

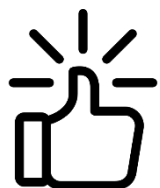


Ex-post evaluation of the french white certificates schemes in France

Didier Bosseboeuf (ADEME France); Berlin 16th December 2019



Some elements for the ex-post evaluation



- An evaluation with many targets (actors request, Interest for the next period of obligation etc.)
- Large implication and complementarity between the ministry and ADEME
- Good mobilisation and collaboration of professionals beneficiating from the scheme
- A good availability of statistical material (Balance, surveys, visits)



- Evaluation until 2018
- Response rate of the online survey rather weak (Excepted households)
- Limited number of visits in services and industries sectors
- Evaluation of energy savings limited to informations coming from visits.



Main features of the evaluation: a scheme very concentrated

- Less than 10% of the requests concern more than 90% of the volumes of obligations.
- 70 beneficiaries concentrates more than 10% of the production.
- Half of the operations are realised based on 10 standardised operations (deemed savings), 2/3 on 20 operations).



Main features of the evaluation

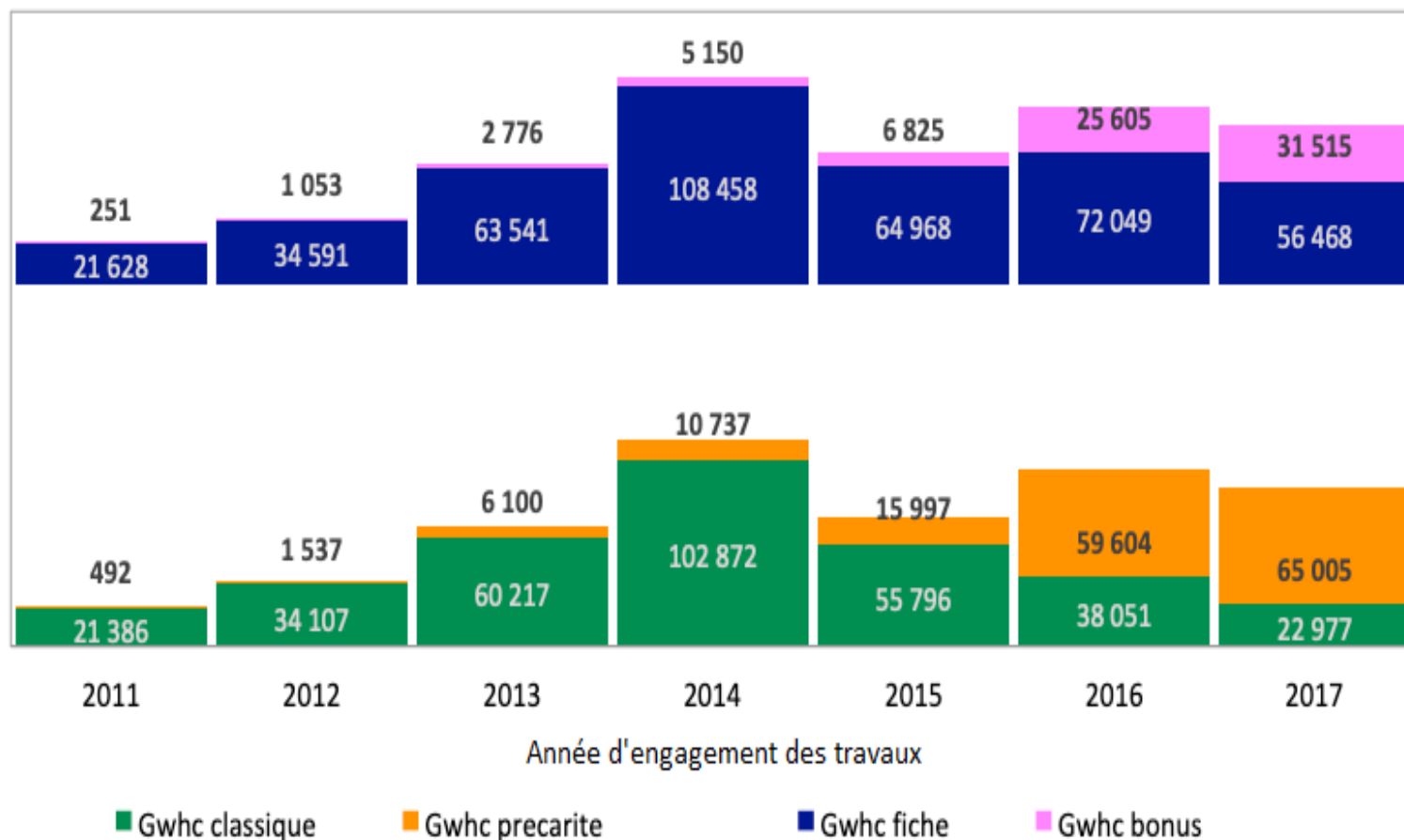
Obligations dedicated to fuel poverty is increasing

