





Market-based Instruments (MBIs): Policy choice and Design of Energy Efficiency Obligations and Auctions

# Portuguese Plan for Promoting Efficiency of Electricity end-use

José Luís Sousa

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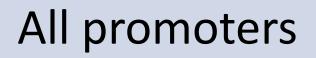
# PPEC – Plan for Promoting Efficiency of Electricity end-use

Promoters'

Measures	<ul> <li>Promoters decides measures, the consegment and the</li> </ul>	onsumer	<ul> <li>Electric utilities</li> <li>Consumers' rights associations</li> </ul>		
	Evaluation	<ul> <li>Measures (with p are evaluated acc set of criteria</li> </ul>	•	<ul> <li>Energy Agencies</li> <li>Municipal Associations</li> <li>Business associations</li> <li>Research centres and educational institutions</li> </ul>	
Consumption		Ordered list	<ul> <li>Measures a ranked by merit</li> </ul>	ire	
<ul> <li><u>Consumer segments</u>:</li> <li>Households</li> <li>Industry and Agri</li> <li>Services and Com</li> </ul>	culture		Selection	• Starting from the most valued measure, the selection is made until the whole budget is allocated	

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# Competitions with own budget



Tangible - Industry

Tangible - Services

Tangible - Households

### Intangible

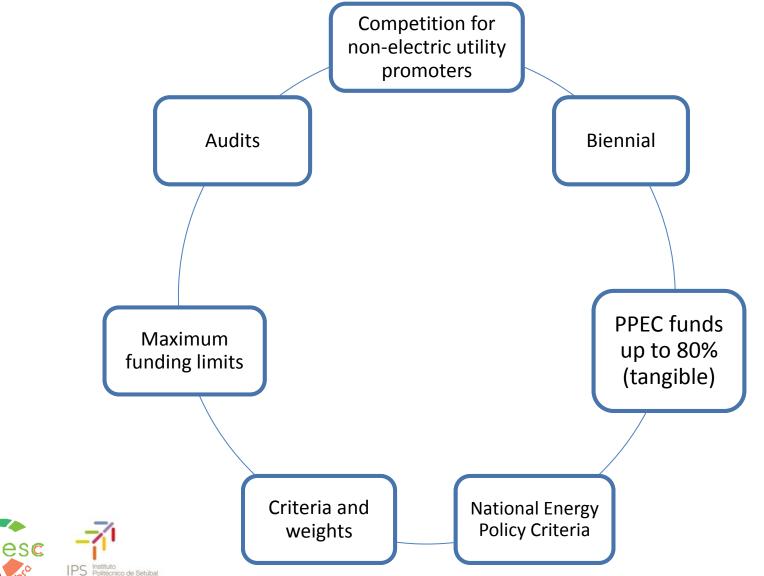
Non-electric utility promoters

Tangible (Industry / Services / Households)

Intangible



# Some challenges and learnings



# Funding

System Global Use Tariff (paid by all customers)

• 11,5 million Euros/Yr → 23 million Euros by PPEC Edition)

#### Competitions own budget

- All promoters Tangible: 14 M€
- All promoters Intangible: 2M€
- Non-electric utilities promoters Tangible: 4M€
- Non-electric utilities promoters Intangible: 3M€

#### Criteria

- Economic regulation (Benefit-Cost ratio, Scale risk; Weight of the investment in equipment)
- National Energy Policy (In line with other policy instruments, territorial coverage, ...)



### Deeper savings

Participation of beneficiaries in costs

Mandatory Measurement &Verification Plan

Audits

High number of promoters, partners and consumers Only technologies with efficiency above the market standard are financed PPEC 2017-2018

- 223 candidate measures (61,5 Million Euros); 79 promoters; 107 partners.
- Selected measures
  - 50 tangible
  - 26 intangible.
- 111 million euros in benefits (avoided consumption and emissions)
- 1470 GWh of lifetime savings.



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# Portugal Energy Efficiency Promotion Plan

José Luís Sousa António G. Martins





# Some results from PPEC Editions

	2007	2008	2009- 2010	2011- 2012	2013- 2014	2017- 2018
N. of Promoters	8	21	29	48	65	87
N. of Measures *	62	131	125	159	207	223
Tangible	25	70	61	75	86	103
Intangible	37	61	64	84	121	120
Cost of the measures (k€)*	26 631	46 272	58 116	57 081	58 840	61 586
Tangible	19 315	37 534	39 844	38 822	30 640	36 973
Intangible	7 317	8 737	18 272	18 259	28 200	24 614

\* Considering only eligible measures

In PPEC 2017-2018 evaluation under the economic regulation perspective (in Portuguese)

### PPEC costs of the measures

		PPEC average costs (€/MWh)	
All promoters	Tangible – Households	12,02	
	Tangible - Commerce and Services	16,08	
	Tangible - Industry and Agriculture	12,88	
	Total	13,49	
Non- electric sector promoters	Total	17,27	
	Total	14,12	