

# Analysis of the French energy efficiency services market

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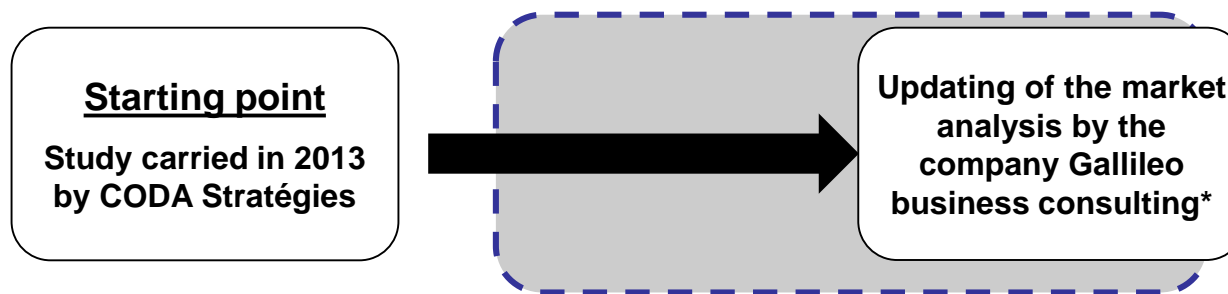
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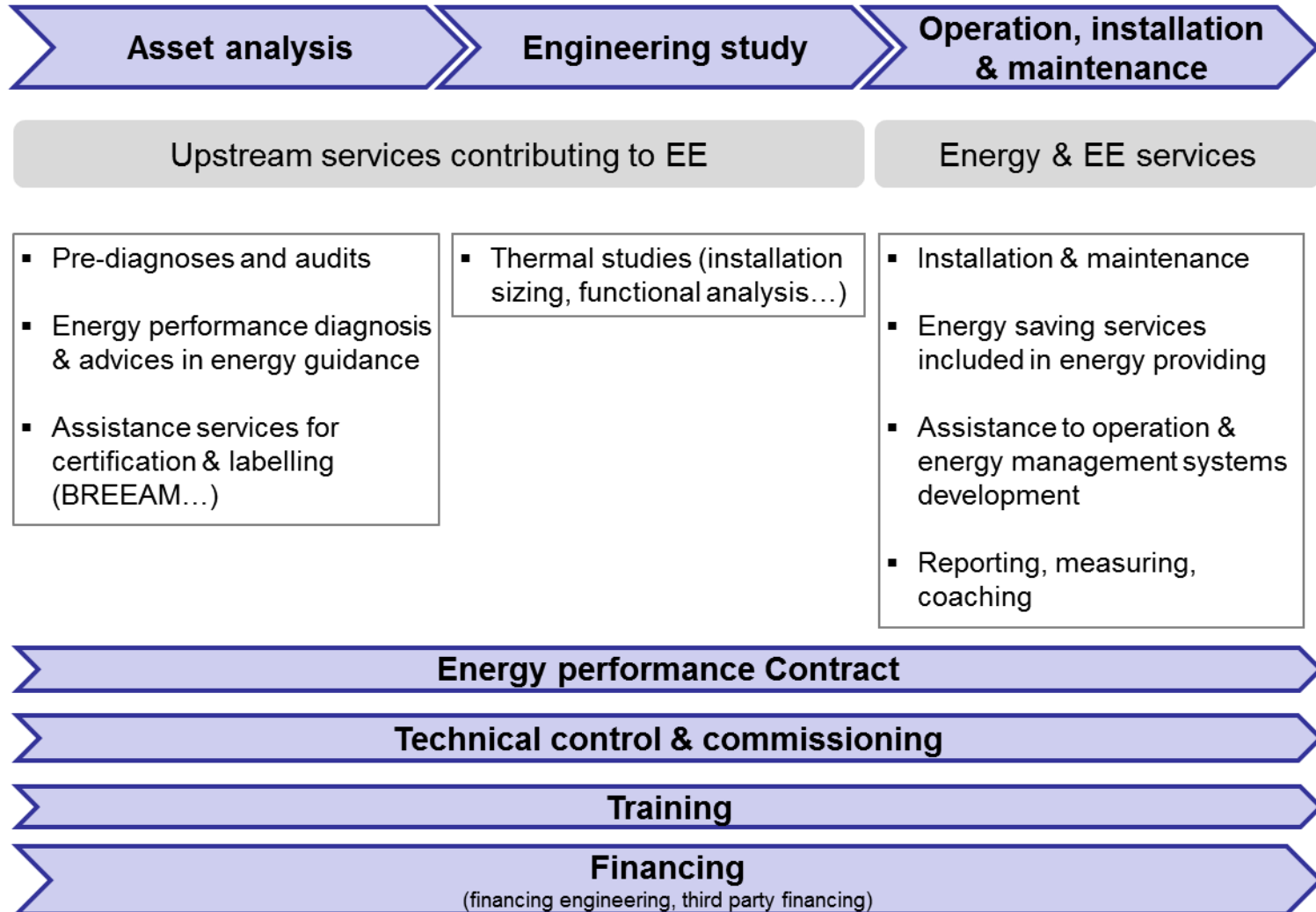
- 1) Context & objectives of the study
- 2) Scope & value chain
- 3) Methodology
- 4) Quantitative estimation & limits
- 5) Trends & new entrants
- 6) Main challenges & recommendations for EES market development

