

# Energy poverty in Italy: some figures and actions

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# Overview

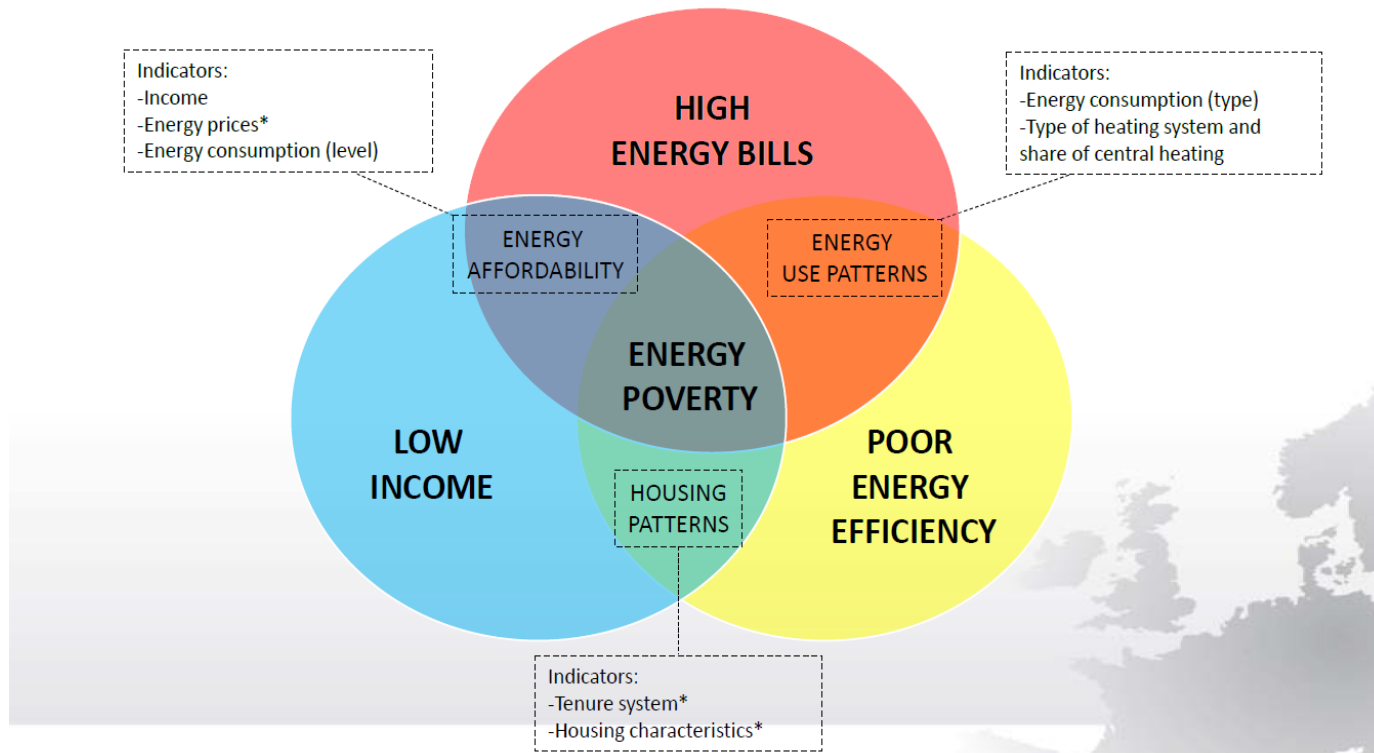
- Energy poverty definitions and drivers
- Italian figures
- Existing studies on energy poverty
- Italian policies related to energy poverty
  - ❖ Electricity bonus
  - ❖ Gas bonus
- Existing projects
- Conclusions

## Some definitions

1. Energy expenditure above a given threshold of own income (e.g. 10% of a family);
2. Self-certification: a family is considered EP if it states that it is unable to adequately heat the house or to pay the bills of gas or electricity;
3. It is impossible to buy a minimum amount of energy services that would ensure an healthy environment (e.g. > least 18 ° C in the main rooms);
4. Contemporary occurrence of an energy expenditure (above a certain threshold) and an income capacity towards expenditures below the poverty treshold (e.g. Low-Income High-Costs” measures).
5. Are more definitions applied at MS level?

