

Energy Efficiency in Public Administration (Eco.AP): Advantages of the ESCO model

Napoli
10th of April 2015

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de eficiência
energética

Eco.AP Program

Description

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Eco.AP Program

Objectives:

- Promote the efficient use of energy in Central Government;
- Promote the development of the ESCO market in Portugal, both on the public and private sector;
- Contribute to achieve the goals established in NEEAP to reduce energy consumption in Public Administration Sector in 30% until 2020.

Main Measures :

- Existence of an Energy Manager in all Central Government Bodies;
- Development of the Barometer Eco.AP in order to evaluate the energy efficiency of the Central Government Sector
- Development of Energy Performance Contracts in the buildings/equipments with an higher energy consumption (or inefficiency);
- Development of energy efficiency action plans for the remaining buildings or equipment.

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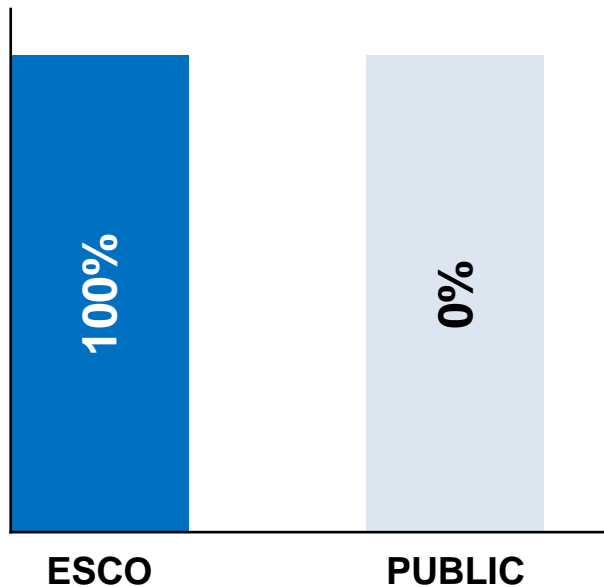
Eco.AP Program

Energy Performance Contracting

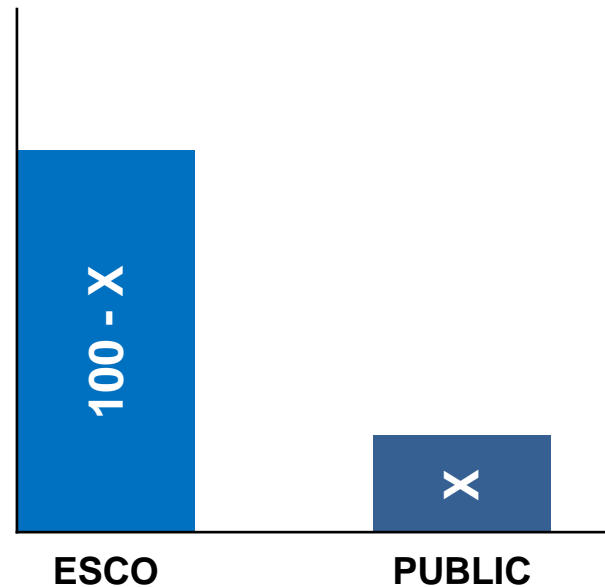
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Business Model

