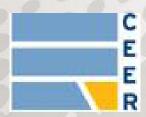
## **Key issues for regulators**

EU Regional PEDEE workshop on:

"Policies for Energy Provider Delivery of Energy Efficiency"

Pedro Verdelho – Head of Division of Tariffs and Prices, ERSE Brussels, January 18, 2012





### 1. Policies for Energy Provider Delivery of Energy Efficiency



### **Key issues for regulators**

- Ensure that regulatory incentives are closely aligned with the objective of energy efficiency.
- Ensure that regulation is friendly to innovative new service providers.

#### **Measures**

- Definition of network tariffs and regulations that provide incentives for grid operators to offer system services to network users permitting them to implement energy efficiency improvement measures – Energy Services to be provided by the market
- Definition of Access tariff structures which induce a rational use of electricity and support dynamic pricing for demand response measures by final costumers (time-of-use tariffs, real-time pricing, peak time pricing, peak time rebates) Innovative access tariffs allow to promote innovate end-user market tariffs
- Create the conditions for better information on tariffs, on consumption and on the economic incentives to be gained from energy efficiency improvement – The value of clear information in a consumer-friendly format
- Design of specific mechanisms to promote energy efficiency to overcome the existence of market failures that hinder economic agents from taking efficient decisions – The need for mechanisms to promote energy efficiency

## 2. Portuguese energy efficiency regulatory program (PPEC)



### PPEC - a competitive tender mechanism for energy efficiency

ERSE, the Portuguese Energy Regulator, developed a **competitive tender mechanism** by which eligible promoters submit candidate measures to improve efficiency in electricity consumption.

PPEC aims to promote a more efficient use of electricity, either by the installation of more efficient equipment on consumers of electricity or by acting on consumers behaviour.

The candidate measures are selected by ERSE through technical and economic criteria, based on cost-benefit analysis, publicly discussed and approved *ex-ante*.

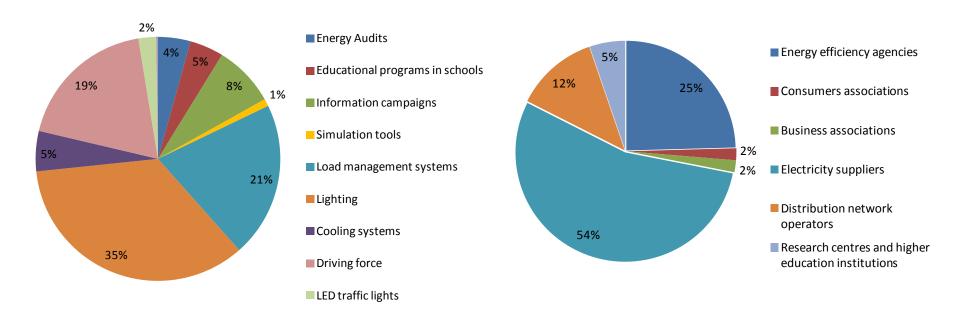
- > PPEC 2011-2012 received 150 submissions from 50 lead promoters.
- ➤ A very competitive contest, the number of measures submitted was 4 times the number selected. Only the best measures, with higher benefit-cost ratios were selected.
- More than 20 lead promoters and 40 other entities (energy providers, consumers associations, business associations, municipal associations, universities, ESCO, environmental organizations, institutions of social solidarity, TV broadcasters...) are involved in the projects selected. Advantage of maximizing the number of agents involved in the promotion of energy efficiency, reaching more consumers and increasing the positive spill-over effect.

# 2. Portuguese energy efficiency regulatory program (PPEC) Measures approved and eligible promoters



# Approved measures PPEC 2011-2012 (% PPEC budget)

### **National and Regional Promoters**

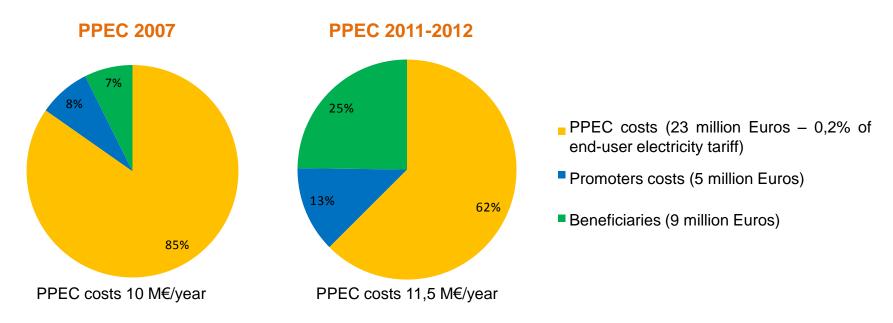


20% of PPEC 2011-2012 budget is allocated to demand side management measures (load management systems). This type of measures will provide real-time information to consumers, helping them to take decisions on their electricity consumption, increasing their demand elasticity.