# Data related to energy poverty

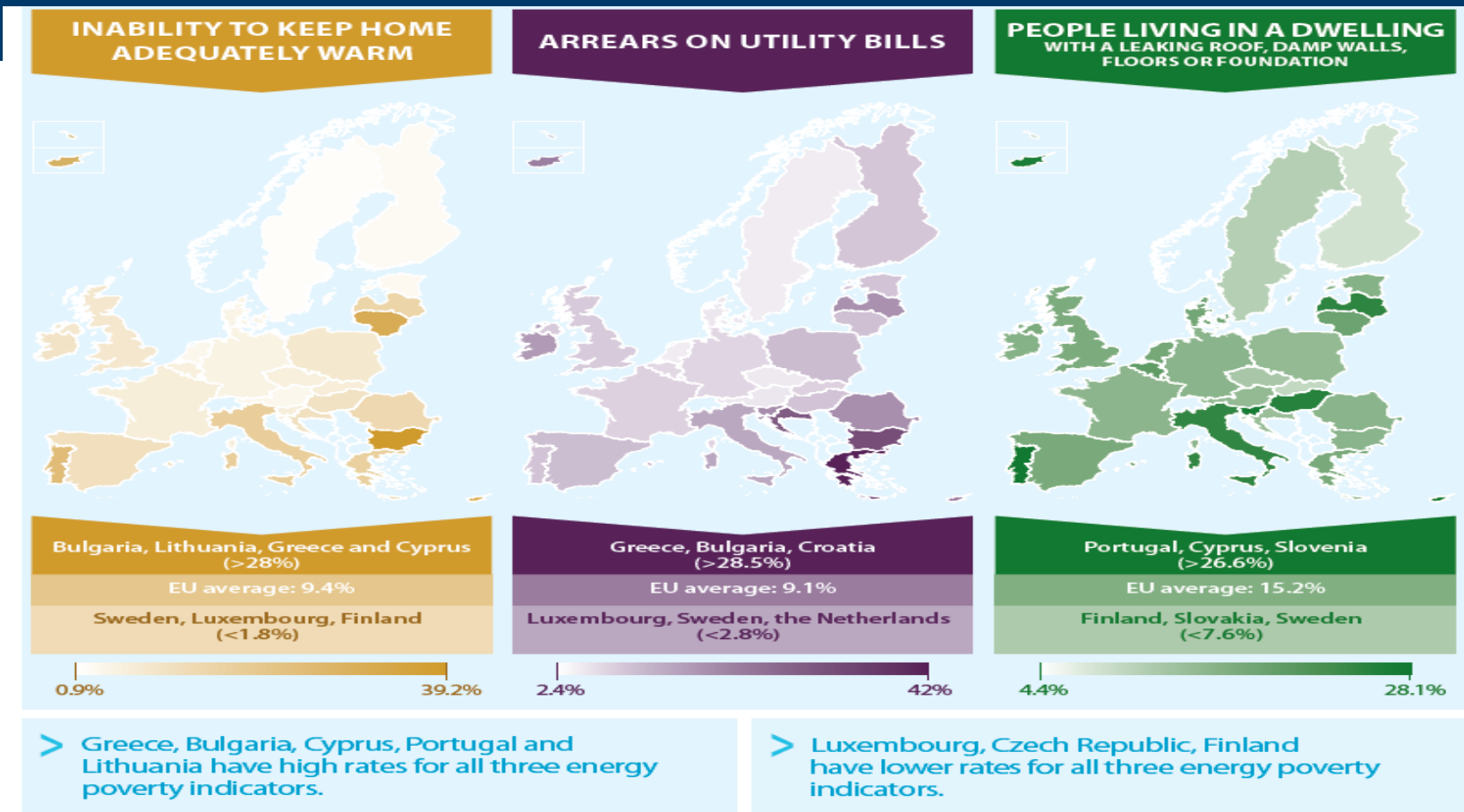
## Drivers of energy poverty - Insight Report 2015



Source: EnR Position Paper

- Italian data are available for all these indicators: in few cases (e.g. type of heating system) at sample level, in most cases for the whole population
- An observatory for energy poverty does not exist (yet) in Italy

# Energy poverty in Italy according to EU Commission



Source: EnR Position Paper

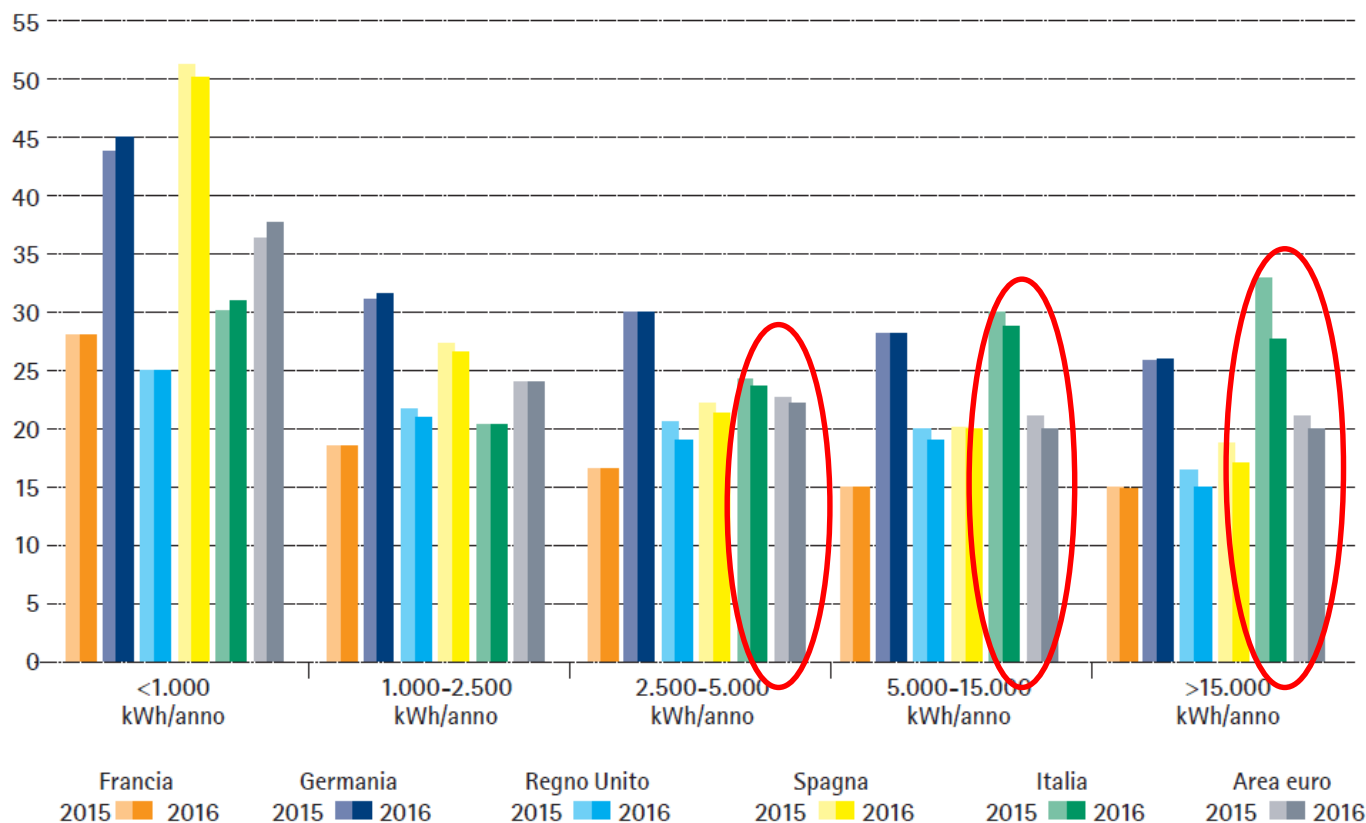
Italy appears in the EU average range with respect to the indicator 1 and 2; however people living in poor condition buildings are widespread all over Italy and represent 26% of the total building stock.