Since 2016 a share of obligations should be realised towards fuel poverty households.

As the results **60% of the volumes of obligations** have dedicated to Fuel poverty).

This is due to a better valorisation of this type of obligations compared to the classic ones

Bâtiment résidentiel (en GWhc) : Précarité. Bonus.





Main features of the evaluation : The beneficiaries

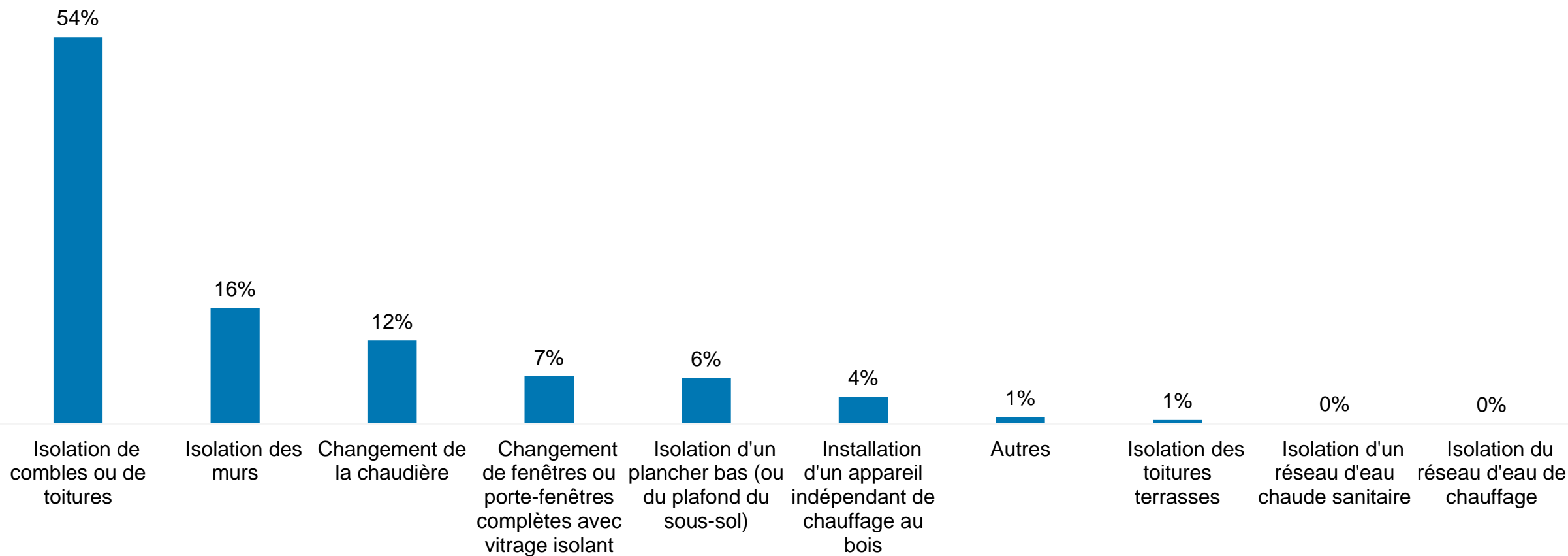
More than 1.5 million beneficiaries since 2011

Each year, 96% of beneficiaries are new

Sector	« small » beneficiaries		« Large multi-beneficiaries	
	Number	% volumes CEE du secteur	Number	% volumes obligation per sector
Households	1 448 317	84%	64	16%
Transport	23 964	96%	1	4%
Services	21 437	94%	17	6%
Industry	3 932	97%	6	3%
Distric heating	2 153	94%	7	6%
Agriculture	1 242	100%	0	0%
Program	464	67%	5	33%
Other	9	100%	0	0%

Un « grand multi-bénéficiaire » est un bénéficiaire ayant totalisé plus de 500 GWh_{cumac} en plus de 4 opérations (lignes Emmy).

