



# Monitoring and evaluation of investments

Guidance improvement, recommendations and conclusions

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## Introduction

The implementation of the pilot regions projects has shown some barriers and obstacles, that have highlighted the opportunities but also difficulties to set up a Program Delivery Unit (PDU) and kick-start a large scale program for energy efficiency and renewable energy in buildings. These barriers are mainly of political, organisational, decisional and financial nature.

The analysis of these barriers, their impact and possible ways of lifting them has allowed to improve the guidance to project developers wishing to create and finance a PDU and to formulate some recommendations.

## Guidance improvement

Having gone through the process of developing the pilot region's projects and monitoring their results, the following improvements are suggested to the Step-by-step guidance as documented in the CITYinvest brochure "SETTING UP INNOVATIVE FINANCING SCHEMES FOR ENERGY EFFICIENCY RENOVATIONS: A GUIDANCE FOR LOCAL AUTHORITIES".

### Step 1 – Get Inspired

#### Learn from your peers

- In WP2 we developed an in-depth analysis and benchmark of 26 models that summarize the organisational, operational and financial elements of the programs and PDUs. As part of the monitoring activity in WP5 we added similar descriptions for the 3 pilot region's models: Renowatt+ (GRE Liège), Murcia and Rhodoshop (Rhodope). These 3 additional models provide valuable insight into how the models work, how the PDU is set-up, funded and managed, as well as how projects are organized and financed. We advise to also have a look at these 3 pilot region's models.

### Step 2 – Set the Ground

#### Get political commitment

- As far as convincing stakeholders and political decision makers, the project has learned that there is a need to develop a strong program/PDU business case and business plan. This includes defining precisely the mandate that the PDU should get from the Program Authority (PA), the required resources to fulfil the role of the PDU and the funding required for PDU set-up and operations. In addition it should include the way that the program itself (investments) are being funded over the horizon of the program. Such a strong business plan will definitely help motivating and convincing the Program Authority to engage into and finance the PDU and the program. Such a business plan should particularly motivate the reasons for the PA to do so.

#### Build your action plan

- A strong element of a successful Action Plan is the ability to obtain STRUCTURAL funding for the Program Authority for the duration of the program. The experience of the pilot region's projects has shown this very clearly. In particular for Renowatt+'s pilot project the inability to raise such structural funding from the PA has led it to turn to EU funding (i.e. ELENA funding). In addition to the difficulty to obtain this funding because of political reasons (in particular

the unwillingness to provide sufficient financial guarantees), such EU funding is insufficiently structural. After 3 to 4 years, very often there are no financial resources available to pursue the program. The same holds for Rhodope which has successfully obtained an Horizon2020 PDA funding to execute a 3 year program for energy efficiency and renewable energy in municipal buildings, but without securing structural funding of the PDU beyond that period. We strongly advise to obtain such structural funding (e.g. in the form of equity), as certain PDUs in some countries have succeeded in doing. In addition to such structural funding from the Program Authority or Authorities, one can then complement this by EU funding for financing specific technical assistance for certain phases of the program under programs as ELENA, Horizon2020 or local PDA funds.

- Sometimes the PDU plays the role of aggregator, e.g. of local municipalities. In CITYinvest's pilot regions this is the case of Renowatt+ and Rhodoshop. Although this "service" of the PDU offered to the local internal customers clearly provides an advantage, it may also lower the involvement of these local Program Authorities in the PDU. Thus, we recommend increasing the involvement of the "buying" local Program Authorities into the structure of the PDU. A good example of this is the SPL OSER project/PDU in France, where they become shareholders and contribute to the structural funding of the PDU.
- When several local Program Authorities need to be convinced to join the program, the process of convincing them can take a long time. It may make sense to start with a core of very motivated ones and start the program with them before extending it to the more reluctant ones. So constituting such a core group is definitely a good practice. This was successfully applied by the Rhodope region.

## Step 3 – Get Operational

### Monitor your investments/savings

- A successful monitoring of the results can only be done if the data sources used in the development phase correspond to the data used in the monitoring phase. This has shown to be somewhat of an issue in the pilot regions projects. Thus, we strongly advise to develop from the start a comprehensive database that includes the data about the beneficiaries, the projects and buildings, the energy consumption, the investments and the energy savings. This will allow a consistent follow-up in each of the development phases of the program (action plan, assessment, preparation, tendering and implementation).
- As for the monitoring itself, we have developed in WP5 quantitative and qualitative questionnaires that allow to collect data on the beneficiaries, projects, buildings, investments, savings, etc., as well as on the major barriers encountered and their impact. We strongly suggest using these questionnaires or getting inspired by them to monitoring the progress of the program and projects.

## Step 4 – Enlarge and Up-scale

As we have not reached this stage yet in the pilot regions, we have not yet been able to define guidance improvements.