# Energy poverty in Italy

1. Despite the presence of specific policy tools, EP has not been addressed as an in and of itself issue
2. The historically high household energy costs have accelerated for the dynamic of raw materials and for the growth of the “system burden” on the bills, especially the electricity sector.
3. Since the purchase of energy products is not sensitive to price variations, these increases have affected a higher share of expenditure on lower households
4. In general the budget energy affected the 7 percent on total spending in 1997 and 8.4 in 2012.

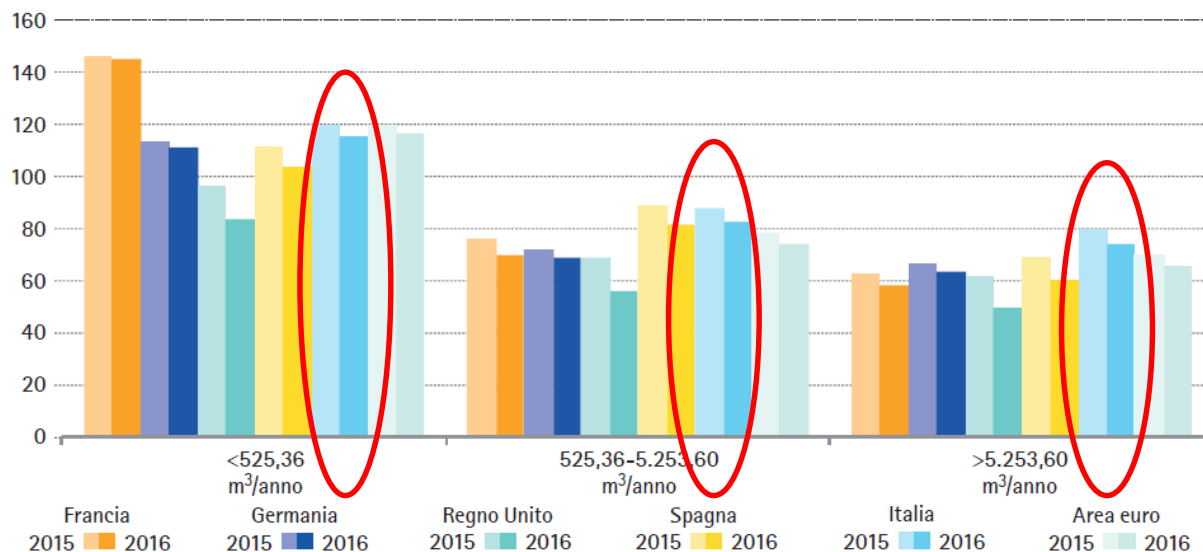
# Electricity prices in Italy

Final Prices of Electricity for Domestic Use across Major European Countries;  
Gross taxes Pricing, c€/ kWh, 2016



# Gas prices in Italy

Final Prices of Natural Gas for Domestic Use across Major European Countries;  
Gross taxes Pricing, c€/ m<sup>3</sup>, 2016



Source: AEEGSI 2017 Annual Report

- Electricity prices are higher in Italy than in the Eurozone for three higher consumption brackets
- Gas prices are also higher than the Eurozone; for the lowest consumption bracket prices are higher only in France
- Such pattern clearly impacts on energy poverty, since energy expenditures are relatively not much compressible

