



Italian National Agency for New Technologies,
Energy and Sustainable Economic Development

Data collection and analysis from the incentive schemes in Italy

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*G20 Energy End-Use Data and Energy Efficiency Metrics initiative
Uncovering the role of digitalization for energy efficiency indicators*

Session 3 - Developments in traditional data collection methodologies



ECOBONUS – The measure

Since 2007, tax deductions scheme for the energy renovation of existing residential buildings resulted as a key driver of energy efficiency improvements in the housing sector, with more than 3.6 million of implemented actions, and almost 38.8 billion euros of leveraged private investments.

The Budget Law 2018 changed the deduction rates for some actions and extended the possibility of tax credit transfer to all taxpayers and all eligible actions: tax credit can be transferred to suppliers who implemented works or to other private entities, with the possibility of an only one subsequent transfer to other entities than suppliers, as long as they are linked to the works that implied the tax deduction. For taxpayers out of the no-tax area, credit cannot be transferred to credit institutions and financial intermediaries.

ECOBONUS – Eligible actions at building level

Eligible actions at building level

Action	Maximum eligible deduction (€) (^)	Maximum eligible expense (€)	Deduction (%)
Reduction of heating energy demand of the whole building	100,000.00		65%
a) insulation of vertical walls, roof, slabs (*)	60,000.00		65%
b) windows and shutters replacement (*)	60,000.00		50%
c) installing solar shades (*)	60,000.00		50%
d) actions on common parts, involving over 25% of the building surface area		40,000.00 (#)	70%
e) same actions as in d) to achieve at least the average quality as per tables 3 and 4 of Annex 1, of the Italy's Ministerial Decree 26/06/2015 "Guidelines for the Energy Certification Decree"		40,000.00 (#)	75%
f) actions as in d) and e) implemented in seismic zones 1,2 and 3, aimed to reduce seismic risks also, resulting in one lower class of the seismic risk classification		136,000.00 (#)	80%
g) actions as in d) and e) implemented in seismic zones 1,2 and 3, aimed to reduce seismic risks also, resulting in two or more lower classes of the seismic risk classifications		136,000.00 (#)	85%

BONUS CASA – The measure

Since 1987, tax deductions for the retrofit (not specifically addressed to the energy performance of involved dwelling/building) is allowed.

In the period 2014-2018, on average 45 billion euros of investments have been leveraged every year.

The Budget Law 2018, to allow the monitoring and evaluation of energy savings achieved thanks to the implemented actions, introduced the obligation of the communication to ENEA of the information about the work carried out, as for Ecobonus.

Total investments and incentive schemes

Year	INVESTMENTS - TOTAL		INCENTIVIZED INVESTMENTS		
	Private investments in retrofit and energy renovation - TOTAL (M€)	Private investments in retrofit and energy renovation - Residential (M€)	Implemented actions in the residential sector (n)	Investments (M€)	Share of investments in the residential sector (%)
2013	64.150	45.801	1.653.588	27.957	61,0%
2014	66.109	47.242	1.668.497	28.457	60,2%
2015	67.402	47.925	1.525.054	25.147	52,5%
2016	69.734	49.879	1.742.903	28.243	56,6%
2017	71.062	50.444	1.741.647	28.106	55,7%
2018	72.639	51.356	1.757.340	28.587	55,7%