# 2. Portuguese energy efficiency regulatory program (PPEC) Funding leverage



### **PPEC Leverage the Amount Invested in Energy Efficiency**

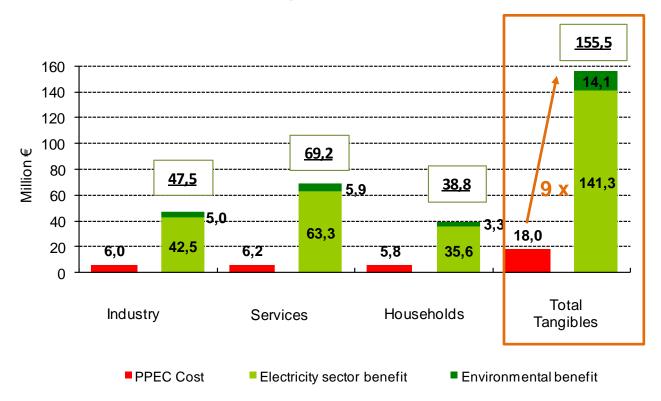


The growing interest in PPEC has permitted an increase in the level of co-financing demanded from the promoters and beneficiaries, so as to ensure greater ownership and involvement. Currently promoters and/or beneficiaries have to support at least 20% of the total cost of the efficiency measures.

## 2. Portuguese energy efficiency regulatory program (PPEC) Benefits and costs



### PPEC 2011-2012 – Benefits outweigh costs...

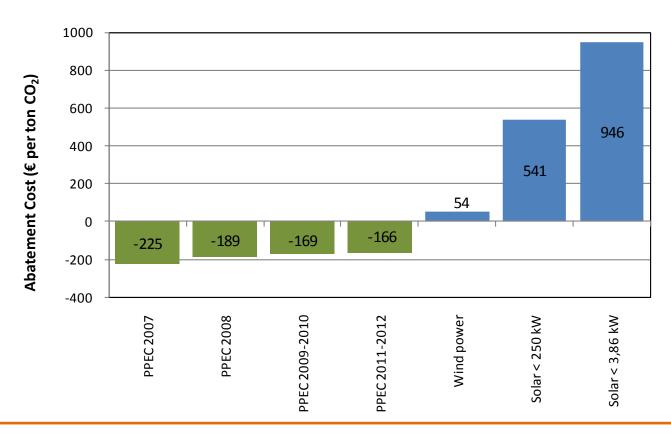


ERSE estimates that the benefits of this edition of PPEC with the implementation of tangible measures will be nine times higher than costs. Are expected potential gains of 155 million for costs of 18 million.

### 2. Portuguese energy efficiency regulatory program (PPEC)



#### **Global GHG Abatement Cost Curve in Portugal**



The reduction of greenhouse gas emissions and the reduction of energy external dependence achieved by **demand side measures** have positive net benefits when compared with supply side measures. Both type of measures from a policy perspective have to be considered.

#### 3. Final remarks



- Importance of close cooperation between policy makers and regulators.
- Ensure that regulatory incentives are closely aligned with the objective of energy efficiency.
- Ensure that regulation is friendly to innovative new service providers.
- Importance of **bringing several entities for delivering energy efficiency** (energy providers, consumers associations, municipalities, universities, ESCOs, institutions of social solidarity...) in order to maximize the number of agents involved, reducing the market failure to overcome, reaching more consumers and increasing the spill-over effect. **Tender mechanisms for energy efficiency**, as in the case of PPEC, represent **a good practice** for changing customer behaviour in favour of energy efficiency.
- Rigorous ex-post evaluation of savings is important, discounting possible "rebound effect", and "free-riding effect" and avoiding double counting of savings via overlapping with other programs.
- Energy efficiency is far more cost-effective than other mechanisms to meet environmental targets. The best Megawatt is the Negawatt

Regulators ensure the crucial balance between energy AVAILABILITY and energy AFFORDABILITY and thus have a ENTRAL ROLE in the TRANSITION TO A LOW CARBON ENERGY SECTOR



## Obrigado!

Learn more about PPEC in "Effects of the Introduction of Successful Mechanisms to Promote Energy Efficiency in Non-EU Countries", a MEDREG (Association of Mediterranean Regulators for Electricity and Gas) paper which won the first ICER (International Confederation of Energy Regulators) Distinguished Scholar Awards in the category 'impact on developing countries'.

http://www.icer-regulators.net

ERSE – Portuguese Energy Services Regulatory Authority

Telef: +(351) 21 303 32 00

E-mail: erse@erse.pt

http://www.erse.pt