**Context:** the Energy Efficiency directive (EED) **requires each State Member** to report on **implemented energy efficiency measures every 3 years** through the National Energy Efficiency Action Plan (NEEAP), and provide a **qualitative review of current and future development** of the energy efficiency services (EES) market

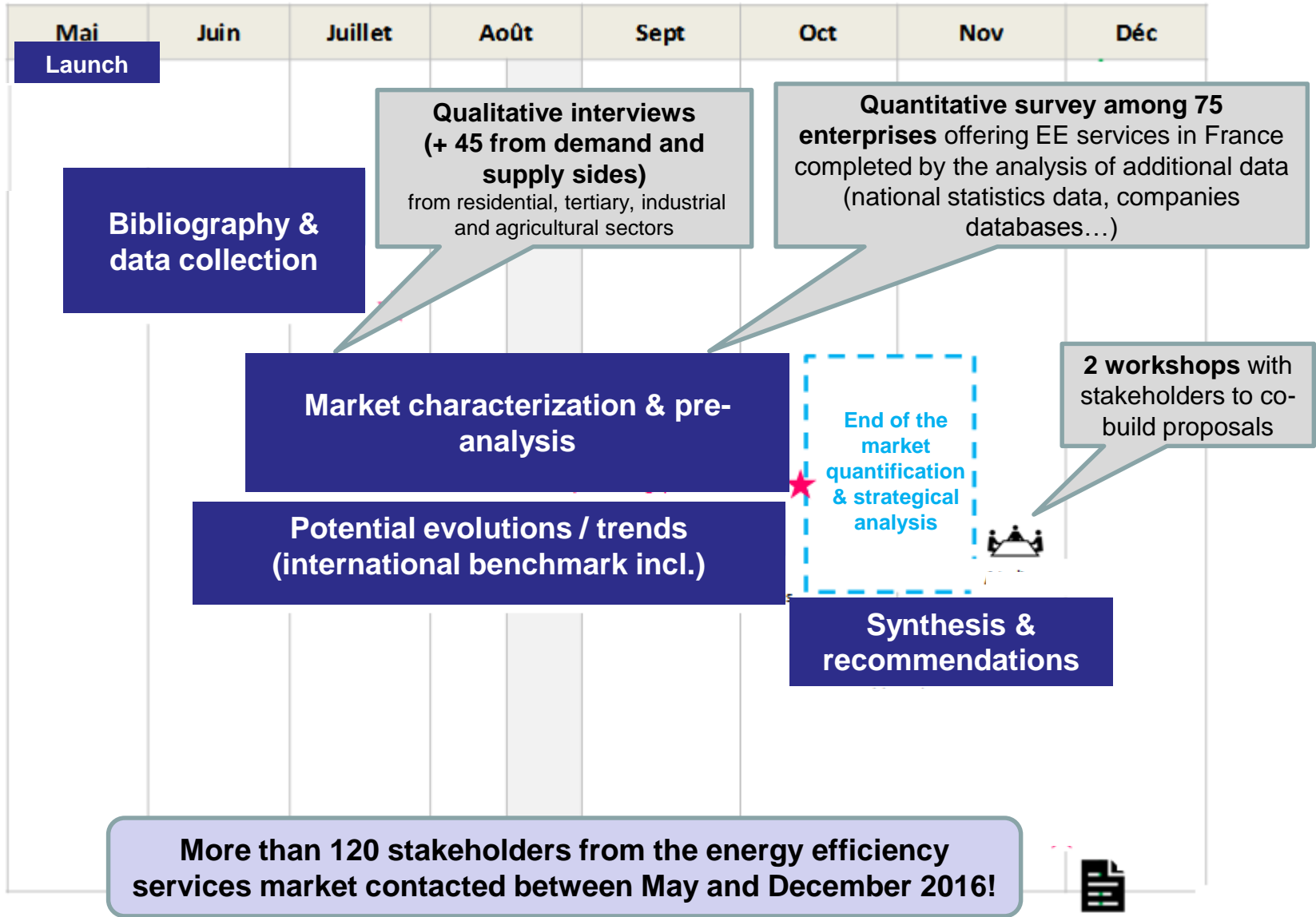
**Objectives** for ADEME & Ministry for energy transition : update the analysis carried out in 2013 on the energy services market for NEEAP 2014 to feed the NEEAP 2017 and get a **quantitative estimation per segment**