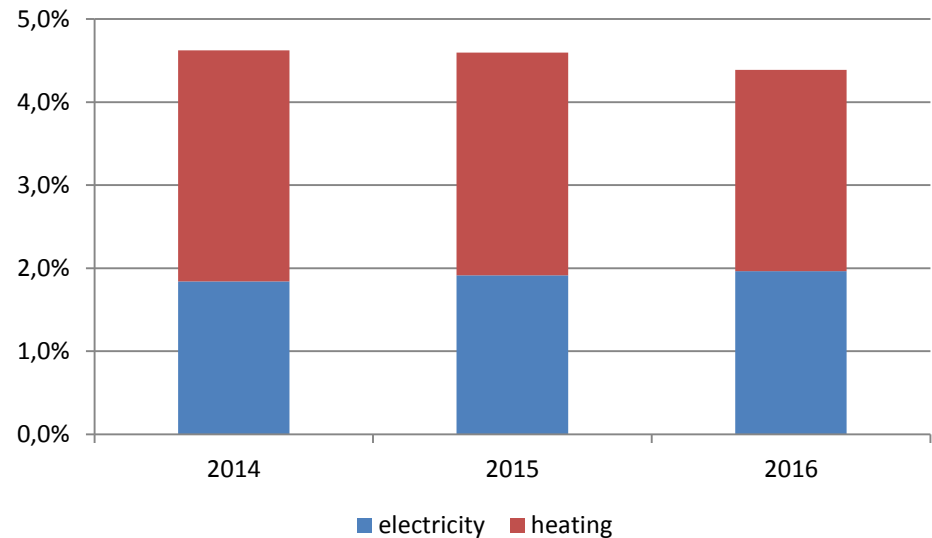


## Italian figures – general information

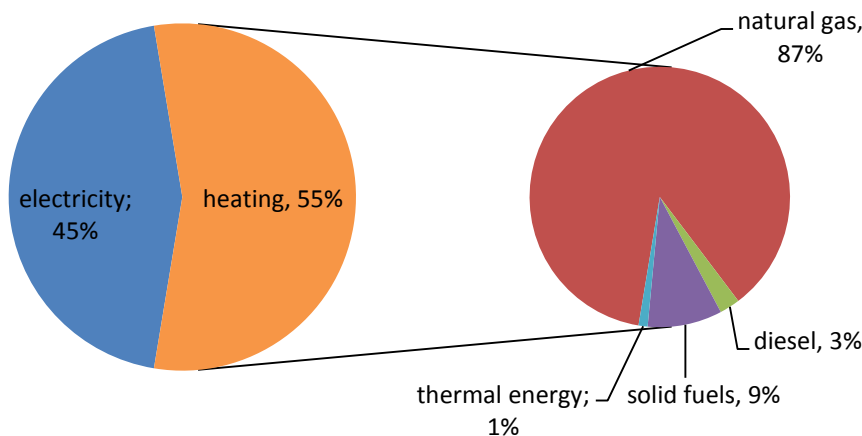
1. February 2017: Report “**Fuel Poverty ed Efficienza Energetica**” published by AiCARR, Federesco and some consumer associations  
([www.aicarr.org/Documents/Convegni/Relazione%20Fuel%20Poverty\\_def.pdf](http://www.aicarr.org/Documents/Convegni/Relazione%20Fuel%20Poverty_def.pdf))
2. In Italy, the number of people in a state of absolute poverty has dramatically increased in recent years: from 1.8 million in 2007 to 4.5 million in 2015
3. Low incomes due to the crisis and low-cost and low-efficiency houses result in a too burdensome energy supply for many people: in 2013 only, 1.8 million families received a notice of suspension of electricity supply due to missed payments.
4. Since 2013, ISTAT has introduced a sampling survey on energy expenditure based on 20,000 households representatives at regional level:
  - ❖ 1.1% of households living in Central Italy do not have heating system; in Southern Italy the percentage is 5.3%
  - ❖ more than 2/3 of interviewed households do not have cooling system

# Italian figures – consumption patterns

- ISTAT data show that expenditure on electricity and heating has remained relatively constant in last years
- The percentage on total expenditure was constant also in previous decade, confirming that energy expenditure is not much compressible



Source: ENEA elaboration on ISTAT data



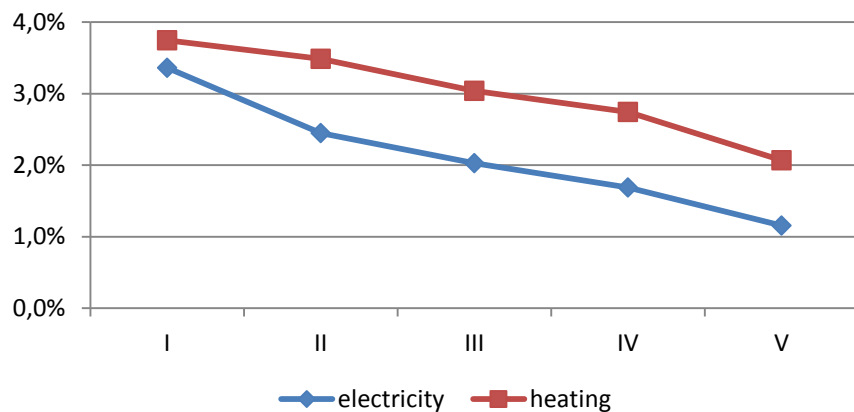
Source: ENEA elaboration on ISTAT data

- Heating represents the highest percentage of energy expenditure, in 2016 and also in previous years
- Natural gas constitutes the majority of heating expenditure (87%), ( but what about the gas bonus measure? )

