

## CONFERENCE SUMMARY

# Exchanges on energy performance contracts for the renovation of public buildings in France and in Italy

13<sup>th</sup> June 2019 – Lyon



Local authorities and energy efficiency companies involved in energy performance contracts (EPCs) in France and Italy shared their respective experiences on Thursday 13 June at the DREAL Auvergne-Rhône-Alpes in Lyon.

The conference was divided into two parts: case studies were presented by the contracting authorities from Italian and French local authorities; then, companies providing EPC services discussed the setting up of their offers as well as their management of the performance guarantee.

Avec le soutien de :

## INTRODUCTION

- **Laurent Chanussot, AURA-EE**

As part of the STEPPING project, AURA-EE and its European partners have tested shared models of Energy Performance Contracts (EPCs) for the renovation of public buildings. Pilot projects have enabled to work on buildings in different municipalities and on the suitable legal models to group them, to mobilize the local business market and to seek new financing levers.

The purpose of this conference is to share the results of this work on a transnational scale through testimonies from French and Italian local authorities and economic actors.

**Website of the project:**

<https://stepping.interreg-med.eu/>



## EPC CASE STUDY IN FRANCE AND IN ITALY

- **Silvio De Nigris, Regional Council of Piedmont, Italy**
- **Véronique Richalet, Regional Council of Auvergne-Rhône-Alpes and Laura Salez, Dalkia France**
- **Piergabriele Andreoli, AESS – Agency for Energy and Sustainable Development of the City of Modena, Italy**

### The Piedmont Region

Silvio De Nigris, from the Piedmont Region, lead partner of the STEPPING project, presented **four grouped EPC projects** initiated with the funding of the Interreg MED programme. These EPCs involve the **renovation of nearly 40 buildings in about twenty Piedmontese local authorities**. The estimated energy savings are between 25% and 40%, for energy efficiency works ranging from €320k to €1.5m. Another European project, 2020Together, enabled them, in parallel, to launch the renovation of 18 buildings in five local authorities, in the form of an EPC over 13 years, guaranteeing 61% energy savings for works worth €2.5 million.

These Italian EPC always include the supply of energy with a contractualization that is like a public-private partnership (PPP). In this type of contract, the local authority can request a financing for only part of the work from the contracting energy efficiency company. It should be noted that the financial savings made by the EPC guarantee the partial reimbursement of the investment made in the works. Besides, the financial aspect is not the only argument for setting up an EPC. The environmental impact - reduction of greenhouse gas emissions and development of renewable energies - can also be highlighted.



## La Région Auvergne-Rhône-Alpes

In 2014, the Auvergne-Rhône-Alpes Region launched a consultation for the **renovation of nine high schools in its stock of 308 establishments**. Véronique Richalet, from the Regional Council and Laura Salez, from Dalkia, presented the EPC signed between the two parties at the end of 2015. This EPC, which also includes EDF Optimal solutions and SOHO architects, covers **50 buildings**. It guarantees 45% energy savings, or €650k in savings per year, for an investment of €23m granted by the Region. Environmental objectives are also included in the contract: 42% of reduction in CO2 emissions and 28% of production of renewable energy.

Different types of works have been carried out over a three-year period: insulation (replacement of carpentry and insulation from the outside), replacement of heating systems, installation of photovoltaic plants, fans in workshops, deployment of LED bulbs as well as monitoring systems, centralized technical management (CTM) and connected meters. These actions were chosen by the technical service providers based on the economic objectives set by the Region. The IPMVP measurement protocol has determined the type of consumption monitoring implemented throughout the contract. The occupants were sensitized throughout the work.

## The City of Modena

The Energy and Sustainable Development Agency (AESS) of Modena in Italy, has been deploying EPCs for 18 years. Pierngabriele Andreoli, its director, gives the figure of **58 EPCs for public lighting and 42 EPCs for public buildings**, for a total investment of 300 M€. Thanks to the STEPPING project, AESS has built a **grouped EPC model on 62 buildings** in seven local authorities, allowing 30% energy savings, for a total of €9 million (including energy supply, and preventive and corrective maintenance), including €6 million of investment in energy efficiency actions.

