

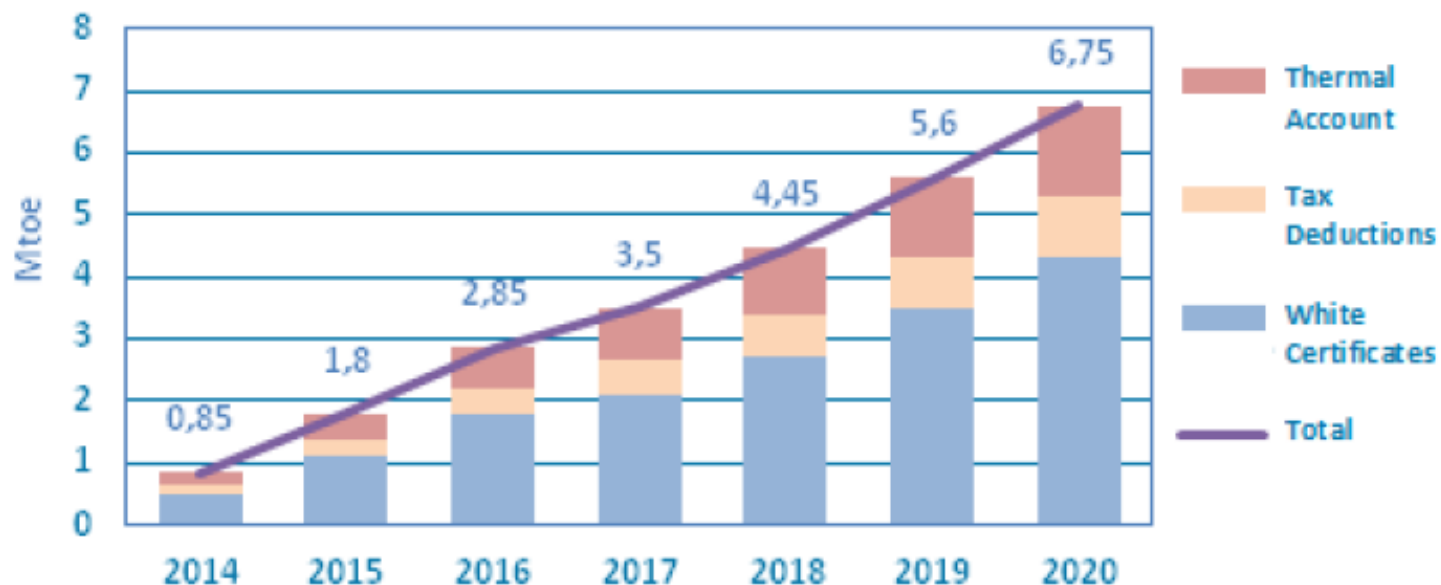
***“Session 3 – Developing the data”
Italian policies for energy efficiency:
tax rebates for energy revamping***

**G20 Energy End-Use Data and
Energy Efficiency Metrics initiative**

**Gabriella Azzolini
ENEA - DUEE**

Buenos Aires
February 22th 2018

Directive 2012/27/UE, Article 7: Energy efficiency: Italian targets and policies



Source: Ministry of Economic Development

Summary of the expected savings, in Mtoe/year 2014-2020



Tax deduction for energy efficiency

L. 296 - 2006 (National Budget Law 2007)

L. 205 - 2017 (National Budget Law 2018)

- tax deduction of **50%-65%-70%-75%**
- Tax rebate on personal or corporate income taxes, **no tax credit**;
- The rebate is completely recovered over 10 years;
- Maximum amount deductible: from 30k euros to 100k euros;
- beneficiaries can transfer the tax rebate to suppliers or other private subjects, including banks (**bankability** reduces regressivity).