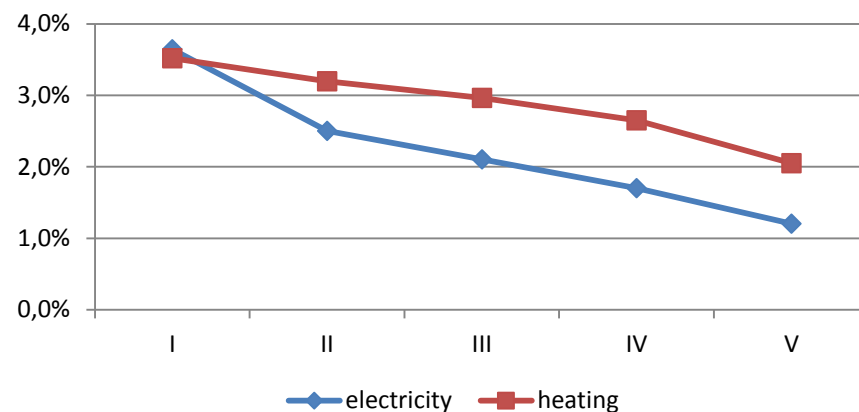
# Italian figures – energy expenditure by quintile

% of electricity and gas expenditure by quintile of total expenditure

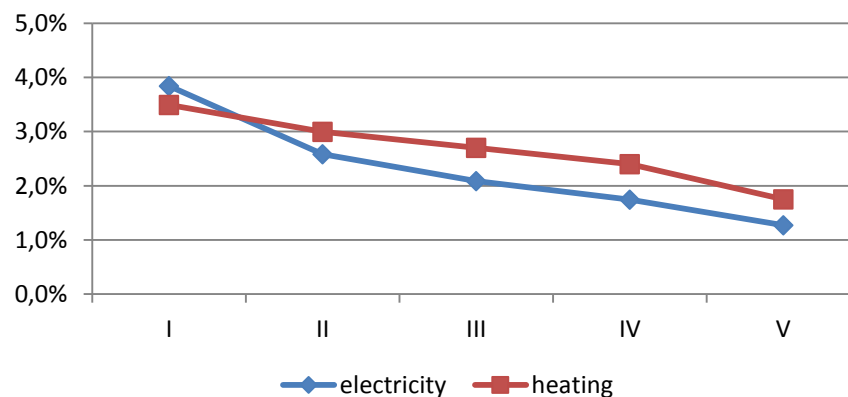
**2014**



**2015**



**2016**

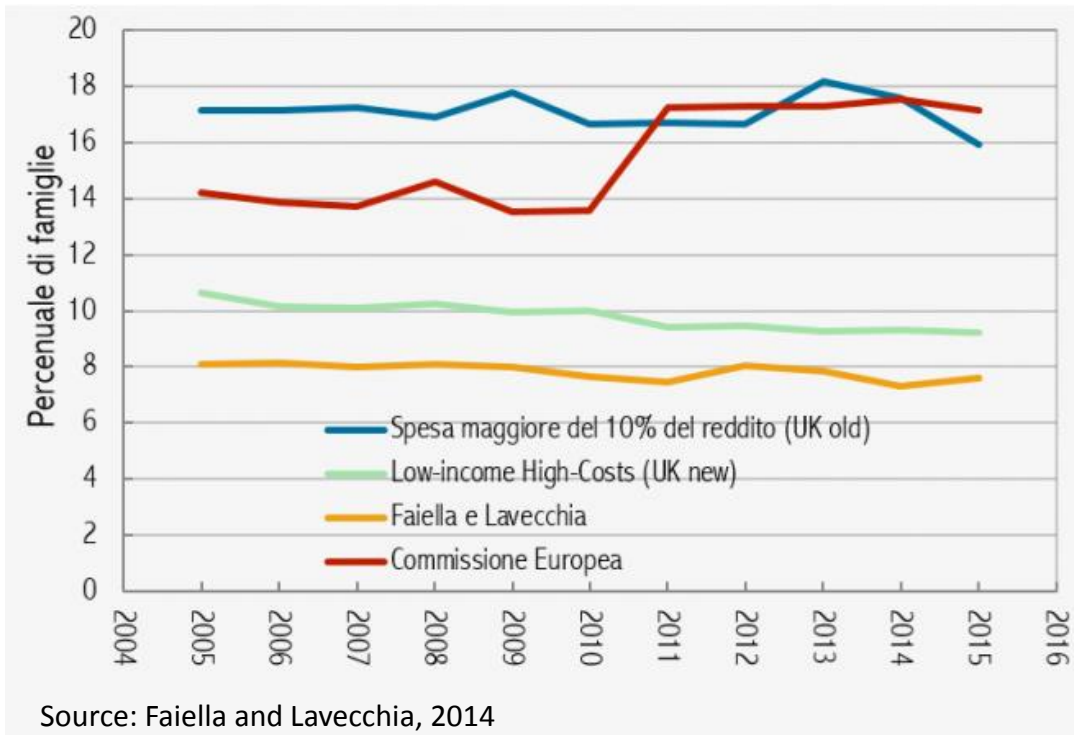


Source: ENEA elaboration on ISTAT data

## Existing research studies

1. Miniaci, Scarpa, Valbonesi, 2008  
Distributional Effects of Price Reforms in the Italian Utility Markets  
<https://www.jstor.org/stable/24440168>
2. Miniaci, Scarpa, Valbonesi, 2014  
Fuel poverty and the energy benefits system: The Italian case  
<ftp://ftp.repec.org/opt/ReDIF/RePEc/bcu/papers/iefewp66.pdf>
3. Authority for electricity, gas and water system (AEEGSI), 2014  
Relazione in esito all'indagine conoscitiva sullo stato di attuazione della disciplina del bonus elettrico e gas (a report on the survey about the level of implementation of the gas and electricity bonus measures)  
<http://www.autorita.energia.it/it/docs/14/072-14.htm>
4. Faiella and Lavecchia (Bank of Italy), 2014  
La povertà energetica in Italia  
[http://www.bancaditalia.it/pubblicazioni/qef/2014-0240/QEF\\_240.pdf](http://www.bancaditalia.it/pubblicazioni/qef/2014-0240/QEF_240.pdf)

# Implications of different measurement approaches



## Comparison of four measures

1. UK old: energy expenditure greater than 10% of income
2. UK new: energy expenditure above a threshold and expenditure capacity below relative poverty threshold
3. Faiella e Lavecchia: energy expenditure above a threshold; total expenditure below relative poverty threshold; nul heating expenditure for households having total expenditure below the median
4. Commissione Europea: average of three subjective measures relative to house temperature, delay in paying bills and building structural problems undermining energy efficiency

