The French observatory of EPCs





Agence de l'Environnement et de la Maîtrise de l'Energie Concerted Action on EED, March 2018



1) General introduction to EPC practices in France

- Differences in terminology
- The main steps
- The importance of M&V

2) Focus on the French EPC Observatory

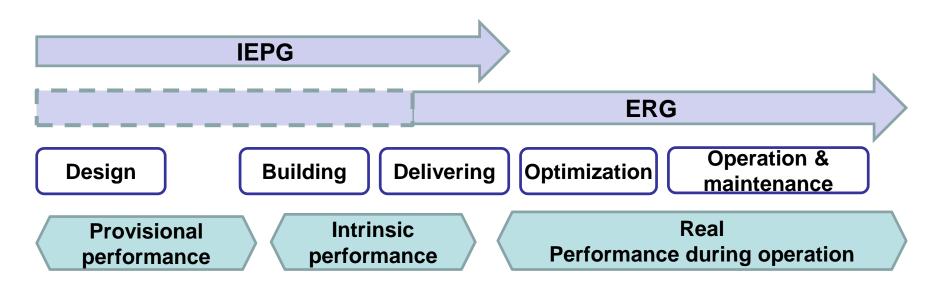
- Origin of the initiative & objectives
- A multiple steps implementation
- First results



Introduction – Differences in terminology

The intrinsic energy performance guarantee (IEPG) Scheme guaranteeing a maximal level of energy consumption compared to a scenario set by a contracting authority according to needs and parameters that can be different than hypotheses taken into account for regulatory calculations

The energy results guarantee (ERG) Scheme guaranteeing a maximal level of effective & measurable consumption. The guarantee can cover the overall refurbishment phases or only a part of





Introduction – the main steps

Preparatory study

- Local strategy
- Energy audit
- Reference consumption
- Investment estimation
- Evaluation

Contracting

- Legal model
 selection
- Consultation & analysis
- Services provider selection

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Contracting

 Works
 Perform

 • Design
 Perform

 • Work
 monitoring

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Operation

Performance monitoring (measure & verification)

Example of EE actions

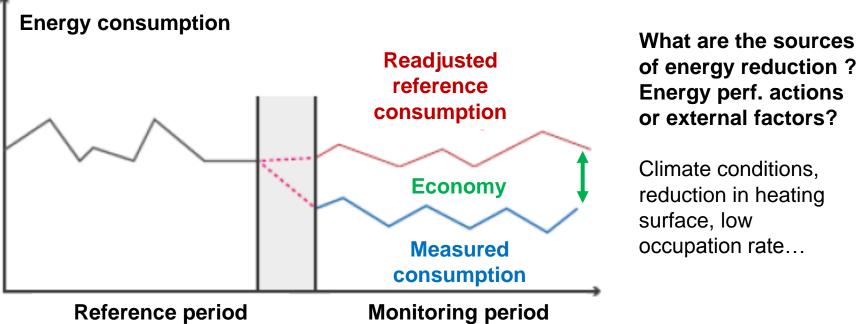
- Behavior changes in use
- Works on building envelop
- Changes in hot water heating systems
- Ren promotion in efficient way

Project management a key role in the successful implement of EPC

Document preparation (energy audit, reference situation...)



Introduction – the importance of M&V



of energy reduction ? **Energy perf. actions** or external factors?

Climate conditions. reduction in heating surface, low occupation rate...

For more information on tool & guide developed by ADEME and its partners to implement successful energy performance contracts: www.ademe.fr/methodes-outils-garantie-resultats-energetiquesguaranteed www.ademe.fr (focus on commissioning)



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Focus on the French EPC observatory



Origin of the initiative & objectives

An initiative led by 3 public stakeholders





The French agency for environment & energy management

The French center for expertise on risks, environment and mobility



The French building technical center

Objectives & main features

Data collection

- Centralized & reliable information
- Energy saving estimation
- Retours on experience collection

Inform the project ownership



Training material

- Guide for implementation
- Examples sharing per types
- Information on contractual procedures

