

Title of the measure:	FRA17 : Mandatory Energy Audit
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General description

Since December 2015, articles L233-1, R233-1 and R233-2 from the French Energy Code oblige large companies to make an energy audit.

The firms concerned are the ones that have more than 250 employees or revenues exceeding 50 million euros total assets exceeding 43 million euros in the last two accounting years (grand enterprises EU status equivalent).

The audit has to be made every four years (except for ISO 50001 certified companies). Around 5000 firms in France are concerned by this scheme. These energy audits must cover 80% of the energy bill¹ of the firm and must be carried out in respect with the current standards (NF EN 16247 - 1, 2, 3 and 4).

The French Agency for environment and energy management (ADEME) was requested by the Ministry of Ecology to provide a platform in order to gather the results of these audits (www.audit-energie.ademe.fr).

Impact evaluation / main results

There are two sources of data for this policy:

- A survey on 3559 firms concerned by the policy and which performed an energy audit was carried out during summer 2017. The participation reached more than 40%.
- Data entered by 4955 companies on the platform provided by the ADEME

The data available on the platform and in the survey do not deal with the effective energy savings. They only gather information on the recommendations for energy savings actions that were highlighted by the audit (potential energy savings, ROI, type of measure to implement...).

NB: the data provided by companies may contain some entry errors (there is no systematic quality control).

In average, the mandatory energy audits loaded on the platform cover 82% of the energy bill and the ISO 50 001 certifications cover 88% of the energy bill. The median number of recommendations by firm was five.

The most common recommendations are:

- Lighting interventions: 4009 recommendations
- Energy management: 2899 recommendations
- Vehicle interventions: 2648 recommendations

The cheapest recommendations are vehicle interventions, organisation of transport flows and energy management that all have a median cost of 1 k€.

The recommendations with the highest median energy savings are:

- Steam production and distribution: 220 MWh/an
- Interventions on the process: 109 MWh/an
- Cold production and distribution: 70 MWh/an

The recommendations with the lowest ROI are compressed air production and distribution, vehicle interventions and organisation of transport flow that all have a median ROI of 1 year.

According to the survey led by ADEME in 2017:

¹ 65% for the audits carried out before the 5th of December 2015

- 90% of audits were performed by external auditors
- 2/3 of companies had never done an energy audit before
- the majority of companies were satisfied about their energy audit
- 20% of companies were not able to exploit the results of the audits because of quality lack
- More than 50% of persons who follow the energy audit are from the Health, Safety & Environment department

This phenomenon of lack of skills is also stressed in another study from ATEE (the French association for environment & energy) that is why ADEME helps companies:

- improving the intrinsic quality of the audit by training and giving methods to auditor
- training company about the goal and the content of an energy audit.

The answers to the question “What were your motivations to perform an energy audit?” were

- 94%: To ensure compliance with the law
- 56%: To reduce the energy consumption of the firm
- 31%: To apply an environmental policy
- 13%: The audit was imposed by the group’s policy
- 11%: To develop the company’s image
- 11%: To move a step forward in the ISO 50001 certification
- 1%: Something else

The general feeling about audit reports is (without being exhaustive):

- A lack of detailed hypothesis and calculation
- A lack in the description of instrumental measures
- A lack in the description of the proposed measures
- A lack in the estimation of the costs and winnings
- A lack in the available subsidies for the implementations of proposed measures

Interaction of measures

INDFRA7 ADEME aid for decision-making to support energy diagnosis

References

[Loi n°2013-619 du 16 juillet 2013 portant diverses dispositions d'adaptation au droit de l'Union européenne dans le domaine du développement durable \(DDADUE\)](#) – The law introducing the energy audit obligation for non-SMEs;

The DDADUE law resulted in two decrees and two ministerial orders:

- [Décret n° 2014-1393 du 24 novembre 2014 relatif aux modalités d'application de l'audit énergétique prévu par le chapitre III du titre III du livre II du code de l'énergie](#)
- [Arrêté du 24 novembre 2014 relatif aux modalités d'application de l'audit énergétique prévu par le chapitre III du titre III du livre II du code de l'énergie](#)
- [Décret n° 2013-1121 du 4 décembre 2013 relatif aux seuils au-delà desquels une personne morale réalise un audit énergétique](#)
- [Arrêté du 28 février 2013 relatif au contenu et aux modalités de réalisation d'un audit énergétique](#)

[ADEME report on the energy audits for large companies](#)

For more information on schemes easing the implementation of energy efficient actions see paragraph 3.2.2 from NEEAP 2017

For more information on good practices, see the guide released by ATEE (the technical association of energy and environment) at the following link <http://atee.fr/management-de-lenergie-audit-energetique>