- Number of households significantly changes according to the adopted measure
- According to the measure adopted by Bank of Italy study (Faiella and Lavecchia), 8% of households out of total population are in energy poverty (corresponding to 2.1 million of households)

# Which policies for energy poverty in Italy?

Different measures are in place in our Country, which directly or indirectly are connected to energy poverty

- Electricity bonus
- Gas bonus
- On-going pilot projects are producing interesting results which could inspire and shape future policies

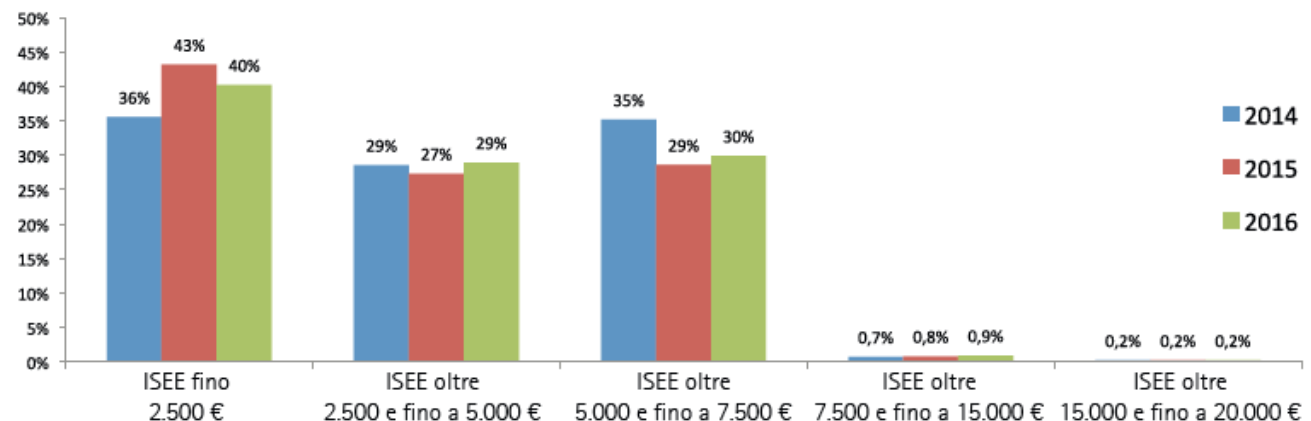
# Data on electricity bonus use

|                      | 2014    |         |         |         |
|----------------------|---------|---------|---------|---------|
|                      | North   | Centre  | South   | Total   |
| Number of households | 310,998 | 144,244 | 504,165 | 959,407 |
| % on the total       | 32%     | 15%     | 53%     |         |
|                      | 2015    |         |         |         |
| Number of households | 250,123 | 105,899 | 294,296 | 650,318 |
| % on the total       | 38%     | 16%     | 45%     |         |
|                      | 2016    |         |         |         |
| Number of households | 271,155 | 112,150 | 297,102 | 680,407 |
| % on the total       | 40%     | 16%     | 44%     |         |

Source: AEEGSI 2017 Annual Report

- Implemented between 2008-2016, 2.7 million households have enjoyed, for at least one year, the bonus (more than 57% in the South)
- In 2016, relative to the totals in respective macro-regions, households having enjoyed the bonus are 2.2% in North-West e % in South
- Bonus equal to 20% of average electricity expenditure (from 80 to 150 €/PoD depending on households members); increased to 30% in 2017