General statistics on beneficiaries point of view: Which operation?



Nombre total de réponses : 2 866



What type of subsidies have been made?



Individuals



Social housing

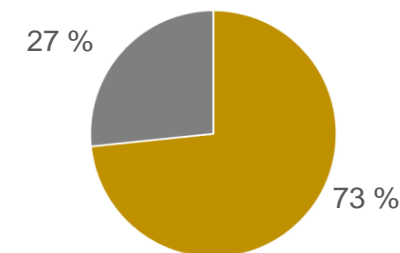
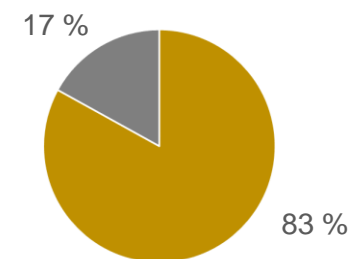
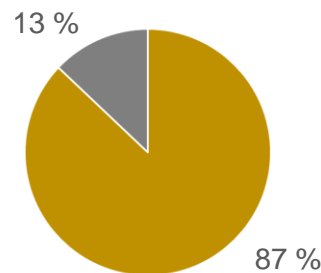
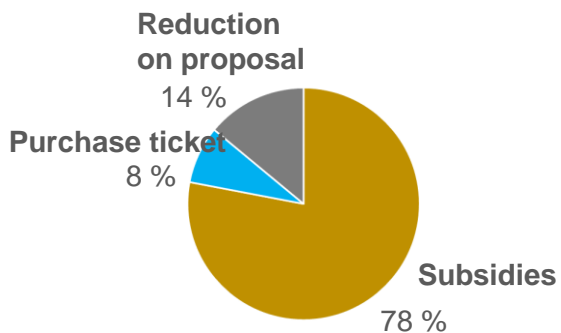


Industry

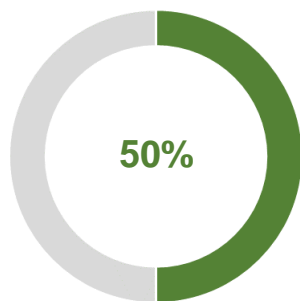


Services

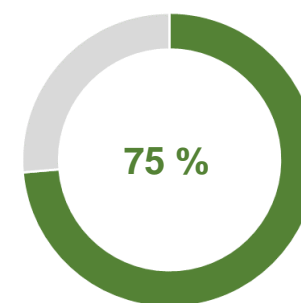
What kind of Aid did you get?



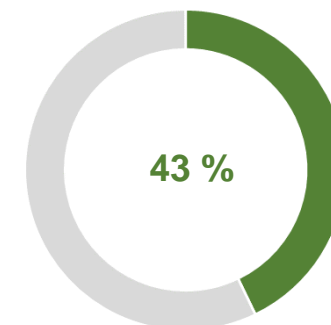
Is the chosen option was on a volontarie basis?



2 176



136



28



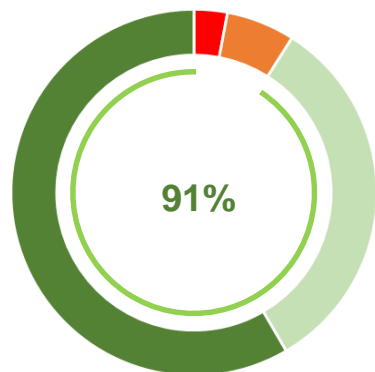
Beneficiaries satisfaction and energy savings

« Are you satisfied about the quality of EE works? »

