites:

- BUILD2LC
- VIPA

### Challenges in setting up new financing and supporting instruments with EU funds for energy rehabilitation of buildings: feedback for successful projects

INTERREGIONAL SEMINAR AT VILNIUS, LITHUANIA  
10-12 JANUARY 2017

#### AGENDA

#### DAY 1 – 10 JANUARY 2017

Venue: ARTIS Centrum Hotels, Totorių str. 23, Vilnius 01120.

8:30 – 9:00 Registration & Welcome Coffee

9:00 – 9:30 Welcome opening and keynote speech. *Tsvyatko Velikov, DG Regional and Urban Policy of the European Commission. Gvidas Dargužas, VIPA CEO (Lithuania). Cristóbal Sánchez, Andalusian Energy Agency General Manager (Andalusia).*

#### SESSION 1. NEW STRATEGIES TO ALLOCATE EU FUNDING TO ENERGY RENOVATION OF BUILDINGS

9:30 – 10:00 ESIF support for sustainable energy efficiency financing at European Level. *Tsvyatko Velikov from DG Regional and Urban Policy of the European Commission.*

10:00 – 10:30 European Fund for Strategic Investment (EFSI), opportunities in Lithuania, presentation of feasibility study. *Marius Vaščega, Economic Governance Officer of the European Commission in Lithuania.*

10:30 – 11:00 Financial instruments in Lithuania: lessons learned. *Rūta Dapkutė-Stankevičienė, Deputy Director of the EU Investment Department, Ministry of Finance (Lithuania).*

11:00 – 11:30 Coffee break

11:30 – 12:50 Good practices in innovative financing of projects for energy efficiency. Round table.

- ZagEE project: Reconstructed public buildings in Zagreb. *Hrvoje Maras, North-West Croatia Energy Agency (REGEA).*
- Renovation of Multi-Apartment Buildings in Lithuania. *Inesis Kiškis, Director of European Union Assistance management department. Ministry of Environment (Lithuania).*
- Programme for Sustainable Construction in Andalusia. *Joaquín Villar, Head of Internationalisation and Prospective Dept. Energy Agency (Andalusia).*
- European Commission, Directorate – General for Regional and Urban Policy Fund. *Mr. Gregor Čufer, Ekoslád (tbc).*

12:50 – 13:15 Q&A and discussion

13:15 – 14:30 Lunch & Networking

## SESSION 2. CHALLENGE FOR MANAGING AUTHORITIES IN FINANCING ENERGY RENOVATION OF BUILDINGS

14:30 – 15:00 State of play of Energy Efficiency in the Operational Programmes. *Isabelle Seigneur. Joint Research Centre, European Commission.*

15:00 – 15:30 Supporting instruments for managing authorities at national and regional level in the implementation of the Operational Programmes and Smart Specialisation Strategies.

- The Energy and Managing Authorities Network. *Inmaculada Periañez, Joint Research Centre, European Commission.*
- Smart Specialisation Platform on Energy. *Inmaculada Periañez, Joint Research Centre, European Commission.*
- REBECA: the Spanish Network on Low Carbon Economy. *Francisco Tovar, Ministry of Finance (Spain).*

15:30 – 17:00 Challenges in implementing programmes with ESI Funds. Round table with the managing authorities of the BUILD2LC partners (Policy Board).

Moderated by *Isabelle Seigneur. Joint Research Centre, European Commission.*

- Rzeszów (Poland). *Norbert Tomkiewicz, Director from Department for Regional Development, Marshal's Office of Podkarpackie Region.*
- Gorenjska (Slovenia). *Tilen Smolnikar, Energy Directorate, Ministry of Infrastructures.*
- Lithuania. *Rūta Dapkutė-Stankevičienė, Deputy Director of the EU Investment Department, Ministry of Finance.*
- Croatia. *Damir Gubić, Head of Department for the Implementation of Financial Instruments, Ministry of Regional Development and EU Funds.*
- Andalusia (Spain). *Joaquín Villar. Andalusian Energy Agency.*
- Jämtland Härjedalen (Sweden). *Dr. Erik-Widar Andersson Senior Advisor, Financial issues within regional development, Region Jämtland Härjedalen.*
- Gloucester (United Kingdom) - *Barry Wyatt, Strategic Head of Development Services, Stroud District Council.*

17:00 – 17:30 Conclusions

## DAY 2 – 11 JANUARY 2017

Venue: ARTIS Centrum Hotels, Totorių str. 23, Vilnius 01120.