Recent decrease of beneficiaries with ISEE between 5,000 and 7,500 € and corresponding increase of those with ISEE lower than 2.500 €, thanks to the reform in ISEE calculation

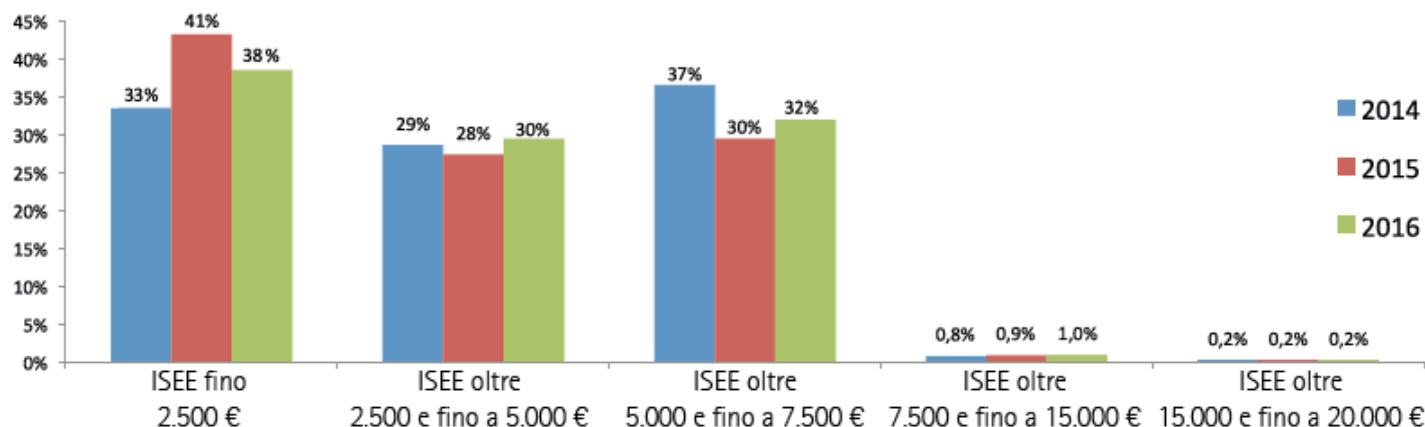


# Data on gas bonus use

|                                                        | 2014    |         |         |         |
|--------------------------------------------------------|---------|---------|---------|---------|
|                                                        | North   | Centre  | South   | Total   |
| Number of households                                   | 267,540 | 109,239 | 247,454 | 624,233 |
| % on the total                                         | 43%     | 17%     | 40%     |         |
| % of households having also received electricity bonus | 86%     | 76%     | 49%     |         |
|                                                        | 2015    |         |         |         |
| Number of households                                   | 216,607 | 84,659  | 147,230 | 448,496 |
| % on the total                                         | 48%     | 19%     | 33%     |         |
| % of households having also received electricity bonus | 87%     | 80%     | 50%     |         |
|                                                        | 2015    |         |         |         |
| Number of households                                   | 222,312 | 86,121  | 140,274 | 448,707 |
| % on the total                                         | 50%     | 19%     | 31%     |         |
| % of households having also received electricity bonus | 82%     | 77%     | 47%     |         |

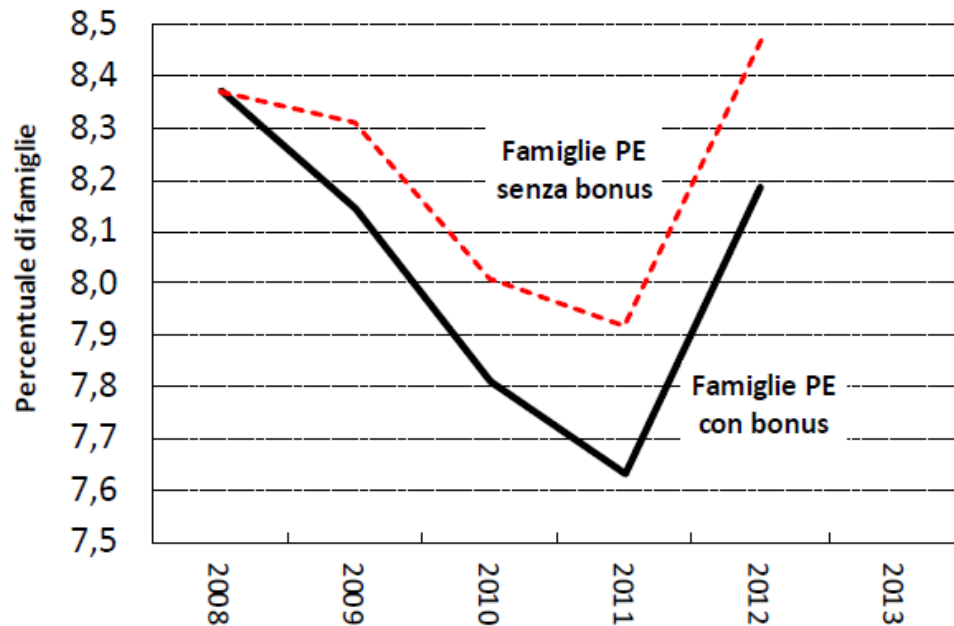
- More than 1.54 million households have enjoyed, for at least one year, the bonus
- 45% of beneficiaries are in climatic zone **E** and 26% in **D**
- The bonus changes according to the household components, gas use and climatic zone from 30 to 260 €/PoD
- Low percentage in South due to non - methanisation of Sardinia region
- Higher percentage of households having enjoyed both bonuses in the North

