THE USE OF ENERGY PERFORMANCE CONTRACTS FOR THE ENERGY RENOVATION OF PARIS SCHOOLS

Workshop on Innovation, applied research in renewable energy and relationships with SMEs

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Faro
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BACKGROUND & OBJECTIVES

- Public buildings is a target set for 30% GHG emissions reduction by 2020.
- Covenant of Mayors initiative was drafted within the City of Paris Climate Plan.
- City of Paris Climate Plan originates from CPE-Ecoles, which is a large-scale investment programme to 2020. CPE-Ecoles has as overall objective to achieve 65,000 MWh energy consumption reduction and 13,500 teqCO2 emissions reduction, aiming at energy renovation of 660 public schools.
TYPE OF ACTIONS AND IMPLEMENTATION

CPE-Ecoles

is a large-scale investment programme to 2020

was initially implemented in

100 schools (1st pool)

underwent

EE interventions consisted in:
- insulation of building envelope
- revamping of doors and windows
- replacement of lamps
- PV plants on rooftops
- installation of thermostatic taps

were implemented using

Energy Performance Contract - EPC

ELENA - European Local Energy Assistance

Malta Intelligent Energy Management Agency
ENERGY PERFORMANCE CONTRACT (EPC)

Energy Performance Contract - EPC

- tended through
- ESCOs
- City of Paris
- has a duration of 20 years
- pay
- guarantee
- conduct
- perform
- implement
- debt reimbursement through energy savings

Investments costs
30% energy savings
Studies
Project management
Energy renovation actions
Maintenance & monitoring actions
Training & awareness-raising actions

EE interventions
were implemented using
ELENA TECHNICAL ASSISTANCE

EE interventions were implemented using ELENA - European Local Energy Assistance, which is an EU initiative supported and covered by the EU Commission and managed by the EIB - European Investment Bank.

ELENA supports energy efficiency, distributed renewable energy, and urban transport projects/programmes.

technical assistance & project development costs
ELENA TECHNICAL ASSISTANCE - #2

ELENA - European Local Energy Assistance

- supports
  - energy efficiency, distributed renewable energy and urban transport projects/programmes

- covered

EU initiative

is managed by

- EIB - European Investment Bank
- EU Commission

Technical assistance

- Selection/grouping of the schools to be refurbished
- Preparatory studies
- Preparation of energy baseline for selected schools
- Tender preparation and tendering procedure
- Monitoring of signed contracts
- Targeted information towards users
ACHIEVED RESULTS

- 10,700 MWh/year reduction of energy consumption
- 2,300 t/year reduction of CO2 emissions
- 850,000 EUR reduction of energy costs

EE interventions

Training activities were aimed at:
- Municipal employees
- Teachers
- Pupils

Awareness-raising sessions targeted:
- Families
LESSONS LEARNT

- Based on the results achieved, the municipality decided to launch other EPC tenders - the first EPC became a **reference at national level and beyond**

- Companies proved to be able to propose **innovative solutions** with limited budgets

- The project contributed to the development of a **cross-sectorial vision** of energy efficiency actions within the municipality

- The project allowed the municipality to acquire **technical expertise** to independently develop its own EE projects and to assist other public authorities in the development of similar projects (**transferability and replicability**)
THANK YOU

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