# Recommendations

The analysis of the barriers and their impact, as part of the responses to the WP5 qualitative questionnaires for monitoring program progress has allowed us to formulate the following recommendations:

## Secure the long term involvement of the Program Authority

In effect, the change in political majority at the Program Authority can negatively impact the planning and the outcome of the PDU set-up as was shown in the Renowatt+ pilot region. Securing support at high political level, across majority and minority, seems to be essential to obtain long term commitments and financial support for the program.

## Increase the capacity and know-how of the beneficiaries

The lack of understanding and know-how about energy efficiency in general and implementation methodologies (e.g. Energy Performance Contracting) in particular, may hinder the beneficiaries' commitment process, as is shown both in the Renowatt+ and the Rhodope cases. The creation of a centralized PDU to run the program does not solve issues as beneficiaries like local municipalities still need to approve projects, agree to funding proposals, coordinate local works and interact with a variety of occupants. Experience has shown that multiple meetings are needed to bring and keep them on board. A good preparation and adequate process for such beneficiaries' involvement is key to the success of any program.

## Anticipate supplier market development

In some case, in particular in emerging markets, the availability of sufficient and adequate suppliers may be an issue. This can be in particular the case with respect to the availability of Energy Services Companies (ESCOs) to execute Energy Performance Contracts (EPC), as highlighted in the Rhodope region. The limited availability on the market of ESCOs can hinder the development of successful EPC projects, as there may not be sufficient candidates to tender. It can also limit the access to ESCO financing. We advice to set-up a dialogue with existing and potential ESCOs, to generate interest not only for the first project but for the overall program and to work actively with them to attract their interest. This may include lobbying to international ESCOs who's local subsidiaries may not be geared up to provide EPC, but have the potential to develop into serious ESCO candidates.

## Increase PDU staff's capacity and know how

Even creating a PDU to act as an aggregator of projects for various subsidiaries may not be sufficient, if this PDU does not have the necessary skills and experience to execute the program. It may be required to provide specialized training on technical, operational, legal and financial aspects to the PDU staff. It may also be useful or even necessary to hire the services of experienced consultants or facilitators to assist the PDU in the program and project set-up, tendering, implementation and financing. In any case the overall project team (both internal and external staff) needs to have the necessary expertise to manage the PDU and execute the program adequately and on time.

## Invest in reliable data acquisition

Reliable data acquisition on buildings, energy consumption, projects, investments, energy savings, etc. is key to a successful program implementation as was shown both in the Renowatt+ and Murcia

Region projects. Reliable data on buildings and particularly energy consumption is often missing; The lack of reliable data not only impacts the project design and implementation but also the project monitoring. This is especially the case when there are multiple beneficiaries who all manage building and energy data separately. In case of EPC projects it is also mandatory to have correct baseline data as savings guarantees offered by the ESCOs are based on that. The EPC tendering becomes difficult if no correct baseline data is available. Thus it is mandatory to invest sufficient time and resources in this data collection and ideally implement an electronic data collection system.

### Obtain structural PDU funding from the Program Authority

Both the Renowatt+'s and Rhodope's team had difficulties in obtaining PDU funding from the Program Authority or Authorities. They eventually turned to EU funding (respectively ELENA and Horizon2020 grants). Although this can temporarily provide technical assistance funding for an initial program of investments it does not secure a long-term vision on the PDU's working budget or investment capacity.

We recommend to secure structural funding (e.g. in the form of equity or long term budgets. In addition to such structural funding, the PDU can complement this by EU funding for financing specific elements or phases of the program.

### Consider Off-balance financing solutions for project investments

One of the main barriers to implementing large scale energy efficiency and renewable energy projects in the public sector is the impact on the public debt as was also highlighted in the initial CITYinvest report on the 26 models in Europe. One possibility is to obtain an exception for "productive investments", e.g. for EPC projects, where the local authorities can increase their authorization for such projects, although debt still needs to be carried by the regional and/or national government. This mechanism was successfully pioneered by the Liège Province Project under the Renowatt program and can likely be extended for the Renowatt+ program. Nevertheless it does not fundamentally solve the issue and only transfers the problem from the local to the regional/national level.

With the new EUROSTAT rules on ESCO financing for Energy Performance Contracts, published on 19 September 2017, there are new possibilities for debt deconsolidating or off-balance financing using formulas associated with "operational leasing". Although the cost of financing may be important, as highlighted by the Renowatt+ team, this offers real opportunities for new alternative financing beyond the debt capacity of current local and regional authorities. Guidance from the EIB on how to interpret the EUROSTAT rules is expected by the beginning of the second quarter of 2018. We do advise to look into this option, in particular when EPC is considered.

## Conclusions

Getting commitments from Program Authorities, setting-up and managing a PDU, developing and implementing projects and financing the PDU and the investments can be a challenging task. Many barriers lie ahead and need to be tackled. Nevertheless, when following a structured approach as the one developed in the CITYinvest project the chances for success are significantly increased. We have developed a large set of useful tools and guidance material that can be used in all the different steps of the process. It does not necessarily guarantee the flawless development and implementation of

the program, but it reduces the risk, allows to anticipate the hurdles and improve the quality of the various deliverables.