

Workshops: Energy Efficiency (In Clean Industry): Scaling Up Strategies

*The role of energy efficiency in avoiding energy supply costs*

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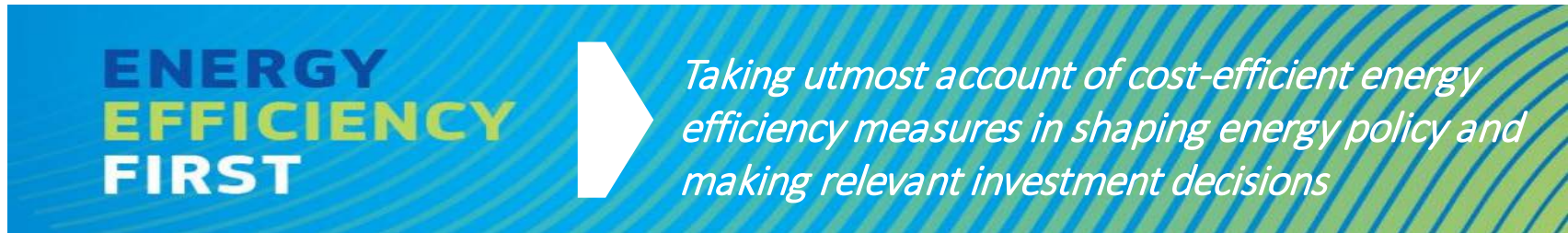


# The importance of energy efficiency



Energy sector responsible for three-quarters of the GHG emissions in 2020\*

→ The energy sector has to be at the heart of the solution to climate change

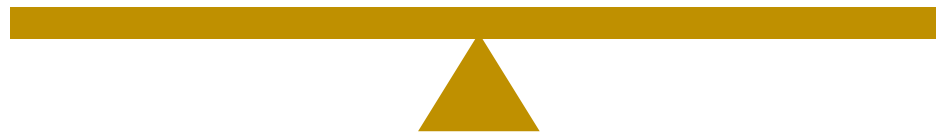


Energy efficiency is far more **cost-effective** than other mechanisms to meet environmental targets, reduce energy supply costs and increase security of supply.

With prices of natural gas and electricity rising to all-time highs, energy efficiency helps to **lower energy bills** and cushion the effects of price volatility.

Affordability

Availability



Regulators ensure the crucial balance between

***CENTRAL ROLE in the TRANSITION TO A LOW CARBON ENERGY SECTOR***

\*European Environment Agency (2022), *Approximated estimates for greenhouse gas emissions*, <https://www.eea.europa.eu/data-and-maps/data/approximated-estimates-for-greenhouse-gas-emissions-3>

# Energy regulators role fostering energy efficiency



**Energy Services provided by the market**

Definition of network tariffs and regulations that provide incentives for network operators to offer system services to network users

**Innovative access tariffs and end-user market tariffs**

Definition of network tariffs that induce rational use and support dynamic pricing for demand response (time-of-use tariffs, real-time pricing, peak time pricing, peak time rebates)

**Clear info, consumer-friendly format**

Foster better information on tariffs, on consumption and on the benefits from energy efficiency

**Tools to promote energy efficiency (PPEC)**

Design of specific mechanisms to promote energy efficiency to overcome the existence of market failures that hinder economic agents from taking efficient decisions



Regulatory incentives aligned with the objective of energy efficiency  
Innovative friendly regulation (welcome new service providers)

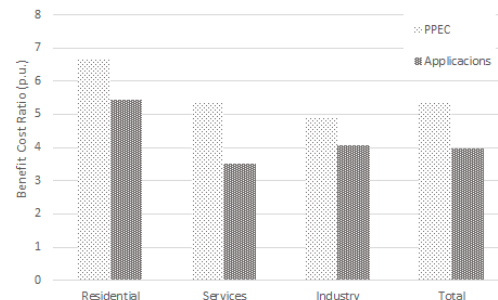
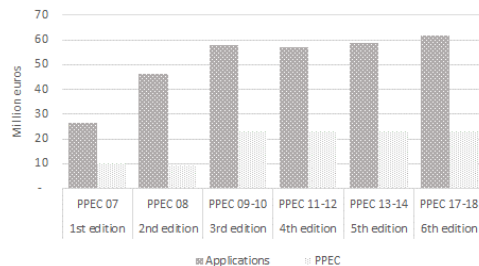
## What is PPEC

**End-use energy efficiency programme** that finances the implementation of measures to foster efficiency in energy consumption. **Tender mechanism** by which applicant measures are evaluated according to their merits: energy savings, cost-benefit analysis...

PPEC finances **Tangible measures** (installation of equipment with higher efficiency, e.g. LED lighting, high efficiency motors, heat pumps) and **Intangible measures** (dissemination of information on efficient use of electricity and gas to promote changes in consumers behaviour, e.g. information campaigns, energy audits).

**Benefits outweigh costs:** Tender mechanisms are competitive mechanisms and as such, only the measures with the highest benefit-cost ratio are financed.

→ PPEC ensures the maximization of social benefits per unit of incentive.



**Brings several entities to promote energy efficiency** (electricity and gas suppliers, network operators, energy agencies, business and consumers associations, universities...) and **leverage the investment on energy efficiency** (1<sup>st</sup> edition – PPEC financed 85% of investment; 6<sup>th</sup> edition – PPEC financed 56% of investment)



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# Thank you! The best Megawatt is the Negawatt

Results of all the previous PPEC editions, since 2007...  
... 979 million euros of benefits for a PPEC investment  
of 75 million euros → benefit/cost ratio of 13