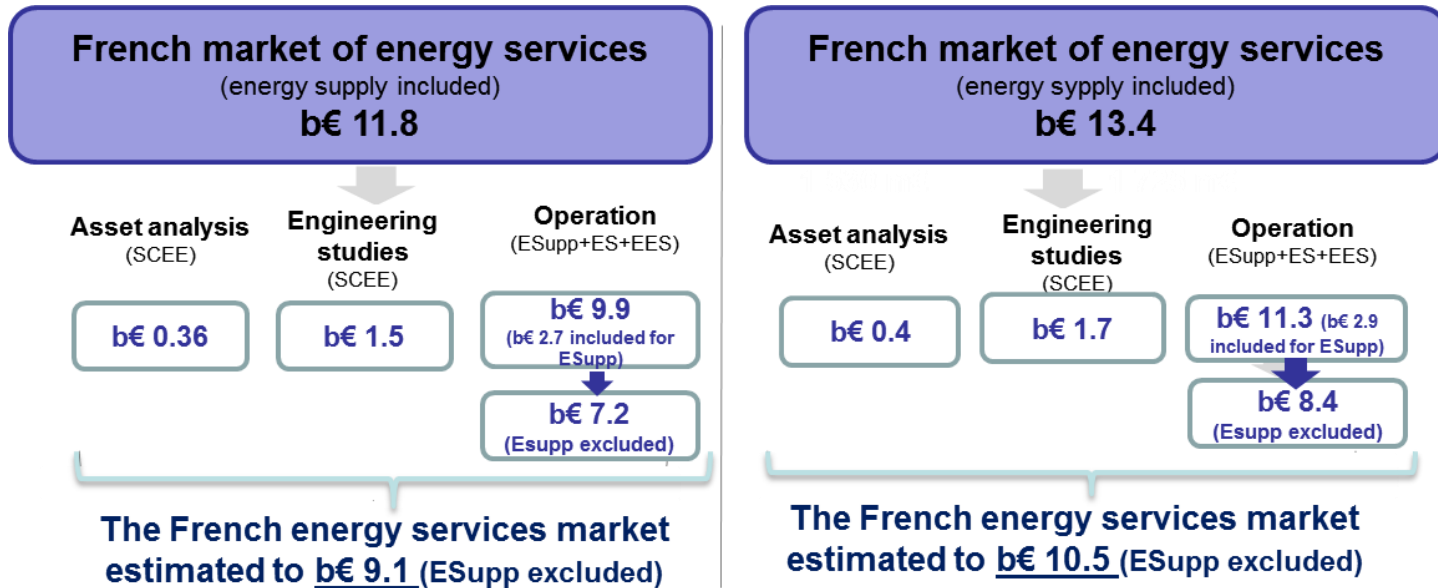


\* Most of the data used is related to 2015 as the study has been carried out in 2016



2016





SCEE: services contributing to energy efficiency  
 ES: energy services  
 EES: energy efficiency services  
 ESUP: energy supply

The French market of EES has been estimated to **b€ 10.5 in 2015** (energy supply excluded), and to b€ 13.4 by including energy supply services, and could be split in 3 main segments

- b€ 0.4 generated through asset analysis services
- b€ 1.7 generated thanks to engineering studies
- b€ 11.3 through operation, installation and maintenance

**14.4% of increasing** (energy supply included) **compared to 2013 !**

## Estimation of the market by segment

SERVICES	CAT	VALUE 2015
<b>OPERATION, INSTALLATION AND MAINTENANCE</b>		<b>M€ 11,303</b> (ESupp incl.) <b>M€ 8,442</b> (ESupp excl.)
<b>Collectives boiler operations</b>		<b>M€ 5,091</b>
<i>Energy supply</i>	ESupp	M€ 1,273
<i>Energy services</i>	ES	M€ 2,800
<i>Energy efficiency services</i>	SEE	M€ 1,018
<b>District heating network</b>		<b>M€ 2,118</b>
<i>Cost of energy input</i>	ESupp	M€ 1,123
<i>Operation cost (boiler room + grid)</i>	ES	M€ 995
<b>Industrial cogeneration</b>		<b>M€ 623</b>
<i>Coût approvisionnement combustible</i>	ESupp	M€ 465
<i>Valeur ajoutée sur approvisionnement combustible</i>	ES	M€ 158
<b>Energy Performance Contracts</b>	EES	<b>M€ 146</b>
<b>Maintenance of individual heating</b>	ES	<b>M€ 1,245</b>
<b>Maintenance and piloting of building management systems</b>	EES	<b>M€ 59</b>
<b>Operation of public lighting</b>		<b>M€ 477</b>
<i>Maintenance (maintenance services of PPP &amp; EPC are excluded)</i>	ES	M€ 417
<i>PPP – CPE for public lighting</i>	EES	M€ 60
<b>Maintenance of electrical infrastructures with impact on energy</b>	ES	<b>M€ 1,270</b>
<b>Project ownership assistance</b>	ES	<b>M€ 29</b>
<b>Assistance to the implementation of an energy management system</b>	ES	<b>M€ 13</b>
<b>Metering, supervision &amp; coaching</b>		<b>M€ 232</b>
<i>Metering in residential</i>	EES	M€ 185
<i>Metering in tertiary &amp; industry</i>	EES	M€ 47
<i>Coaching</i>	EES	Incl. IN metering