Mapping

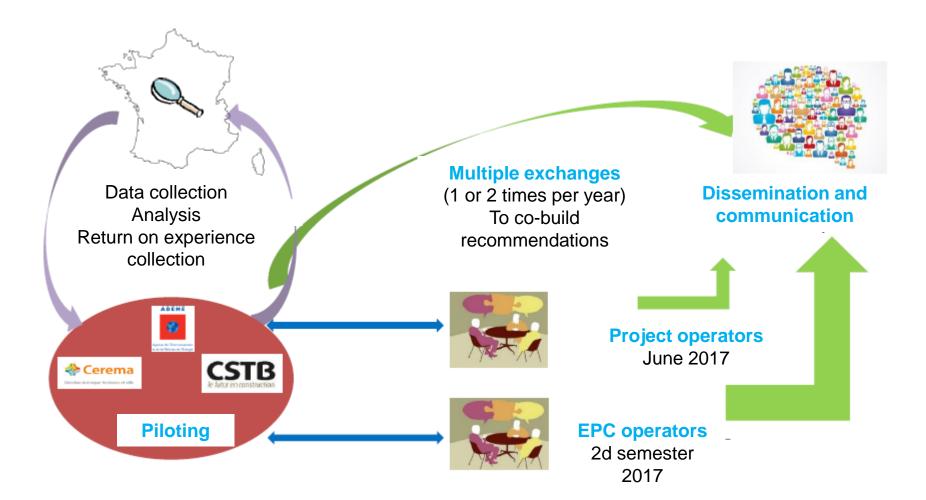
- Public/private
- Tertiary/Residential
- New building/ Refurbishment
- Costs
- Actions implemented

Guide public policies



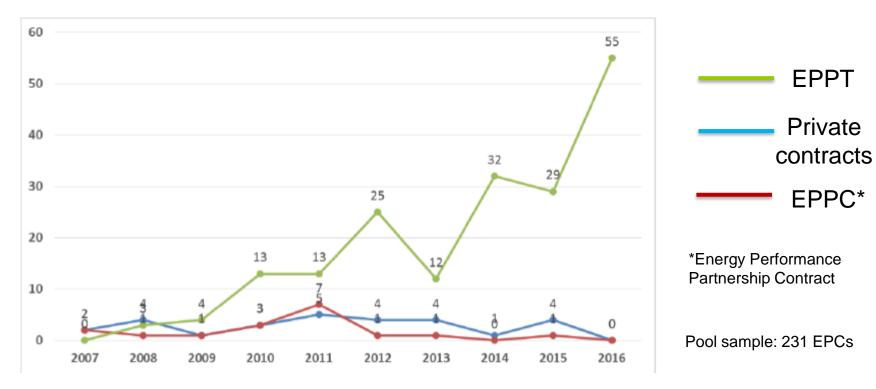


A multiple steps implementation





An increasing number of EPC covered by an EP public tender (EPPT) !



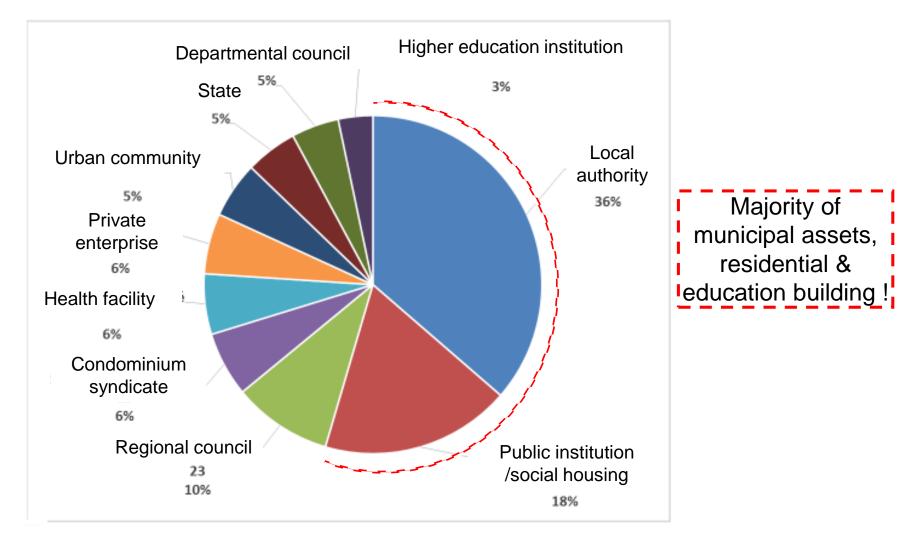


- (→ 86% of the collected EPC regards public building) Analysis based on contractual data (not on operational phase + not necessary specific to building
- Data collected by CSTB & CEREMA then consolidated by project holders