INVESTMENT

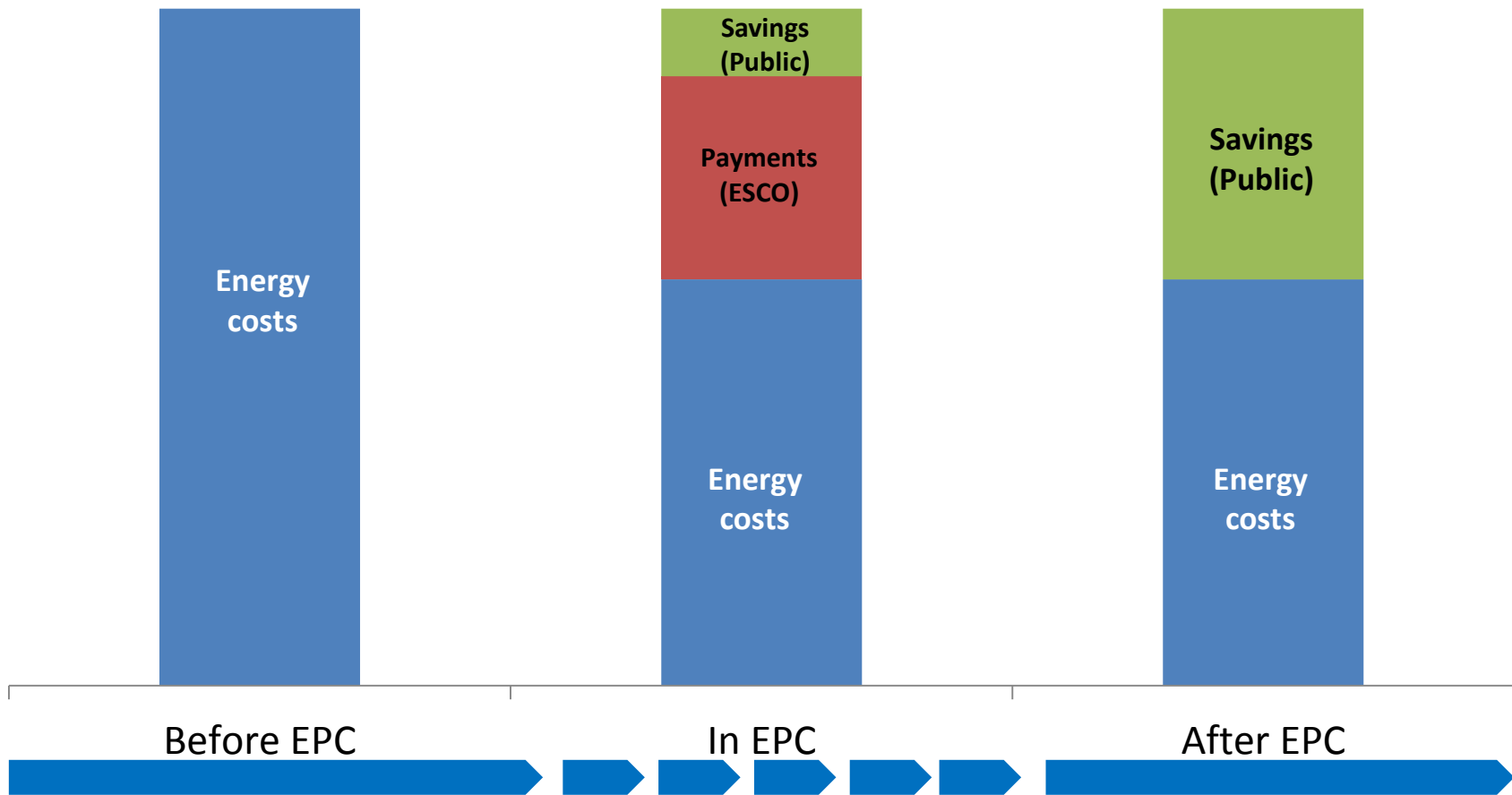


SAVINGS



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Business Model



Legal Framework

RCM n.º 2/2011, from January 12th

- Creates the Eco.AP program

DL 29/2011, from January 28th

- Develop the legal framework for energy performance contracts in the public sector, in coordination with the remaining procedures for public contracting

Normative Order n.º 15/2012, from July 3rd

- Creates a ESCO pre-qualification system

RCM n.º 67/2012, from August 9th

- Established that all EPC in the Central Government must be coordinated by the Energy Ministry