SERVICES	CAT	VALUE 2015
<b>ASSET ANALYSIS</b>		<b>M€ 403</b>
<b>Energy performance diagnosis</b>	SCEE	<b>M€ 138</b>
<b>Advices in energy guidance</b>	SCEE	<b>M€ 36-44</b>
<b>Pre diagnosis and audits</b>	SCEE	M€ 212
<b>Assistance to certification and labelling</b>	SCEE	<b>13 M€</b>
<b>ENGINEERING STUDIES</b>		<b>M€ 1,748</b>
<b>EE oriented thermal &amp; engineering studies</b>	SCEE	<b>M€ 1,637</b>
<b>Technical Control</b>	SCEE	<b>M€ 104</b>
<b>Commissioning</b>	SCEE	<b>M€ 7</b>

### Categories

- SCEE: services contributing to energy efficiency
- ES: energy services
- EES: energy efficiency services
- ESupp: energy supply



- **Difficulty to limit the scope** of EE services (for e.g. services offered thanks smart meters and ICT) **and separate the EE services** from the energy supply & energy services (see EPC for ex.)
- **Access to data** regarding certain segments that are very sensitive and/or competitive (mostly services delivered to private customers) was **limited**
- Most of **raw data is dependent of external sources** (not necessary verified)
- **Delay between the moment when the data is available** and the event to which it relates
- **Huge variability in some EE services prices** that may cause huge uncertainties when extrapolating data (see the energy audit segment for e.g.)





### **SERVICES RELATED TO DATA MINING**

Ex. of new entrants:

- NICT players
- Home IoT players/home automation & connected objects
- Smart & big data specialists

### **APPROACH THROUGH USES**

Ex. of new entrants:

- IoT players/home automation & connected objects
- Equipment manufacturers & energy suppliers

### **INTEGRATED OFFERS INCLUDING FINANCING & ENGINEERING**

- Consulting & engineering firms extending their activities

### **SERVICES TO COMPLY WITH REGULATION**

- Monitoring & verification services offered by control companies

### **EES MARKET**

Historical key players

- Operation & maintenance
- Equipment & thermal system manufacturers
- Energy suppliers
- Engineering companies
- Installers
- Services and consulting firms

## Main challenges & recommendations for EES market dev.

### Lack of involvement & EE stake adoption

- Inform and sensitize a large audience to EE issues by targeting different sectors but also diverse positions within the same company
- Promote good initiatives & benchmarks
- Support the skills development to encourage the emergence of EES of quality
- Promote pedagogy on the existing & future regulatory framework to ease its implementation



### Limited acting out & engagement

- Ease access to information related to energy consumption
- Give evidences on the effects of EE actions to reduce reluctance
- Ease collective approaches and resources sharing
- Help project managers to be in touch with the right EES suppliers



### Need for “sustainable” measures & regulation

- Ease changes in behavior in long terms perspectives
- Stabilize the regulatory framework to ease appropriation and to allow progressive skills development
- Give long-term perspectives to EE supporting schemes
- Moving from a normative and negative speech perceived as constraining to a positive and incentive speech



Thank you for your attention

# Additional information

There many sources & means support the energy transition:

- The French state-controlled financial institution **Caisse des dépôts** provides loans to finance initiatives supported by local authorities & SME such as development of Ren & clean transport, improvement of building energy performances

NB: CDC is the French point of contact for investment supported in the framework of the Juncker plan managed by the EIB. It supports project holders in the framework of the European Investment Advisory Hub

- The public investment bank **BPI-France** offers “green loans” (*prêts verts*) to finance « eco-friendly » industrial equipment to SMEs

NB: a specific loan (Prêts Eco-Energie) is proposed to finance equipment (installation incl.) eligible to the white certificate scheme in the industrial & tertiary sectors

- The **ADEME** supports:

- local authorities to fund for the renewal of inefficient individual wood burners (“air fund”)
- heat prod. from REn & heat recovery and district heating (“heat fund”)
- feasibility studies (diagnosis, energy audit...) to ease EE measures implementation in the industrial sector (“aides à la décision”)
- investment in innovative projects/demonstrators through the Investment for the future program from grants, refundable grants & private equity