Source: CRESME

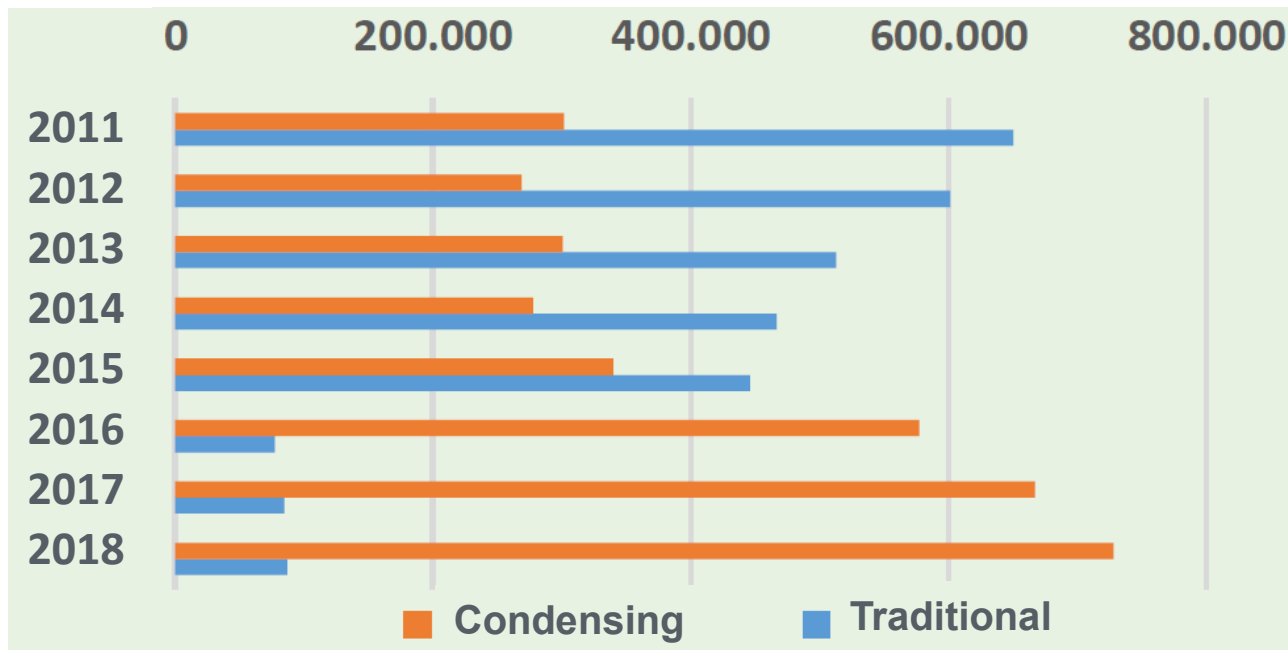
The trends of the two schemes

Year	BONUS CASA			ECOBONUS		
	Actions (n)	Investments (M€)	Deduction (M€)	Actions (n)	Investments (M€)	Deduction (M€)
2007	402.811	7.938	2.858	106.000	1.453	799
2008	391.688	7.365	2.651	247.800	3.500	1.925
2009	447.728	8.070	2.905	236.700	2.563	1.410
2010	494.006	8.808	3.171	405.600	4.608	2.534
2011	779.400	13.408	5.184	280.700	3.309	1.820
2012	883.600	16.325	7.248	265.380	2.883	1.586
2013	1.317.627	24.345	12.172	335.961	3.612	2.203
2014	1.374.216	25.390	12.695	294.281	3.066	1.993
2015	1.193.926	22.059	11.030	331.128	3.088	2.007
2016	1.349.546	24.934	12.467	393.357	3.309	2.151
2017	1.319.656	24.382	12.191	421.991	3.724	2.420
2018	1.355.147	25.038	12.519	402.193	3.549	1.984

Source: CRESME

Overlapping between the two schemes

Number of boilers sold in Italy



In 2018, only 65,000 condensing boilers incentivized through the Ecobonus

Source: Assotermica

Websites for data collection

DETRAZIONI FISCALI

per interventi di RISPARMIO ENERGETICO e utilizzo di FONTI DI ENERGIA RINNOVABILI

Ristrutturazioni edilizie

Art. 16 bis del DPR 917/86

BONUS CASA

detrazioni del 50%

SITI APERTI PER IL CARICAMENTO O MODIFICA DELLE PRATICHE

2019

2018

CONSULTAZIONE PRATICHE ANNI PRECEDENTI:

NESSUN SITO NEGLI ANNI PRECEDENTI.

COME INVIARE LE PRATICHE?

ATTRAVERSO IL PORTALE RELATIVO ALL'ANNO DI FINE LAVORI

QUANDO INVIARE LE PRATICHE?

