



The ups and downs of the French EEO scheme: Positive and negative impacts on the building renovation market

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Accelerating the energy transition for all: Evaluation's role in effective policy making

Sommaire

1. General
outcome of the
French EEO
scheme

2. Impacts on
the retrofit
market

3. Conclusion
and policy
implications

1

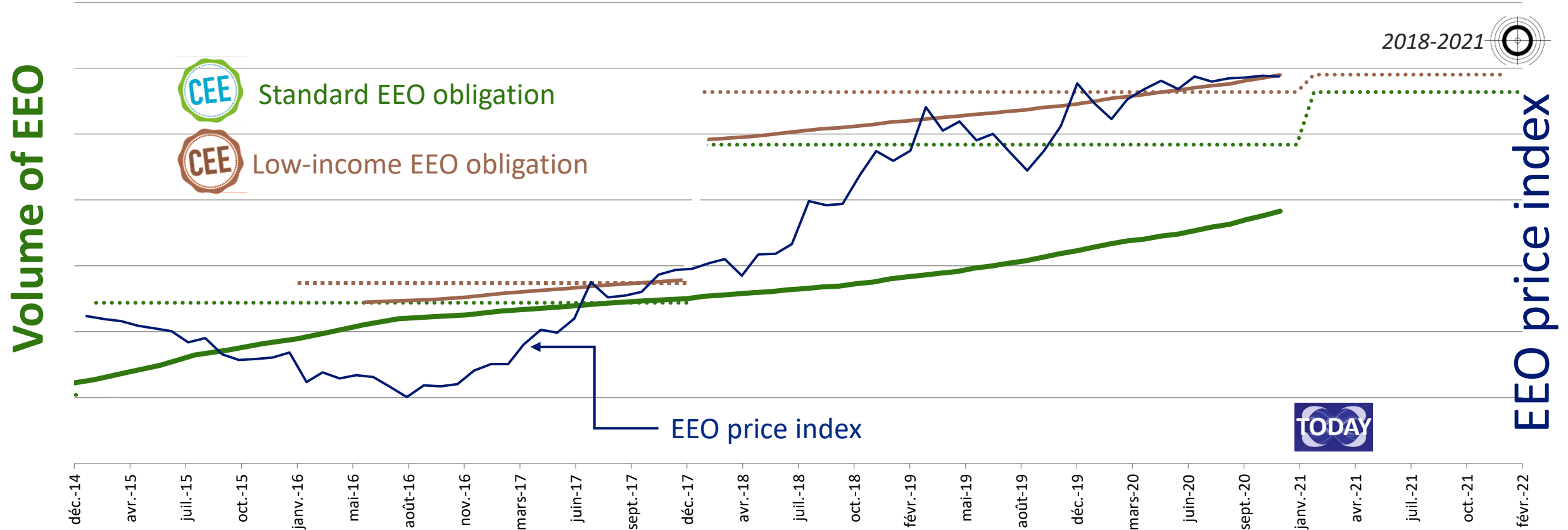
General outcome of the French EEO scheme

2006-2020: how to become the major scheme for energy efficiency

1. French EEO: the current period 2018-2021

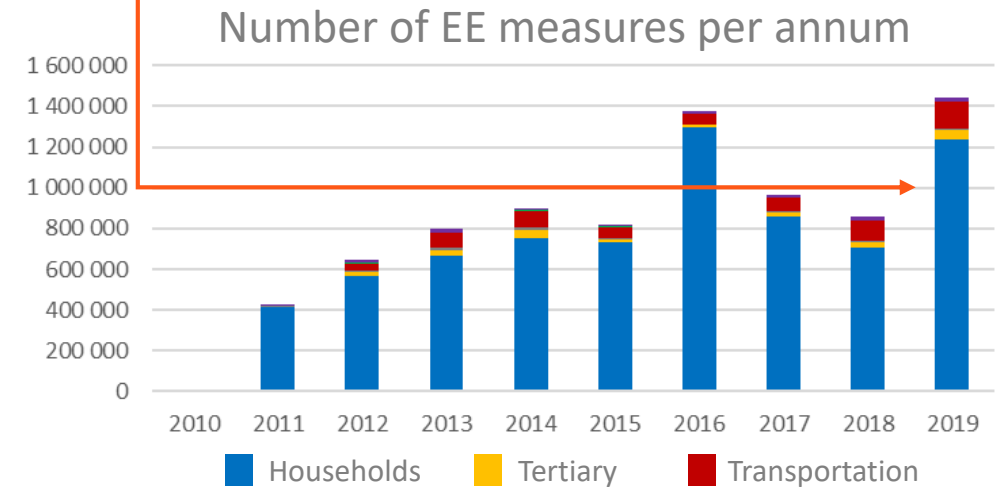
An increase of obligation level and of EEO price → 4 billion€/year

The delivering is lacking of standard EEOs and oversupplying low-income EEOs



1. French EEO: the current period 2018-2021

- 1.2 millions of EE measures engaged in dwellings in 2019
- Dedicated residential programmes to increase EEO delivering targeting low-income households
 - w/ bonus (x2 – x6)
 - Average incentive:
 - air-to-water heat pump: €3,900
 - Gas boiler: €890
 - Roof insulation: €1,500
 - Floor insulation: €1,790
 - Expected 50,000 retrofit/month



(January – December 2019)	Renewable energy using equipment*	Gas boiler	Roof or attic insulation	Floor insulation
Number of measure	119,869	152,549	541,520	208,680
Average financial incentives / measure	€3,963	€886	€1,520 (€18/m²)	€1,790 (€27/m²)
Low-income household share	41-47%	31%	70%	60%
(January – September 2020)				
Number of retrofitted dwellings	80,426	109,679	367,021	184,748
Average financial incentives / measure	€4,193	€1,003	€1,441	€1,177
Low-income household share	50%	41%	67%	49%

2

Impacts on the retrofit market

How to try to increase the number of retrofit and change the market

2. Impacts on the retrofit market



The “1€ free” retrofit for low-income households:

- Insulation (roof, floor)
- Efficient gas boiler
- Air-to-water heat pump



- Energy savings bonus
- EEO price index (from <€2/MWhc in 2007 to >€8/MWhc in 2019)
- + Additional supports (National Housing Agency, tax credit)



2. Impacts on the retrofit market

Increase of EE measures implemented

- Air-to-air heat pump market: +83% in 2019

Modification of technical solution implemented

- blown-in insulation in lost attic space at a very low cost ($< \text{€}20/\text{m}^2$) vs. unrolled insulation
- “In three years, the French market for blown wool has tripled”

The value chain

- increase of the skilled installer/craftsmen
- industrialisation of the value chain (installation, manufacturing and distribution, commercial contacts)

Impact on market price

- Decreasing price for insulation (technical solution)
- Increase price of space heating equipment → capped incentive (Housing agency)

Fraud and quality issues

- “€1 offers” are incentive but sometimes to the detriment of quality (around 15% ?)
- From overestimation of insulated area to fake retrofit (5% ?)

3

Conclusion and policy implications

what we can learn

3. Conclusion and policy implications



- ✓ “Imperfect” calibration of the obligation level in the 2018-2021 period?
- ✓ Subsidised incentive programme with implemented EE measure exceeding expectations
- ✓ Enabled low-income households to carry out retrofit
- ✓ Retrofit market was subject to wide fluctuations
- ✓ Low price and volume vs. quality
- ✓ Revision of the EEO scheme in 2021:
 - incentive programme termination (mid-2021 ?)
 - Incentive programme only for deep retrofit

Conclusion





Thank you