- Non, pas du tout
- Non, pas vraiment
- Oui, tout à fait
- Oui, plutôt



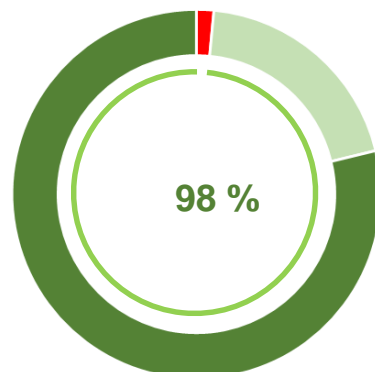
Households



Nb réponses 2 176



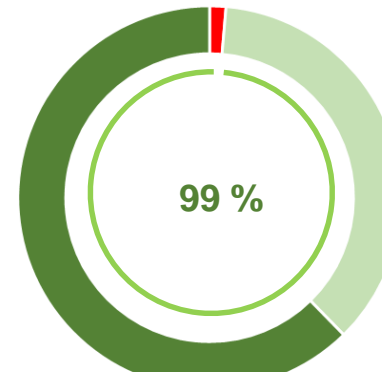
Social housing



66



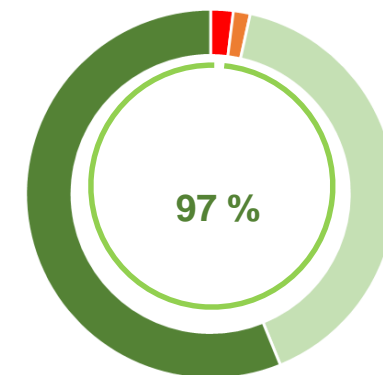
Industry



146

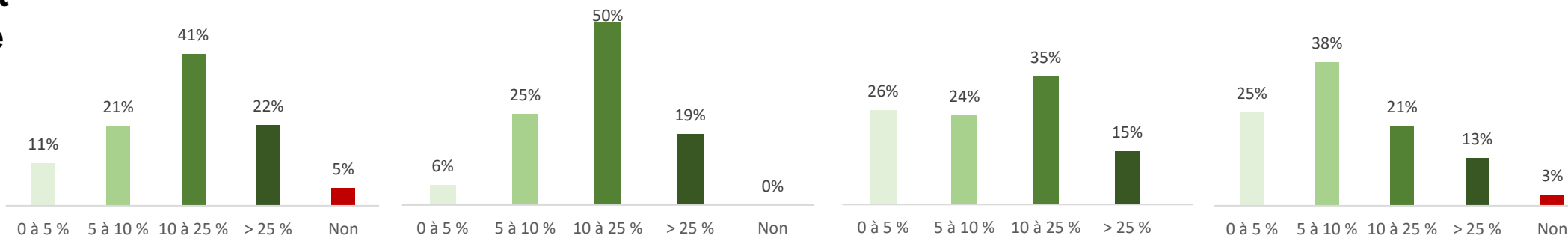


Services



203

Do you think that your works have delivered EE?





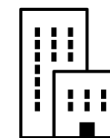
Impact of the subsidies to engage works



Particuliers

Bailleurs
sociaux

Industrie



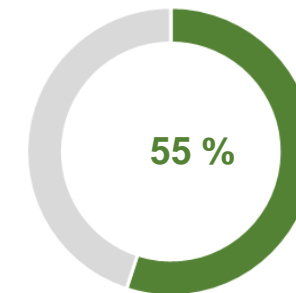
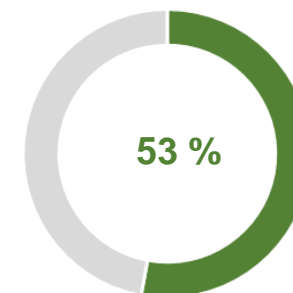
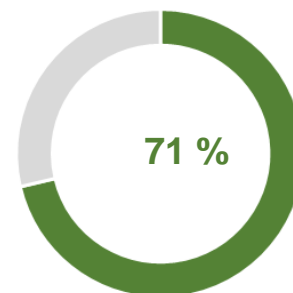
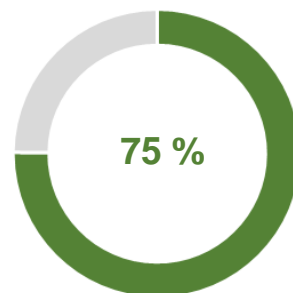
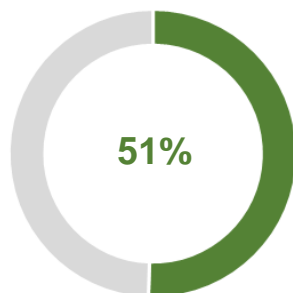
Tertiaire