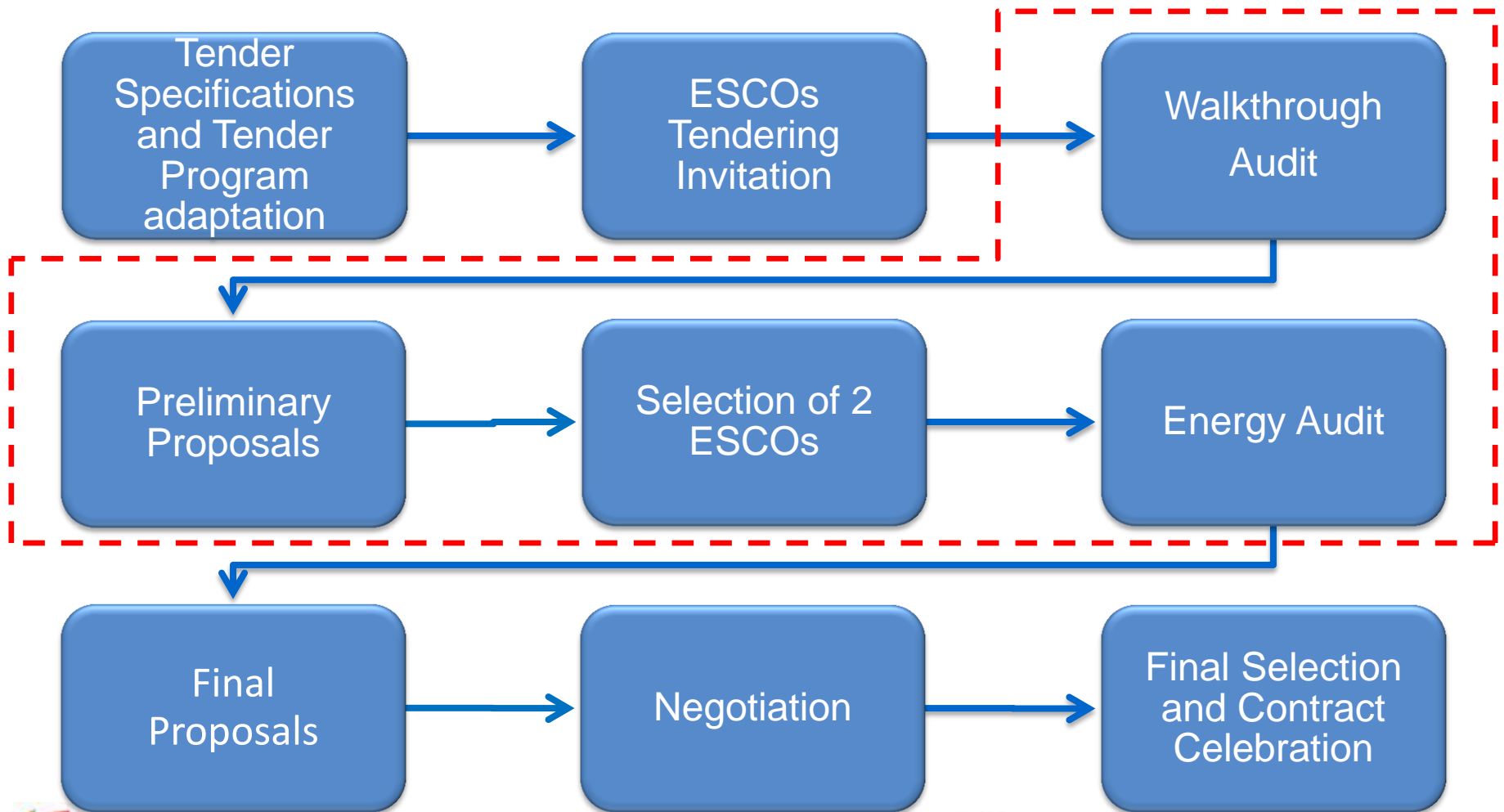
Ordinance n.º 60/2013, from February 5th

- Publish the tender specification model to be used by the public sector in tender for energy performance contracts development (**EED obligation**)