9:00 – 9:15 Registration & Welcome Coffee

### SESSION 3. INNOVATIVE FINANCING TACKLING BY END-USERS IN ENERGY EFFICIENCY PROJECTS

9:15 – 9:45 Public awareness of the multi-apartment building renovation process in Lithuania: technical assistance, promotion, construction works. *Gintarė Burbienė, Head of project implementation division, Housing Energy Saving Agency (HESA).*

9:45 – 11:00 Good practices in informing citizens on the use of innovative financing instruments. Round table.

- Warm & Well–Energy Efficiency Advice and Installation Scheme. *Barry Wyatt Strategic Head of Development Services at Stroud District Council. Gloucestershire, United Kingdom.*
- Grant for municipal energy and climate advisors, *Anneli Kamb and Moa Breivik. Municipal energy and climate advisors, Jämtland-Härjedalen Region, Sweden.*
- Rehabilitation of building and removal of asbestos, *Piotr Pawelec – President and freelance consultant & trainer at the Institute of Good Eco-solutions “Alternative”.*

11:00 – 11:30 Coffee break

### SESSION 4. OTHER INTERREGIONAL EXPERIENCES TO BOOST INNOVATIVE FINANCING IN ENERGY EFFICIENCY PROJECTS

11:30 – 12:00 Boosting innovative financing in energy efficiency projects in public buildings. *Violeta Greičiuvienė, Head of EU Assistance Division, Ministry of Energy (Lithuania).*

12:00 – 13:20 Interregional experiences to boost innovative financing in energy efficiency projects. Round table.

Financial Instruments for Energy Renovation Policies (FINERPOL). FINERPOL project representative.

- Innovative financial experiences in interregional projects to foster energy rehabilitation. *Ignacio Contreras, The Spanish Institute of Financial Analysts.*
- European Partnership of regions to promote investment on energy efficiency in buildings. *Joaquín Villar, Head of Internationalisation and Prospective Dept. Energy Agency (Andalusia).*

13:20 – 13:30 Q&A and discussion.

### STUDY VISIT 1

14:30 – 14:45 Trip by bus to the Study Visit 1 premises: Museum of Energy and technology. Rinktinės str. 2, Vilnius.

Museum of Energy and technology is located in a unique object of heritage: the first Vilnius central power plant. The spaces of the former power plant have been adapted for visitors. It displays various objects of technical heritage and tells the story of the old power plant).

15:00 – 16:00 Study Visit 1.

Experience of Šiauliai Bank in implementing financial instruments – sharing their experience in the application of procedures, adaptation of IT systems, staff training etc...). *Representative of Šiauliai Bank - Credit Risk Department analyst Gedas Janenas.*

## DAY 3 – 12 JANUARY 2017

### STUDY VISIT 2

Venue: Jonava municipality.

9:00 – 13:00 Study Visit 2. Travelling by bus to Municipality of Jonava premises.

13:00 – 14:00 Lunch

*End of the interregional seminar.*



More info: [www.interregeurope.eu/build2lc](http://www.interregeurope.eu/build2lc)



Andalusian Energy Agency  
MINISTRY OF EMPLOYMENT, BUSINESS AND TRADE



VIŠIŲJŲ INVESTICIJŲ PLĒTROS AGENTŪRA



asiantaeth ynni  
**SevernWye**  
energy agency



RARR  
RZESZOWSKA AGENCJA  
ROZWOJU REGIONALNEGO



REGIONALNA ENERGETSKA AGENCIJA  
NORTH-WEST CROATIA  
SIEVEROZAPADINE HRVATSKE  
REGIONAL ENERGY AGENCY



REGION  
JÄMTLAND  
HÄRJEDALEN



leag  
Lokalna energetska  
agencija Gorenjske



**BUILD2LC**  
Interreg Europe



European Union  
European Regional  
Development Fund