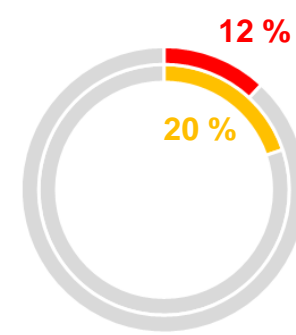
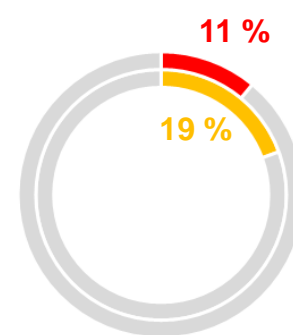
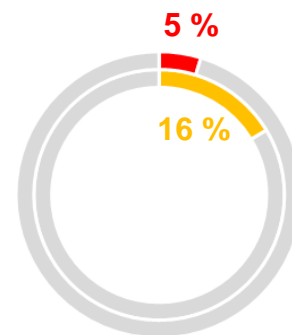
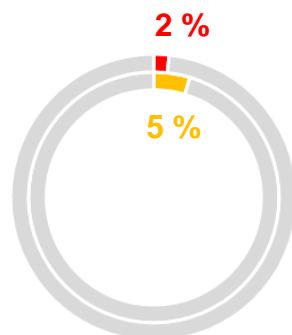
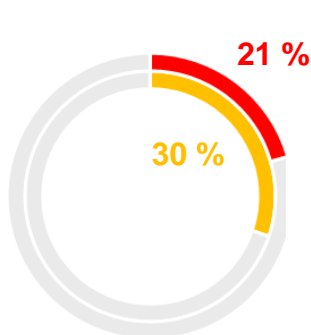
Ensemble

En pondérant selon le
poids des secteurs

Triggering
effect



Free rider
effect



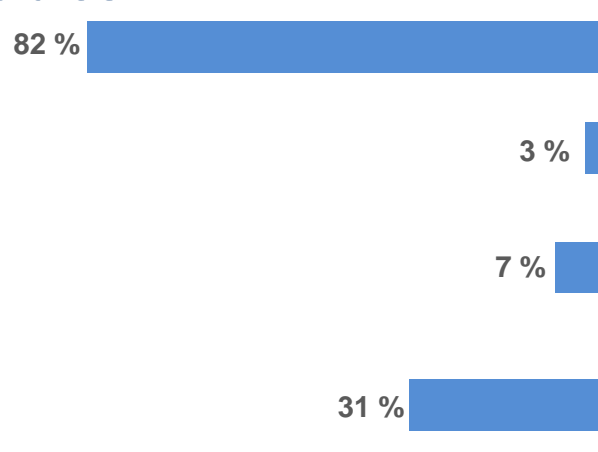
- **Certain** : uniquement réponses « Non, pas du tout »
- **Incertain** : Certain + réponses « Non, pas vraiment »

aux questions : l'aide a-t-elle permis de faire :

- des travaux de meilleure qualité ?
- des travaux plus importants ?
- des travaux que vous n'auriez pas pu faire autrement ?

Impact of the subsidies to engage works for individuals

Share of respondents having subsidies



Nombre total de répondants uniques : 1 488



ADEME



Agence de l'Environnement
et de la Maîtrise de l'Energie

GINGER
BURGEAP



How did you know the scheme?

Did you know the obligation scheme before ?