ESCO – Pre Qualification System

Driver	Levels	Technical Requirements	Financial Requirements
Complexity of buildings / Equipments	Level 1 $\leq 3000 \text{ Gwh}_{\text{eq}}$	<ul style="list-style-type: none"> • 2 Energy Expert (EPBD) • 1 Energy Auditor 	<ul style="list-style-type: none"> • Turnover $\geq 200 \text{ k€}$ • Financial Autonomy $\geq 15\%$
	Level 2 $> 3000 \text{ GWh}_{\text{eq}}$	<ul style="list-style-type: none"> • 2 Energy Expert (EPBD) • 1 Energy Auditor • 1 CMVP • 2 Engineer (SGCIE) 	<ul style="list-style-type: none"> • Turnover $\geq 1 \text{ M€}$ • Financial Autonomy $\geq 15\%$

Tender Procedures



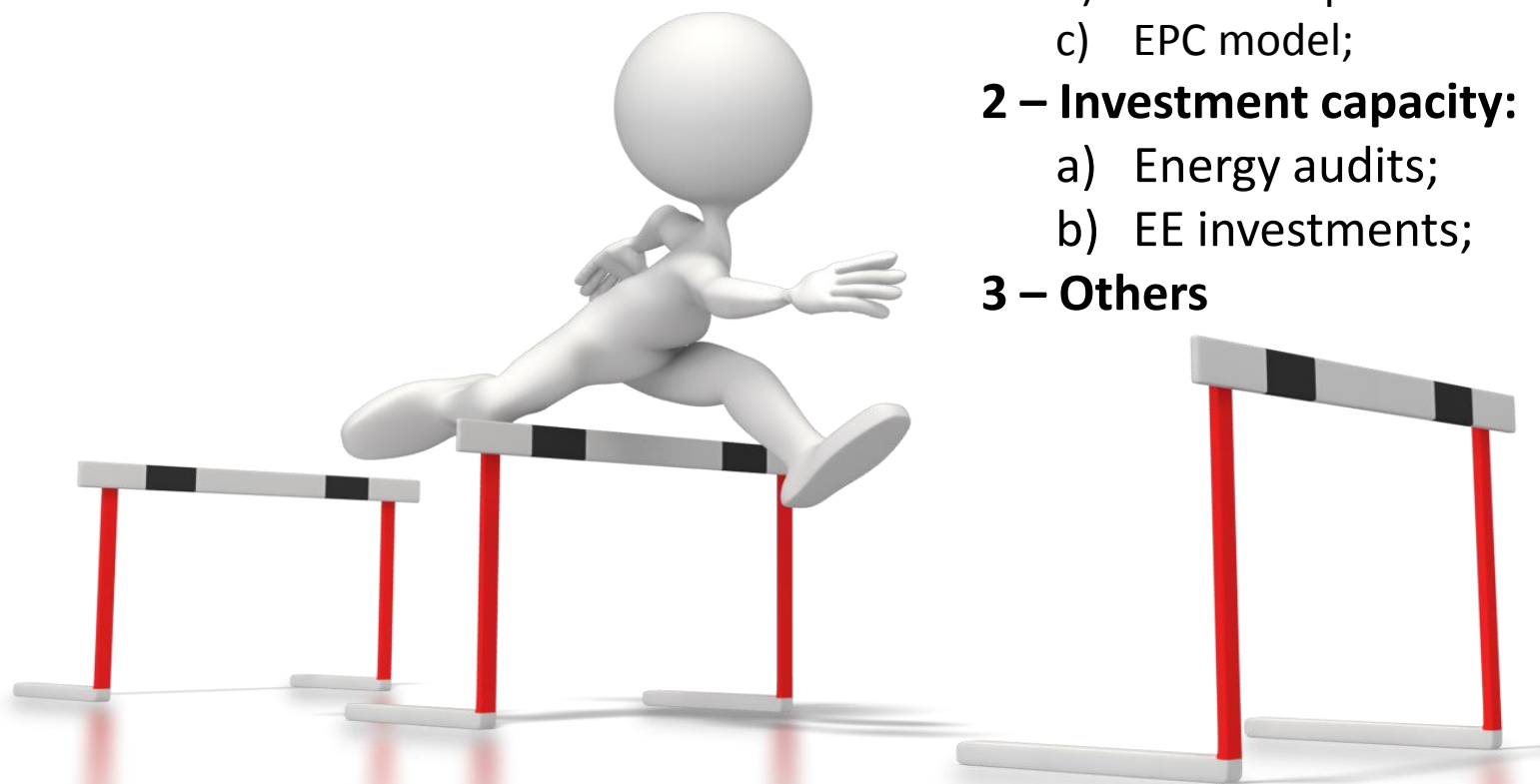
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Main barriers

