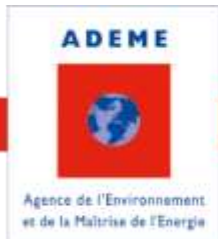
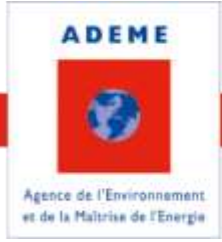


Energy audits

The French experience





Implementation of art. 8 in France

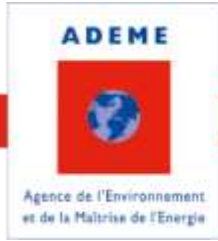
Article 40 of DADDUE Law (2013) on energy audits and energy management systems

➔ 2 Decrees and 2 ministerial orders

- Energy audits are compulsory for large enterprises
- Certification ISO 50001 = exemption for Energy audit
- First energy audit before December 5th and then every 4 y.
- Penalty: « up to 2 % of the turn over ... »
- Reports uploaded on a dedicated platform

Requirement :

- Standards: EN 16247 (buildings, Process, Transport) and ISO 50001 (for exemption)
- Perimeter : 80% of the company energy bill (sampling allowed for buildings)
- stakeholders: qualified energy auditors (internal or external) and accredited certification bodies (NF X 50-091 /NF X 50003)



A survey has been led during the summer 2017

Objectives

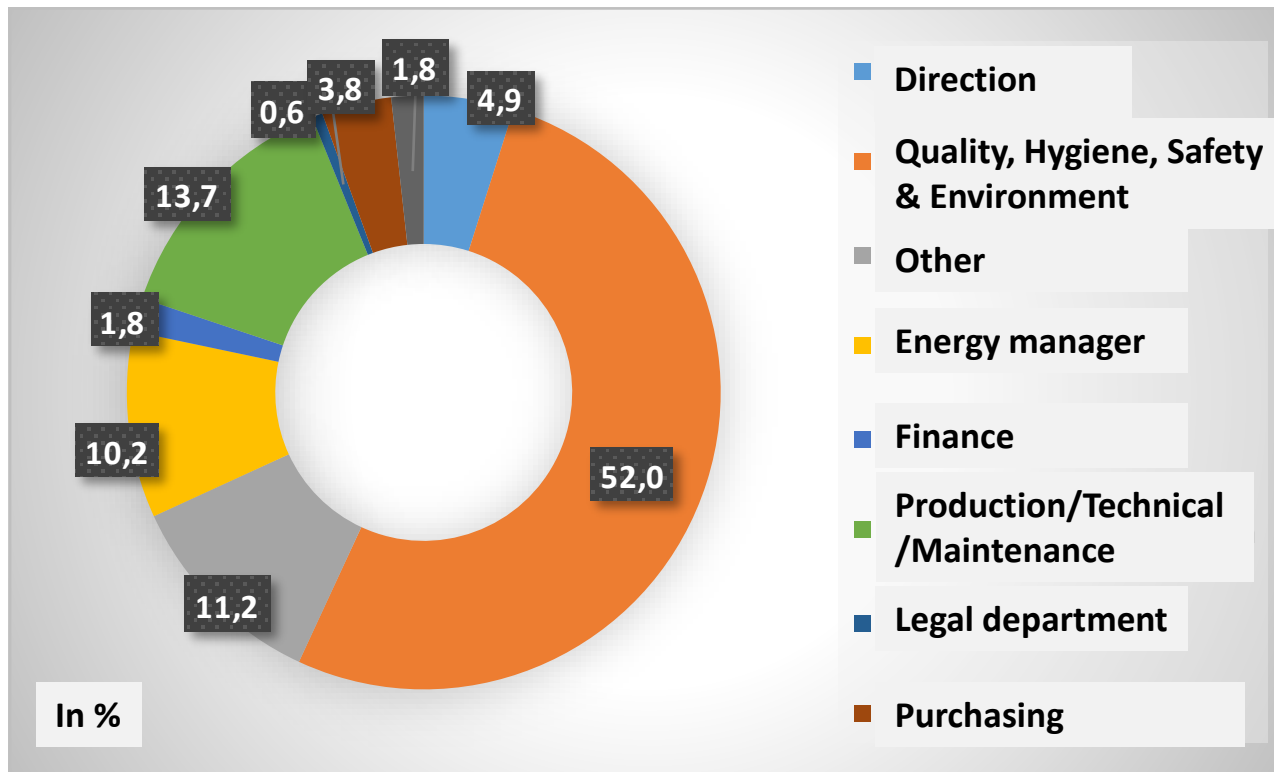
- Stocktaking on the implementation
- Collect information on the use of the platform
- Check some ratios reported on the platform

Survey sent to **3,599 persons** declared as a referent of companies that have submitted audit reports (www.audit-energie.ademe.fr). The survey was not sent to auditors or ISO 50 001 certified companies

High return rate around **40%**.

