

## REPORTING FORM WITH ANNEXES

<b>Training session reporting form</b>	
Title of the event	<b>Contratos de Desempenho Energético (ECO.AP)</b>
Location	Portalegre – Portugal
Date and duration of the event	May, 14 <sup>th</sup> 2019 From 09:00 until 17:30 (according with the agenda).
Number of participants	29
Typology of participants (e.g. Local/Regional/National Authority; Development/Energy Agency; ESCO; Financial Institution; Professional Association (buildings, chambers of commerce, business clusters); SME; Other (please specify)	Municipal technicians, municipal communities, private companies, ESCO's.
Key note speakers	Jorge Almeida (RdA Climate Solutions) Electrical Engineer - Energy Area Founder and Managing partner of RdA -Climate Solutions Director of Investor Confidence Project Advisor of APESE Management Board Member of Energy Technical Working Group on Climate Action Transparency's Certified Measurement & Verification Professional (CMVP) Technical Energy Auditor
Interactive tools used (simulation tools, web-games, quiz, etc.)	STEPPING EPC simulation tool, interactive survey with Sli.do
Number of project posters displayed	1
Number of project flyers disseminated	30
Number of satisfaction	In general, the feedback received/the degree of participants'



questionnaires distributed/ received	satisfaction towards the event was quite positive. Only 8 questionnaires received.
Media representatives	None
List of press releases or articles in newspapers, magazines and on websites – parent institution, STEPPING, Interreg MED Programme. *Scan (pdf) – upload in Gdrive folder; Online links (www) – paste here	<ul style="list-style-type: none"> <li>• Email dissemination for all the main contacts in energy and energy efficiency issues</li> <li>• Facebook and LinkedIn dissemination</li> <li>• Dissemination via institutional website</li> </ul>

#### **Detailed description of the event (min 2000 characters)**

Based on the agenda (lectures, interactive tools, round table discussion, site visits).

In Portugal, Decree-Law n. 319/2009 of 3rd of November transposes the Directive 2006/32/EC of the European Parliament and Council of 5th of April into the internal legal order. It was on the basis of this document that, subsequently, Decree-Law n. 29/2011, of 28th of February, established the legal regime applicable to the creation and execution of energy efficiency management contracts, to be concluded between the services and bodies of the Direct, Indirect and Autonomous Public Administration and Energy Services Companies (ESCO) and where the figure of the qualification system of the ESCO was introduced, thus establishing the need to adopt measurement and verification procedures. The ESCO's are, then, divided into two levels:

- Level 1 - buildings or equipment with an annual or individual energy consumption of 3 GWh or less:
- Level 2 - buildings or equipment with an annual energy consumption, individually or together, more than 3 GWh:

It also legislated the specifications of the procedures for the EPC tenders.

The EPC can be classified according to the following:

- Savings Sharing: The achieved savings are shared over a predetermined period of time, according to a pre-established percentage: there is no standard percentage as it depends on the cost of the project, the duration of the contract and the risks assumed by the ESCO and the client.



- **Guaranteed savings:** In a guaranteed savings contract, the ESCO always guarantees a level of energy savings (which is duly disposed in the contract) and, in this way, protects the client from any risk associated with the performance of the system.

It is important to know that, taking into account the characteristics of each building, the identification of all measures should take into consideration the following aspects:

- Age and conservation status of the analysed technical systems;
- The technology of existing systems and equipment compared to the best available technology;
- Reductions in energy consumption and related costs;
- Payback periods (preferably measures with reduced payback).

In order to carry out a technical-economic analysis of the energy efficiency improvement measures, it is necessary to define an initial scenario - Baseline - that will meet the consumption profile of the installation before any implementations.

The global baseline can be defined by the sum of the different baselines representing the energy consumption of different sectors (thermal, lighting, etc.), with reference values referring to standardized average data under specific conditions or even data measured using monitoring and measuring equipment.

Typically, the baseline has 12 months as the reference period. However, depending on the installation in question, it may make sense to extend this period so as to have a starting point with greater accuracy.

The baseline may be complemented by a few more important data, which will promote its accuracy and facilitate comparison/monitoring after implementation of energy efficiency improvement measures. However, some of these data are not easy to obtain and, in many cases, obtaining them entails increased costs for defining the baseline.

It can highlight the following:

- Actual climatic data;
- Calculation of heating and cooling days associated with HVAC systems;
- Internal temperature of each space in the installation and calculation of air conditioning needs;
- Operating time of HVAC systems (hours per day, days per year);
- Air-conditioned volumes, by space;
- Hours of operation of lighting systems;



- Operation and maintenance costs;
- Other data.

The energy study of an installation must always be accompanied by a particular analysis of the activities and/or processes, typology and state of conservation of the equipment and mode of use, in order to detect possible points of performance and opportunities for improvement, transposed in the identification and selection of improvement measures with technical-economic feasibility.

Not least, the monitoring of energy consumption and its analysis in the face of any variations in relation to the baseline should involve the conclusion of an IPMVP Protocol.

#### **General remarks and conclusions (min 2000 characters)**

***Based on the participants' feedback*** (minutes + satisfaction questionnaires), e.g. areas or procedures where target groups are lacking of knowledge or practical experiences in adapting EPC; identified obstacles, inhibitors and opportunities that are preventing or enabling the uptake of EPC; regional peculiarities + anything that can be useful as an additional input for the realization of MED EPC Guidelines.

In this event, which was attended by around 30 participants (among municipalities, intermunicipal communities, companies (SME, ESCO's) and several reference entities at local and national level), the main topics issued were related to the implementation of Energy Performance Contracts.

Now we are working with the municipalities in order to analyse each of the identified energy efficiency measures and working on the possibility to develop a EPC in our region.

The implementation of the STEPPING project made possible to continue the mission of AREANATEjo with regard to improving energy efficiency in our acting area with special focus on the infrastructures of the responsibility of the buildings of the municipalities.

Emphasizing all the tasks developed in the project, it is worth noting the development of a collaboration protocol with each involved municipality, the development of energy audits/diagnostics for the identified buildings, the installation of energy consumption monitoring systems and, based on all this information, the development of an Investment Plan to assist the implementation of the previously identified efficiency improvement measures.

Taking this into consideration, a thorough analysis has been carried out on European and national



legislation in the development and implementation of an EPC.

EPC is a good opportunity for municipalities to implement their projects, improving the use conditions of their buildings through the installation of more efficient solutions and technologies and allowing also to reduce the energy consumption and consequently the operating costs of these buildings.

In the future, EPCs will certainly be an important solution for financing measures to improve energy efficiency. Thanks to the STEPPING project, municipalities have been better able to perceive the potential of their implementation.

**Annexes – upload in G-Drive folder:**

- Invitation letter (local language)
- Agenda (local language)
- Presentations (local language)
- Photos
- Lists of participants (scanned original)