ENTRO 90 GIORNI DALLA DATA DI FINE LAVORI

PER LA DATA DI FINE LAVORI VEDI FAQ 4.A DEL DOCUMENTO
FAQ BONUS CASA

Riqualificazione energetica

ex legge 296/2006

ECOBONUS

detrazioni del 50% 65% 70% 75% 80% 85%

SITI APERTI PER IL CARICAMENTO O MODIFICA DELLE PRATICHE

2019

2018

CONSULTAZIONE PRATICHE ANNI PRECEDENTI:

2017 - 2017 CONDOMINI - 2016 - 2015 - 2014 - 2013 - 2012 -
2011 - 2010 - 2009 - 2008 - 2007 -

COME INVIARE LE PRATICHE?

ATTRAVERSO IL PORTALE RELATIVO ALL'ANNO DI FINE LAVORI

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FAQ ECOBONUS

Ecobonus: 2018 figures

Action	n.	%	M€	%	GWh/y	%	Years	€/kWh
Condominiums	477	0,14%	55,5	1,67%	18,3	1,58%	30	0,10 €
Whole building	2.674	0,80%	249	7,47%	72	6,20%	30	0,11 €
Envelope	25.267	7,55%	901	27,05%	326	28,18%	30	0,09 €
Windows and shutters	138.790	41,45%	1.072	32,18%	381	32,97%	30	0,10 €
Solar shades	70.491	21,05%	128	3,84%	14	1,22%	30	0,26 €
Solar panel	5.578	1,67%	36	1,09%	28	2,42%	15	0,09 €
Heating system	89.262	26,66%	873	26,20%	309	26,73%	15	0,20 €
Building automation	2.307	0,69%	17	0,50%	8	0,69%	10	0,19 €
Total	334.846	100%	3.331	100%	1.155	100%		

Source: ENEA

Bonus Casa: 2018 figures

Elenco interventi	n.	m ²	MW	Energy saving [MWh/year]
Windows and shutters	124.268	401.431		78.913
Walls	10.995	761.259		41.636
Roof	6.620	725.292		62.206
Condensing boiler	100.025		2.586	145.466
Biomass boilers	18.846		207	55.133
Heat pumps	96.412		470	184.254
Hybrid system	516		13	3.976
Building Automation	5.221	8.110(*)		5.231
Appliances	87.723			13.544

Source: ENEA

EED art. 7: achieved savings (final, Mtoe)

Policy measures notified	New savings achieved	New savings achieved	New savings achieved (estimated)	New savings achieved (estimated)	New savings achieved (estimated)	Cumulative savings	Cumulative savings expected by 2020
	Mtoe	Mtoe	Mtoe	Mtoe	Mtoe	Mtoe	
	2014	2015	2016	2017	2018	2014-2018	Mtoe
Obligation scheme White Certificates	0.872	0.859	1.101	1.341	1.162	5.335	12.25
Alternative measure 1 Thermal energy account	0.003	0.008	0.019	0.045	0.081	0.156	0.46
Alternative measure 2 Tax relief	0.268	0.571	0.894	1.243	1.575	4.552	8.75
Alternative measure 3 National Energy Efficiency Fund	0.000	0.000	0.000	0.000	0.000	0.000	0.13
Alternative measure 4 Impresa 4.0 Plan	0.000	0.000	0.000	0.300	0.440	0.740	2.04
Alternative measure 5 Cohesion Policies	0.022	0.140	0.198	0.199	0.213	0.771	1.25
Alternative measure 6 Information campaigns	0.000	0.012	0.021	0.055	0.074	0.162	0.37
Alternative measure 7 Sustainable mobility	0.000	0.000	0.000	0.000	0.058	0.058	0.25
Total savings	1.166	1.591	2.233	3.183	3.603	11.775	25.50

* Preliminary estimate on data not yet consolidated

Source: Elaboration of the Ministry of Economic Development based on data from ENEA and Gestore dei Servizi Energetici S.p.A



THANK YOU!
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2019 Energy Efficiency Annual Report:

<http://www.enea.it/it/seguici/pubblicazioni/edizioni-enea/2019/rapporto-annuale-efficienza-energetica-2019>

2019 Ecobonus Annual Report:

<http://www.enea.it/it/seguici/pubblicazioni/edizioni-enea/2019/report-detrazioni-fiscali-65-per-cento>



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