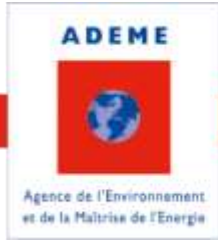


Profile of respondents



A minority of energy specialists

A majority of position connected to Quality, Hygiene, Safety, Environment



Motivations

Compliance with regulations as the main reason for carrying out the energy audit

94%

Regulatory compliance

56%

Energy consumption reduction

Only a half conducted the audit to reduce energy consumption

31%

Application of an environmental policy

13%

Imposed by a Group Policy

For 2/3 of respondents, it was the first energy audit conducted by their company

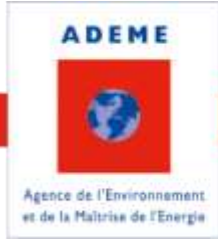
11%

Image

11%

Step towards certification ISO 50,001

Number of respondents: 1,384



Contribution

For **2/3** of the respondents, the energy audit identified areas of progress

For nearly 15% of companies the contribution of the energy audit have not been identified

65%

Improvement areas identified

52%

Better knowledge of consuming sources

33%

Better knowledge of energy costs

15%

Identification of monitoring indicators

14%

Contribution have not been identified

6%

Others



Conditions of implementation

88 % of audits were carried out by an external auditor

6% of audits were carried out by an internal auditor

5 % audits were conducted in tandem

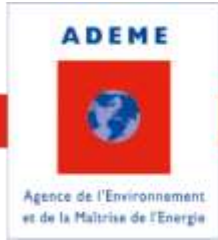
Companies have identified their auditor thanks to:

qualification organizations (29%)

an internal benchmark (21%)

economic criteria (21%)

Without difficulties



Auditor requirements

56% the auditor is able to propose personalized actions

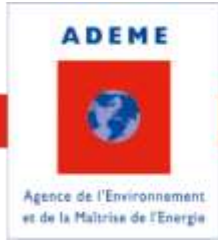
54% the auditor masters the NF EN 16247 methodology

45% the auditor has strong references in terms of energy audits

43% the auditor provides a service at a competitive price

43% the auditor is qualified by a qualification body

36% the auditor has an in-depth analysis capability



Meeting expectations

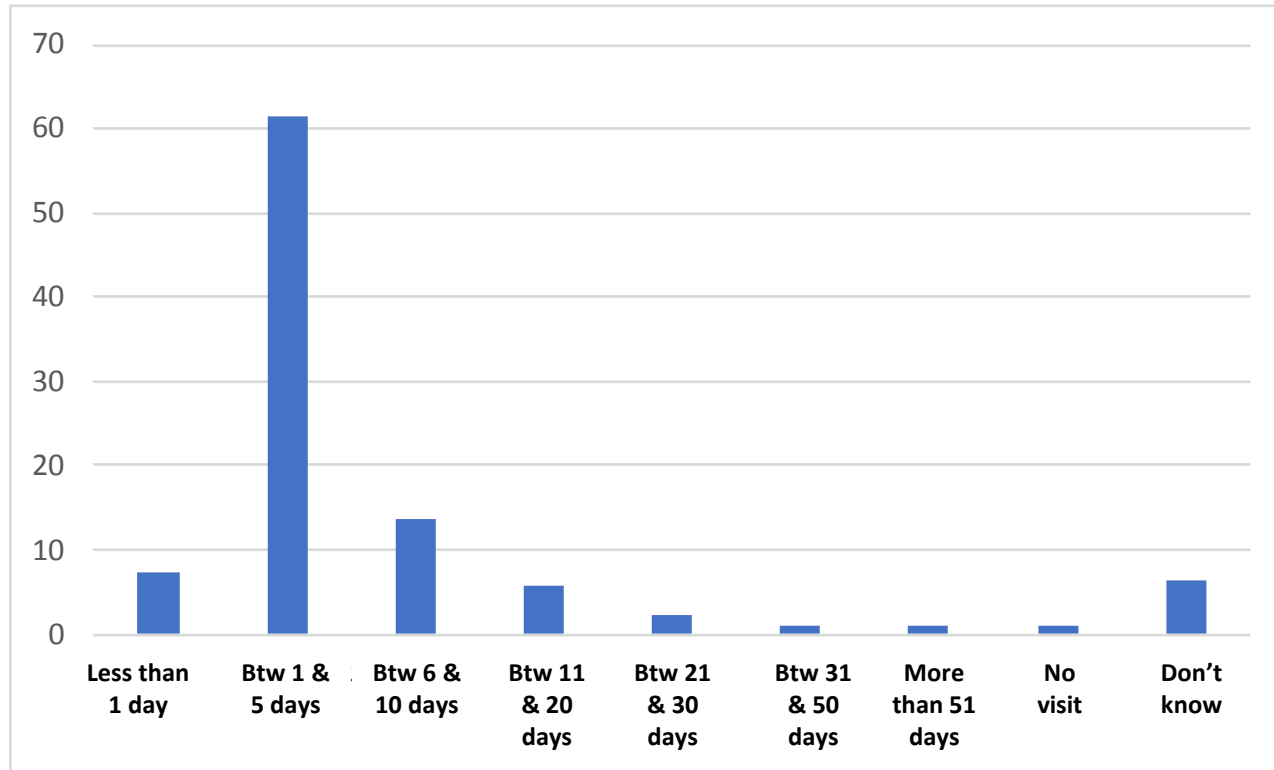
65% of companies are satisfied with their auditor

