## Quality table for the survey of energy consumption in industry in 2010 (EACEI)

Survey identity card	
Name	Survey on energy consumption in industry,
	Excluding agrifood
Year of survey	The survey data are from 2010.
Frequency	Annual survey
Service in charge of the	INSEE – Business Statistics Division (DSE) for the 2010
survey	survey

•	Technical characteristics
Scope and coverage of	The scope of the survey by INSEE covers
survey	establishments in part of the extraction industry and the manufacturing industry (excluding agrifood and sawmills). The activities are those defined by the following NAF rev. 2 codes: 07, 08, 09.9 and 13 to 33 (except 16.10A, 16.10B, 19.10Z, 19.20Z, 20.13A, 24.46Z) and 38.3. Except for 20.11Z (big energy consumer), the headcount threshold is set at 20 employees (failing this, salaried workers) on average over the year (10 employees for 20.11Z).
	Only establishments with production activity are included in the scope.
	The survey covering the agrifood industry and sawmills is conducted by the Statistics and Forecasting Service (SSP) of the Ministry for Agriculture, of Food processing and the Forest.  This quality table only concerns the survey carried out by INSEE.
Geographical scope	France (including overseas departments)
Statistical unit used in	Establishment
the survey	LStabilistificit
Size of reference population	19 715
Sample size	11 000
Number of companies	19 before the switch to the Label Committee in 2001. As
that were given a	the questionnaire has barely changed, no tests since
questionnaire test	this annual survey.
Compulsory or non- compulsory nature of the survey	Compulsory
Collection mode	Online collection. Letter sent indicating the availability of an online form, but replies possible by hard-copy questionnaire on request.



Technical characteristics (cont'd)		
Users committee	with external users	
	without external users	
	no	

Key dates from launch until the publication of results	
First launch meeting	2010 survey dialogue committee: 24/09/2010.
Favourable opinion	21 July 2006
from the National	
Council for Statistical	
Information (CNIS)	
Meeting of the	4 December 2006
approvals committee	
("Label Committee") of	
the CNIS	
Launch of collection	4 January 2011
End of clerks work	5 May 2011
Feedback to companies	Before the launch of the survey in 2011
First publication on the	September 2011 for the scope of INSEE, January 2012
basis of provisional	for the joint scope of INSEE and SSP.
results	

Survey sample	
Sampling method	<ul> <li>Simple stratified random sampling. Included in the sample:</li> <li>all establishments employing 20 or more employees in the sectors where energy consumption is the highest (23.32Z, 23.51Z and 23.52Z);</li> <li>all establishments employing 10 or more employees in the industrial gas manufacturing sector (20.11Z);</li> <li>all establishments employing 250 or more employees;</li> <li>by sampling, establishments with 20 to 249 employees in the least consuming sectors. The sampling strata are defined by crossing the activity codified NTE (specific working level of the EACEI: either division, or group, or class of NAF rev 2) with the size bracket of the establishment (20 to 49 employees, 50 to 99 employees, 100 to 249 employees).</li> </ul>
Number of target variables for the	47
dissemination of results (or for the studies)	



Survey sample (cont'd)	
List of target variables	16 variables of purchased quantities of energy
for the dissemination of	11 purchase value variables
results (or for the	6 diverse variables (self-production of electricity, type of
studies)	tariff)
	14 stock variables.
Number of	4
disseminated sub-	
populations	
List of disseminated	Division of NAF rev. 2
sub-populations	Size bracket (20-49; 50-99; 100-249; 250-499; 500-999;
	1000-1999; 2000 or more)
	Region
	NCE (specific energy classification)
Population of the	31.2 %
exhaustive strata	
surveyed as a	
proportion of all the	
units of the sample	
Sampling rates	55.8 %

Indicators relating to production	
Are there any follow-	Yes
ups?	
If so, what type and	A first reminder to all non-respondents, a second ta
how many?	reminder, and two letters for the pre-litigation procedure.
Number of units in the	10 998
initial sample	
Number of returned	9 587
surveys	
Number 'outside the	1 146
scope' (including units	
that have disappeared)	
amongst the returned	
questionnaires	
Number entering the	148
scope	
Number of useable	8 441
questionnaires	