EPC collected mainly from public procurement tenders results

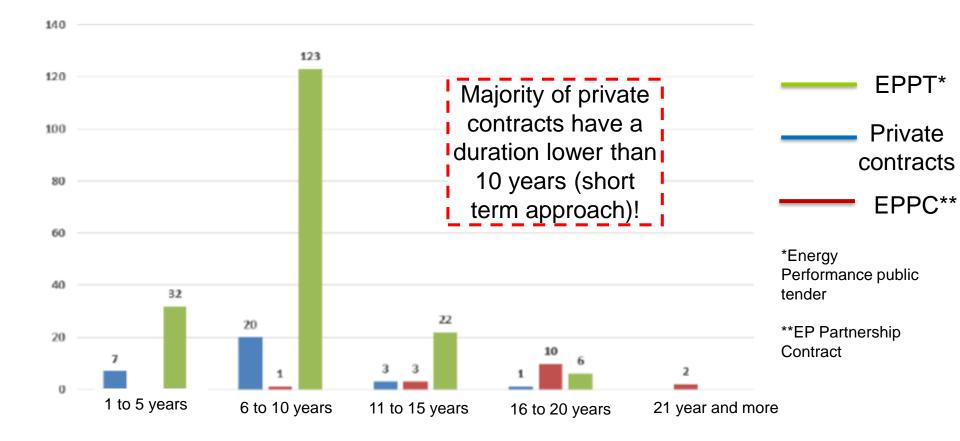


First results – distribution per beneficiary



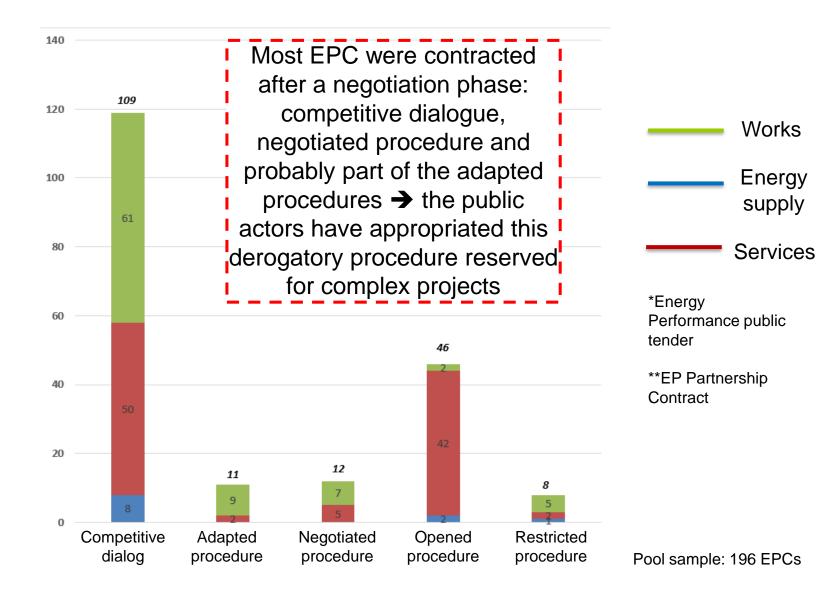


First results – distribution per duration

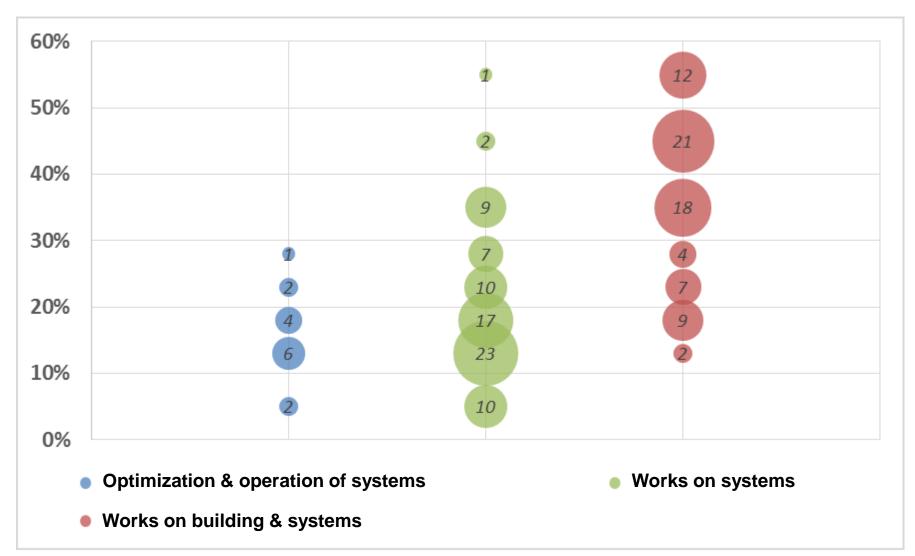




First results – distribution per public tender type







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Pool sample: 167 EPCs



Conclusion

- An increasing number of public EPC targeting mainly local authority, social housing & education building
- Majority of energy performance public tenders
- Negotiation mainly in the framework of competitive dialog

Perspectives

- Deep the analysis and include results from operational phase
- Enlarge the scope to private & new buildings
- Carry out detailed case studies
- Facilitation for pooling of resources for small towns

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Thank you for your attention !

For more information on the first results of the EPC Observatory: <u>www.ademe.fr/sites/default/files/assets/documents/ocpe-novembre-2017.pdf</u> (updated on November 2017) Contact: frederic.rosenstein@ademe.fr