32% of companies are partially satisfied with their auditor

39 companies are not satisfied with their auditor

In **21%** of cases, the auditor had little or no knowledge of the audited activity

Duration of site visits



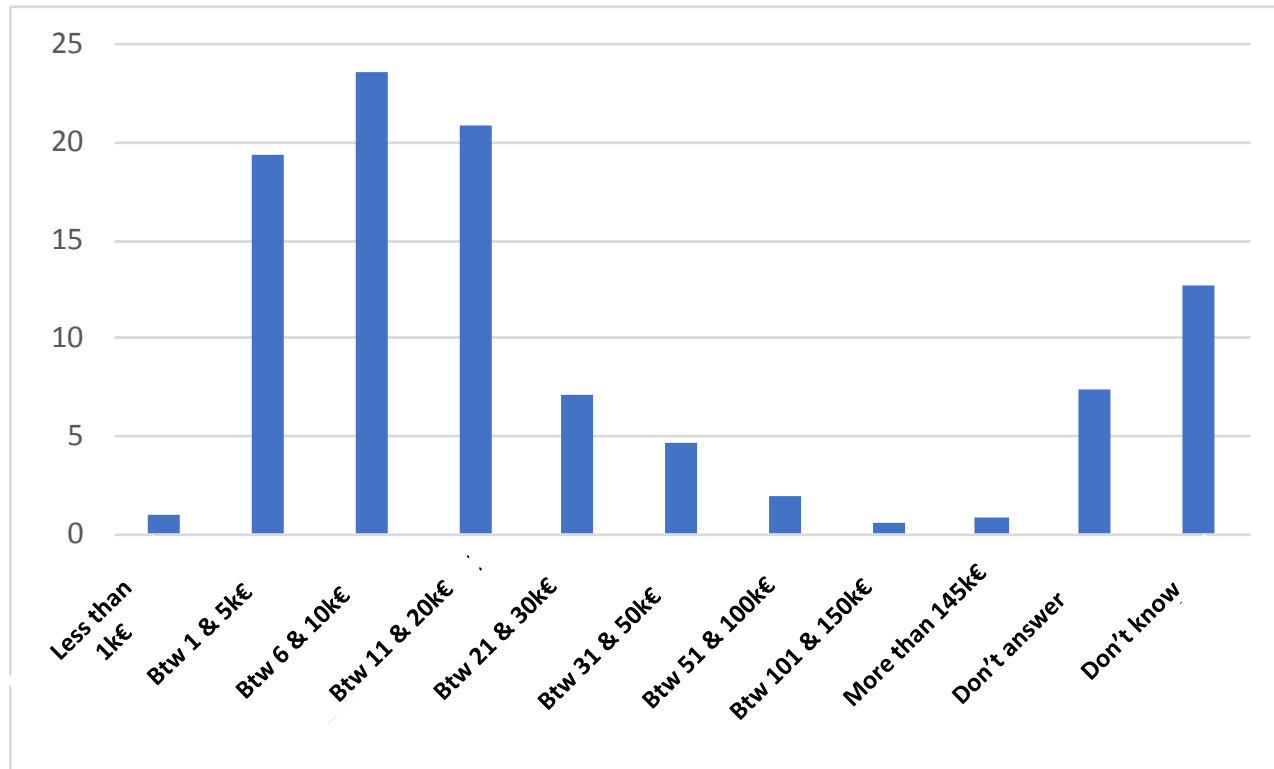
In the majority of cases, the on-site visit lasted between 1 and 5 days

BUT

some site visits were not completed, or lasted less than one day

The methodology of the audit imposes a visit of site ...

Cost-effectiveness of audits



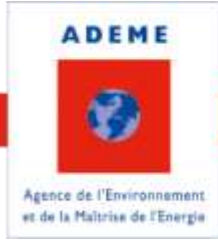
25 % of audits costed less than €5,000

Median cost €12,500

1/3 of respondents estimates that the cost of the audit is covered by the recommendations issued

1/3 of respondents estimates that the cost of the audit is not covered by the recommendations issued

1/3 does not know



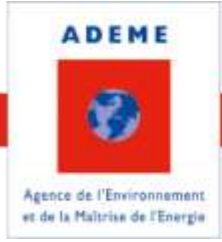
Making use of the results

20% of companies consider that the support of the auditor was not sufficient to allow them to assimilate the results

The main gaps identified concern the lack of :

- details in calculations and assumptions (45%)
- information on the recommendations made by the auditor (45%)
- oral restitution (25%)

8% of companies consider not to be able to exploit the results of the audit , even partially



Quality of reports

45 %

of companies had difficulty filling the platform due to missing data in reports:

42%: lack of data on the estimates

37%: lack of data on payback times

36%: lack of data on consumption

35%: lack of data on investment costs

35%: lack of data on financial savings



Most of companies satisfied but...

Undeniable improvements needed, from the auditors side as well as from the audited side

For more details on the study: <http://www.ademe.fr/bilan-2017-audits-energetiques-grandes-entreprises>

Thank for your attention