Indicators relating to production (cont'd)		
Survey response rate	85.7 %	
Response rate for each	Target variables	Taux de réponse
target variable from the population of	Quantities purchased	97.1 %
respondents	Purchase value	96.4 %
	Type of tariff	81.2 %
	Other electricity variables	97.1 %
	Stock	98.6 %
	NB: Over the whole survey scope, the partial non-response rate for the quantities purchased is 2.9%. The quantity purchased (for example) is considered as missing once another variable relating to the same energy is completed.	
Non-response treatment	Treatment of partial non-responses and errors:  Partial non-responses are corrected using methods based on the mean per stratum.	
	Treatment of total non-responses: Two methods are used to treat total restablishments for which we have a vector we use this response to estimate quantities of year N will be calcul growth coefficients to the quantities of	valid response N-1, response N. The ated by assigning
	For the other establishments, the me total non-responses is hot deck, i.e. we the non-returned questionnaires (duple correctly completed questionnaires (duple random from the same stratum.	e enter the data in icated) with that of
Estimation procedures	The establishments entering the sur the sample selection and the attainmentaken into account by reweighting.	



## **Accuracy indicators**

The coefficient of variation, expressed as a percentage, for the estimations of each target variable and for the divisions of Naf rev. 2.

	Global	Median
Total consumption in TOE*	0.5	1.7
Total purchase bill	0.5	1.6
-		
Overall quantities in TOE*		3.2
Overall purchases		3.4
-		
Quantity in TOE:		
Electricity	0.6	1.5
Steam	1.4	2.4
Natural mains gas	1.4	2.9
Other mains gas	1.8	15.8
Coal	0.4	2.9
Lignite-lean coal	4.0	1.1
Coal coke	1.6	2.2
Oil coke	3.5	6.1
Butane propane	2.6	5.0
Heavy fuel	3.5	2.6
Domestic fuel	1.0	4.7
Other petroleum products	4.0	2.4
Black liquor	1.3	30.3
Wood and wood by-products	1.4	5.2
Special renewable fuels	3.1	4.0
Special non-renewable fuels	3.9	1.9
Purchase value:		
Electricity	0.5	1.6
Steam	1.3	2.0
Natural mains gas	1.2	3.1
Other mains gas	2.1	16.3
Coal	0.3	1.5
Lignite-lean coal	3.1	1.0
Coal coke	1.3	2.1
Oil coke	2.7	4.8
Butane propane	2.2	5.9
Heavy fuel	3.2	3.8
Domestic fuel	6.9	5.4

## N.B.:

The coefficient of variation is the ratio between the standard deviation of the estimation and the value of the estimation. The standard deviation that we can deduce from this coefficient by multiplying it by the value of the estimation is used to produce the confidence interval (generally speaking a "95%" interval can be produced by carrying over from either side of the estimation value twice the value of the standard deviation).

The lower the value of the coefficient of variation, the more accurate the estimation.

50% of the divisions in the EACEI scope have a coefficient of variation for the studies total which is lower than 1.7%.

The coefficient of variation for the studies total over the whole scope is 0.5 %



Dissemination	
Has the survey been archived?	Yes
Is there any	no documentation $\square$
documentation to be	basic documentation   ☑
disseminated?	a comprehensive data dictionary   ☑
	a comprehensive data dictionary   ☑
Number of publications,	⇒ type « Infos Rapides »
by type	
	« 4 Pages »
	(Insee Première, the 4 pages on industrial statistics or equivalent)
	<ul> <li>⇒ type CD-Rom,</li> <li>« Insee-Résultats »,</li> <li>Insee-résultats on the Web (Insee.fr)</li> <li>Minitel, web</li> </ul>
	⇒ articles, studies - Energy balance of France (SoeS)