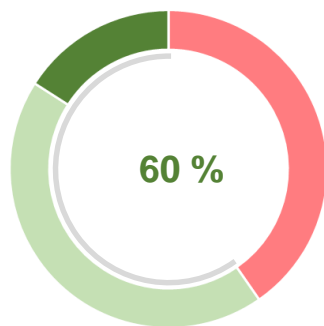

Individuals


Social housing

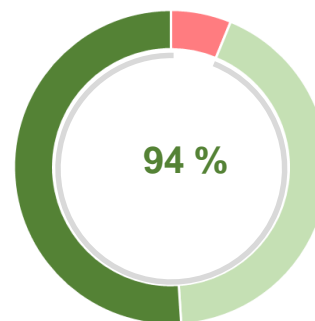

Industry


Services

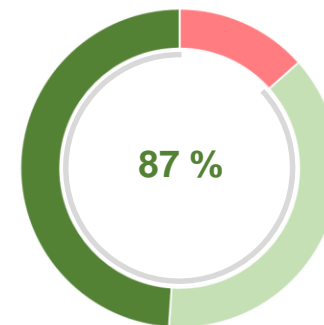
- Oui, plutôt bien
- Oui mais vaguement
- Non



Nb réponses 2 164



145



186

How did you know it ?

41 % Awareness campaign

20 % By hearing

19 % Internet

41 % Instalors

19 % ESCO's

16 % Utilities

24 % Esco's

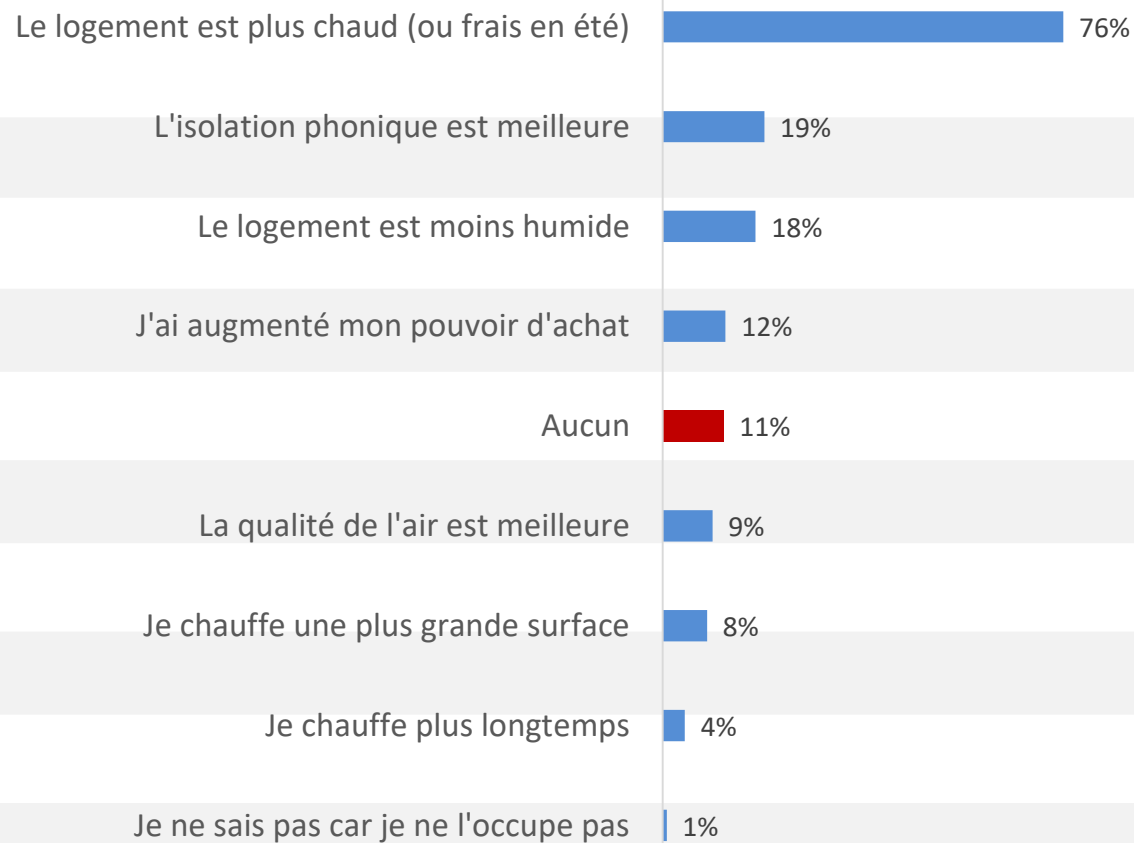
24 % Municipality



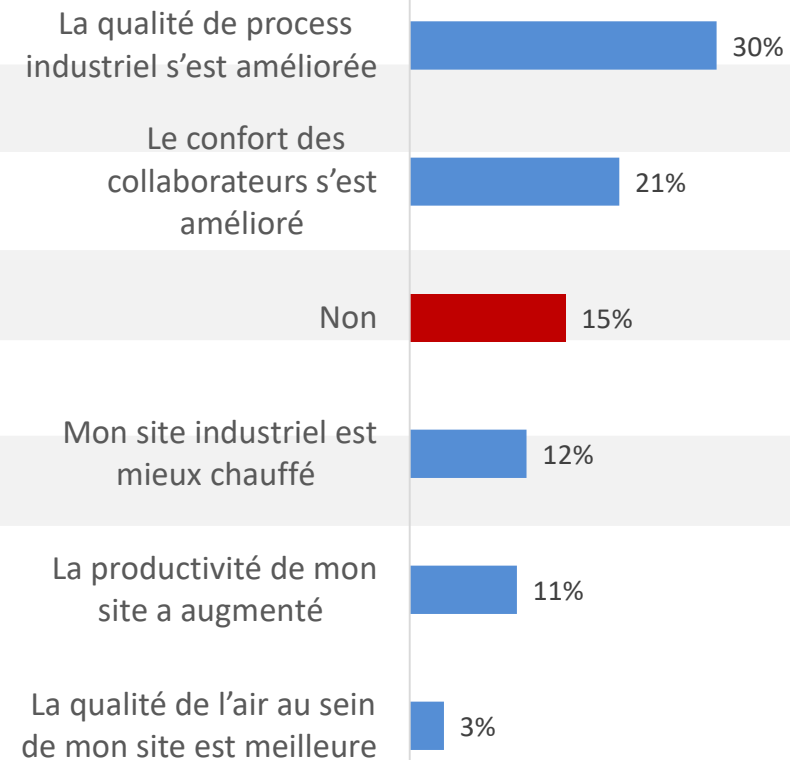
Impacts of energy efficiency works



Households



Industry





Some quantitative results : The beneficiaries

Since 2011, the WC scheme has pushed the installation of :

- 1 million of individual boilers and the replacement of collective boilers for 400 000 flats;
- 480 000 wood boilers;
- 116 000 heat pumps ;
- 260 000 m² of captors for solar water heaters in french tropical islands (around 50 000 logements);
- 45 millions of insulated m² (around 300 000 dwellings for cave and roof and walls;
- More than 3 millions of double or triple glazings windows;
- 6 millions of LED labelled A+;



Some quantitative results

- 3 Billion € per year of activity linked to obligations compared to an annual market for refurbishment of 22 Billion € in housing
- Half of public subsidies dedicated to refurbishment come from obligations
- A very concentrated scheme with 10 % of beneficiaries which generate 90 % of the volumes of obligations
- 1,5 million of beneficiaries since depuis 2011 of which : 1 municipality against 8, 1 household against 20, and 1 industrial site against 60.
- High level of satisfaction of the energy efficiency works. Only floor insulation has bad performances of satisfaction. Confort improvement for 75% of the households
- 3 000 job/years directly created or maintained, 17 000 jobs/year indirectly. es



Recommandations (1/3)

R1

Make compulsory the energy consumption of industrial and agricultural companies, other than fuels (already submitted)

R2

Do not modify the main application methods (standardized operation sheets and bonuses) during each obligation period

R6

Improve the synergies between CEE funding, Action Logement funding (PIV) and public funding (ANAH, local authorities) to accelerate energy renovation actions in the private housing stock.



Recommendations (2/3)

R7

To simplify the administrative burden

R8

For individual beneficiaries, systematically send a paper questionnaire after the issuance of Certificates

R9

Limit the financial windfall that the system can represent, particularly in the industrial sector

R10

Evaluate periodically the real savings generated by the main files in order to correct, if necessary, the method of calculating packages

R12

Reorienting part of the system on lessor owners through better information



Recommandations (3/3)

R13

Study an increase in the share of the "fuel poverty" obligation for the fifth period

R14

Reorienting part of the system on landlord lessors through better information

R15

Stimulate specific operations in the industry by providing guarantees to manufacturers and applicants

R16

Fight against fraud and non-quality within the system