Over the years, they have developed a methodology that they now systematically apply. They first select the buildings that will be subject to energy audits. Then, based on the energy consumption and the ratio (per m<sup>2</sup> for example), energy-intensive buildings with high work potential are selected to integrate the EPC. The objectives in terms of work and development of renewable energies are set, then the financial aspects are defined (energy saving assumptions, initial consumption situation, etc.). The tender files are then prepared (number of lots, type of contract, criteria for selecting bids) and the tenders launched.

## EXCHANGES BETWEEN EPC OPERATORS

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- Laura Salez, Project manager Realisation, DALKIA Smart Building, France
- Claudia Carta, Head of Energy Solutions Development, Iren Rinnovabili - Smart Solutions, Italie
- Alessandra Cavaletti, Product manager, Smart Cities and new Businesses, ENGIE Italie



Three energy efficiency companies in France and Italy discussed how they would proceed **in response to a consultation on an energy performance contract**.

These companies have internal skills and adapted tools which enable them to build complex EPC files in a precise manner. They sometimes use subcontractors, for example to carry out thermal studies or to obtain external advice, but most of the time they rely on internal expertise.

When partnering with co-contractors, the operator usually interacts only with the lead partner in the group of companies. Sometimes

the group's responsibility changes over time: it is first the service provider responsible for the work who is responsible for the EPC, then this responsibility passes to the operator, once the work is completed.

In France, exchanges through competitive dialogue are often essential for the successful implementation of the EPC. Local authority buyers have the possibility of "sourcing", i.e. exchanging with companies during the drafting of the specifications, before the consultation is launched. In Italy, the situation is different because the anti-corruption law requires very limited exchanges between companies and contracting authorities.

What is often missing from the EPC consultation files on which these energy service operators have worked is a reference situation based on reliable figures to build a solid offer. To have a precise idea of building consumption, to control drifts and to guarantee accurate reporting throughout the contract, these companies have deployed monitoring systems based on connected objects.

Finally, in both countries, the EPC imposes penalties that can be high when the objective is not achieved, sometimes with the obligation to carry out additional work. It is therefore in the operators' interest to guarantee the quality of the work on the first try and to implement a control and commissioning system to this end. Concerning the performance guarantee, the operators agree with the contracting authority on a measurement and verification plan. The staff following this plan is generally IPMVP (international protocol) certified. Monitoring to ensure the quality of the work, as well as the implementation of consumption data metering, linked to data processing and alert centres (such as Dalkia's DESC), enable the operator to monitor the quality of the contract.

## **BONUS: LESSONS LEARNT OF THE STEPPING PROJECT ON GROUPED EPC**

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The testing carried out in the project partner countries has enabled a few lessons to be drawn:

- First, the grouped EPC model proved to be complex to implement and time-consuming. Internal local authority resources, as well as renovation project management skills, are key points that the project owner has to consider before choosing the option of an EPC. A project management assistance (AMO) can be a valuable aid in carrying out the patrimonial audit and the construction of the consultation specifications on the one hand, and in the development and monitoring of the energy performance contract on the other hand.
- Limits in terms of public financing, the lack of maturity of the local market and the obligation of guarantee are obstacles raised by the partners regarding the deployment of energy performance

contracts. Hence, in some countries, the markets launched have been unsuccessful, and in others, the respondents are large energy suppliers.

- The selection of buildings part of the contract has to be carried out in a sufficiently detailed manner to ensure the feasibility of the EPC in relation to the market. In the Mediterranean area, where the climate is temperate, energy needs for heating are not very high and sometimes make EPCs unattractive. As for cooling needs, they are increasing.

**Visit the project's exchange platform:**

<http://steppingplatform.com/>