Interventions

Art. 1 - National Budget Law 2018 :

- global energy requalifications of buildings (NZEB) – €100.000;
- building envelope (windows, thermal insulation of structures, solar shading) – €60.000;
- solar thermal systems – €60.000 ;
- heating and dhw production plants – €30.000 ;
- cogeneration plants – €100.000;
- building automation systems – €15.000
- Restructuring of common parts of condominiums



Results

From ENEA REPORT 2017

2016:

360k applications

1.1 TWh/year energy saving

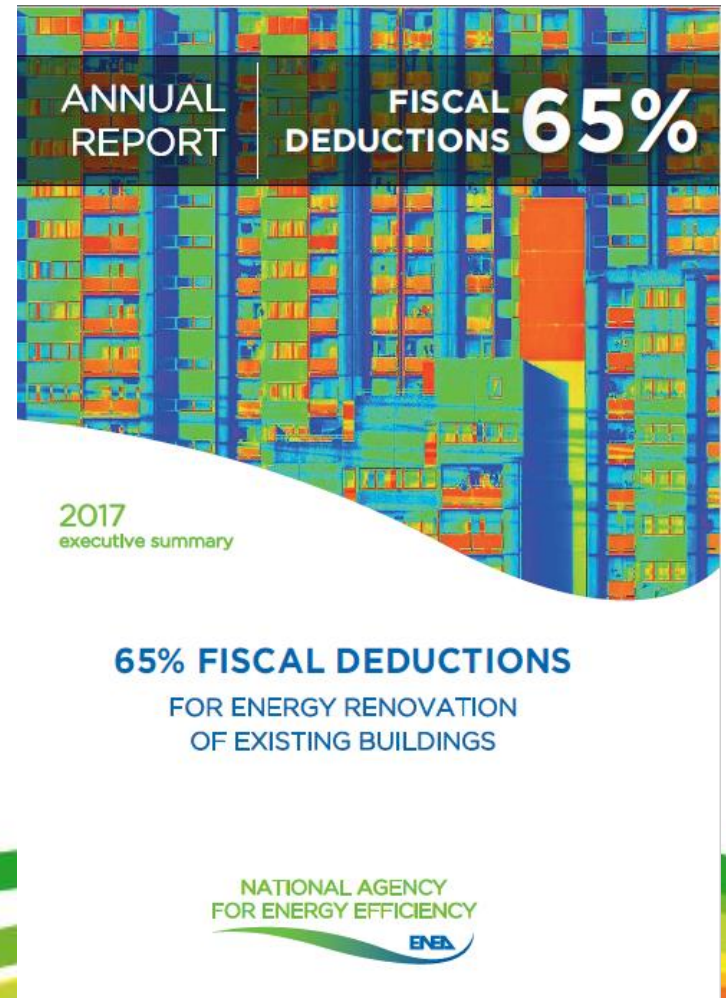
3.3 Billion euros

2007-2016:

2,9 million applications

14 TWh/year energy saving

31.3 Billion euros invested



Results (2017 ENEA report)

Investments (M€) for technology, year 2016 and total years 2014-2016

Technology/intervention	2016		2014-2016		INVESTMENTS 2014-2016 (M€)
	M€	%	M€	%	
Opaque vertical structures	301,1	9,1%	1.074	11,4%	
Opaque orizontal structures	651,2	19,7%	1.734	18,3%	
Windows	1.447,9	43,8%	4.357	46,0%	
Solar Thermal	56,4	1,7%	223	2,4%	
Solar Shadings	148,4	4,5%	249	2,6%	
Condensation boilers	543,3	16,4%	1.412	14,9%	
Geothermal plants	4,1	0,1%	11	0,1%	
Heat pumps	110,3	3,3%	297	3,1%	
Hot water heat Pumps	20,7	0,6%	59	0,6%	
Building automation	9,2	0,3%	9	0,1%	
Other	16,1	0,5%	39	0,4%	
Total	3.308,7	100%	9.463	100%	

Font: ENEA

Results (2017 ENEA report)