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Eco.AP - Barriers



1 – Knowledge:

- a) Buildings/equipment;
- b) Lack of expertise of the staff;
- c) EPC model;

2 – Investment capacity:

- a) Energy audits;
- b) EE investments;

3 – Others

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Technical Assistance

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ELEnA

Location	Lisbon Region
Beneficiary	Agencia para Energia (ADENE)
CoM signatory	No
Sector	EE in buildings, street and traffic lighting
Total PDS cost	EUR 721,273.00
Elena contribution	EUR 649,145.70
Project development services (PDS) financed by ELENA	The objective of the ELEnA assistance is to deploy the necessary technical, financial and legal expertise that will allow developing the investment programme involving ESCOs and using EPC between the Portuguese public administration and private ESCOs.

Description of ELENA operation

The TA developed with the Elena funds will support ADENE in the implementation of the Investment Programme that aims at retrofitting public buildings, street and traffic lighting systems located in the Lisbon Region for improvement of the energy efficiency. The public buildings concerned are owned by the Portuguese central government, while the street and traffic lighting systems are owned by the Lisbon Municipality. The implementation of the Investment Programme will help these public sector actors in meeting their EE and CC objectives. The programme will contribute to mobilising relevant stakeholders from the Region: public bodies, banks, investors and businesses in a broader use of ESCOs to improve EE.

Timeframe

2013- 2016

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ELEnA

Basis for investment identification

ADENE has already performed some preparatory works, including preliminary assessment and selection of some 50 buildings as well as lighting systems to be retrofitted under the project.

Investment programme description

The Investment Programme aims at implementing energy efficiency and renewable energy (PV, solar thermal) measures in public buildings, street and traffic lighting systems. Third party financing (TPF) is the approach adopted for the implementation of the Investment Programme. It will be based on the EPCs between the building and lighting systems owners and ESCOs companies.

Investment to be mobilized

EUR 36 million

Expected results

The implementation of the Investment Programme will result in final energy savings of 88.7 GW/a. In relative terms the potential energy savings (in final energy) are estimated foreseeing a 20% consumption energy reduction in buildings, 55% in traffic lights and 15% in street lighting system. In addition, the Investment Programme will contribute to producing about 4.0 GWh/a of renewable energy. Consequently the project will result in emission reduction of 38,810 t CO₂e/a.

Leverage factor (Minimum 20)

56

Market replication potential

The project will contribute to launching the programme through implementation of first projects. Once proven viable, the programme will be scaled-up and replicated in other Portuguese regions. The project will significantly contribute to the development of ESCO market in Portugal.

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Other Initiatives

National Funds

Energy Efficiency Fund

- Tender 5 – Energy audits in public buildings/equipment, to support tender procedures for EPCs (250.000 €)
- Tender 18 – Support investments to avoid reactive power in public sector

Innovation Support Fund

- Tender 1 – EPCs in private sector: offices, hotels and hospitals (1.050.000 €)

Structural Funds

Cohesion Funds

- IP.4.3 – Energy efficiency in central government:

European Regional Development Fund

- IP.4.2 – Energy efficiency in private sector (non-residential)
- IP.4.3 – Energy efficiency in regional and local government

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Program Eco.AP

Current Status

Current Status – EPC

- One tender procedure in course: Traffic lighting in Lisbon;
- Three tender procedures in a advanced stage of development (buildings);
 - Ministry of Health;
 - Ministry of Defence;
 - Ministry of Economy;
- Several other procedure in different phases;
 - Ministry of Education;
 - Municipalities;
 - ...

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Thank you for your attention

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