Savings (GWh/year) for the technology, year 2016 and total years 2014-2016

Tecnologia/intervento	2016		2014-2016		SAVINGS 2014-2016 (GWH/YEAR)
	GWh/a	%	GWh/a	%	
Opaque vertical structures	106,9	9,6%	351	10,7%	
Opaque horizontal structures	239,1	21,5%	603	18,4%	
Windows	482,3	43,4%	1.531	46,6%	
Solar Thermal	40,3	3,6%	160	4,9%	
Solar Shadings	19,8	1,8%	33	1,0%	
Condensation boilers	167,8	15,1%	428	13,0%	
Geothermal plants	0,9	0,1%	3	0,1%	
Heat pumps	37,5	3,4%	138	4,2%	
Hot water heat Pumps	5,6	0,5%	16	0,5%	
Building automation	5,4	0,5%	5	0,2%	
Other	6,9	0,6%	13	0,4%	
Total	1.112,5	100%	3.282	100%	

Font: ENEA

Advantages

- payback of 50%-65% or even 70%-75%-80% or 85%;
- several eligible interventions;
- large range of deductions;
- several eligible subjects;
- buildings of any real estate register category;
- increased comfort;
- property added value;
- reduction in energy costs;
- simplified documentation.



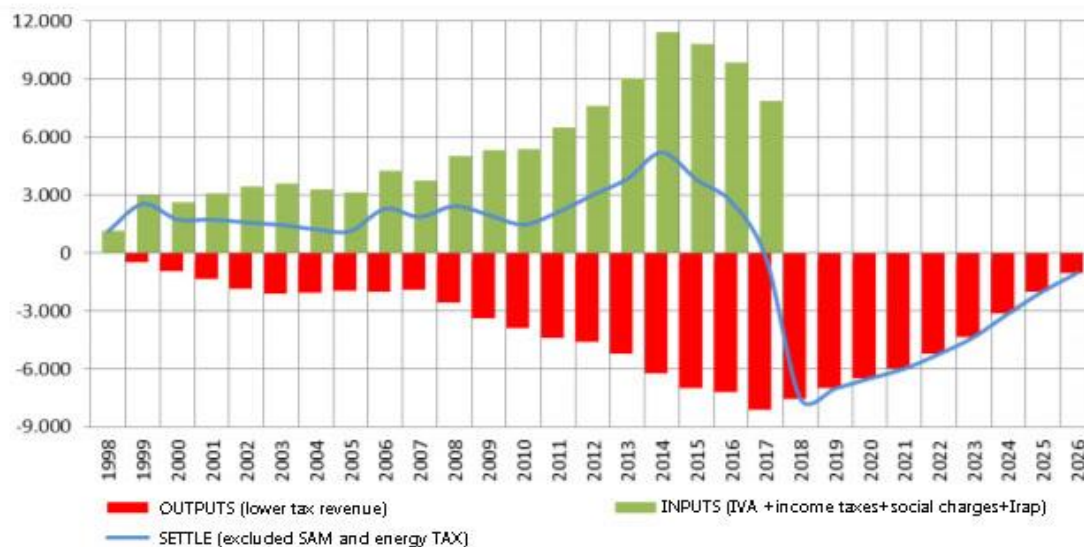
Advantages for the system

- recovery of the existing building stock
 - decorum
 - functional performance
 - seismic risk prevention
- support of the construction industry:
 - support of the production and of the Employment of the sector
 - contrast against illegal work
- accelerating the diffusion of advanced technologies;
- environmental benefits:
 - energy saving for heating, reduction of CO₂ in the atmosphere



Chamber of Deputies study:

Total incentives for building renovation 1998 - 2016:
account of the assigned income and expenses (M€ discounted to 2016)



Font: Cresme

Chamber of Deputies study

Support for the construction industry

employed 2011-2017: 278 thousand directly employed
140 thousand industrial activities
employed 2011-2017 : 1.7 million directly employed,
865 thousand industrial activities

- positive balance of about 8.8 billion euros:
 - Reduced tax dodging
 - Boost of national income coming...
 - ... from investment, ... from consumption by new employees



Services offered by ENEA

- informative website: <http://efficienzaenergetica.acs.enea.it>
- online submission website: <http://finanziaria2017.enea.it>
- e-mail advice;
- training and updating of professionals;
- communication activities.





Energy Efficiency Promotion
Campaign, promoted by MISE
and implemented by ENEA

Thanks for your attention!

gabriella.azzolini@enea.it

www.efficientzaenergetica.enea.it



www.efficientzaenergetica.enea.it
efficientzaenergetica@enea.it