Source: AEEGSI 2017 Annual Report





# Are bonuses effective in tackling energy poverty?



Source: Faiella and Lavecchia, 2014

- Households enjoying the bonus represent only 14% of households in energy poverty (estimated by Faiella and Lavecchia measure)
- This is likely to be due to the limited action framework of gas bonus
- Infact, gas bonus is limited to customers connected to the grid, excluding households not having heating devices or using gas in tanks or other fuels (which are all included in energy poverty measure)

# Why both bonuses are under-used?

1 out of 10 households addressing consumer associations is late in paying bills, but the majority of those who have the right to the electric bonus, gas bonus, or both, do not use it

1. 2.000.000 families could benefit from bonuses but do not apply for, (according to a study of 15 consumer associations supported by AEEGSI <http://adiconsum.it/progetti/dettaglio.php?id=53> ),
2. The study estimates that, on an annual basis, in 2016 only 34% of those entitled to electric bonus and 27% of those entitled to gas bonus, received it
3. At least 1/3 of these did not renew the bonus request. Beneficiaries complains about too complex procedures, inadequate amounts if compared to consumption, scarce or insufficient information.
4. AICARR Report confirms that in 2014, out of 3 million people entitled for the electric bonus and 2.5 million for the gas bonus, only 933,000 people benefited from the first measure and 625,000 of the second one.

# Some recent Project Experiences - 1

## 1. **Banco dell'Energia** Project - Lombardy region

- organised by some energy utilities and Fondazione Cariplo
- aimed at helping households struggling with paying energy bills
- involves non-profit organisations, other customers and companies which could donate a yearly amount through their energy bills, which is transferred to energy poor households
- <https://www.bancodellenergia.it/>

## 2. **Social Innovation to Tackle Fuel Poverty , Project**

- initiative launched by Ashoka and Schneider Electric Foundation
- through a call for tenders, organisations having innovative idea to fight energy poverty will be selected in a panel of EU countries
- <http://tacklefuelpoverty.com/>

## Some recent Project Experiences - 2

### 3. EU SMART-UP project

- on the role of proper information to protect the weak quintiles of the population
- 5 partners from FR, ES, Mt, UK, Italy (with AISFOR coordinator)
- to train at least 1000 consumers in each country and to identify the best training and dissemination approach to help vulnerable consumers to exploit the existing measures (e.g. in Italy, the electric and gas bonuses) and to rationalise their consumption
- Lower incomes classes are often the ones that consume more and less rationally, for various reasons, such as the difficulty of adapting their home equipment with more efficient means
- <https://www.smartup-project.eu/>

### 4. ELIH-Med Energy Efficiency in Low Income Housing in the Mediterranean

- LIH represents between 30 and 40% of existing buildings
- 1000 representative Low Income dwellings selected in 6 partner countries
- Identification of BEST PRACTICES for improving energy efficiency of buildings
- <http://www.elih-med.eu/Layout/elih-med/>

# Energy Poverty, Energy Efficiency and Social Housing In Italy

*Why focusing on social housing? Since being poor is very likely to imply being energy poor, then improving social housing conditions from an energy (and efficiency )point of view helps in fighting energy poverty*

1 million social housing units, with variations in different parts of the country:

- 300,000 belonging to local authorities,
- 700,000 belonging to other public authorities
- they can benefit of both Ecobonus (fiscal deductions 65%) and Social Bonus
- EE measures in these households are also meant to alleviate EP, because concretely help people, **with priority to disadvantaged people**

*Increasing energy efficiency makes families save money, improves business and creates jobs*

# Measures supporting Energy Efficiency in Social Housing In Italy

## 1. The “Piano Casa” (National Plan for Housing – 2014 Ministerial Decree )

- Ministry of Economy and Finance has provided 400 million € for energy upgrading and renovations of social house dwellings plus 67.9 million € to renovate 2,300 dwellings for disadvantaged categories.
- The Minister of Infrastructures and Transport made available to the Italian regions 105 million € for measures of retrofitting on social houses (Decree 16/3/2015).

## 2. Legge di stabilità 2016 (Italian Economic Law for 2016)

- Ministry of Economy and Finance: 170 million for energy upgrading and measures on social houses.
- By the European funds ERDF (European Regional Development Fund) and ESF (European Social Fund), the Italian Region Lombardia will use 80 million Eur for measures of energy retrofitting in social houses, involving 580 households.

## 3. PROJECT Rig.ener.a.

- Partnership between the Municipality of Bologna, Acer Bologna, the company Ciri Edilizia an&Costruzioni, the University of Bologna.
- 23 buildings will be upgraded to low consumption houses.
- Householders do not spend money, the social houses will be upgraded through an agreement between the Municipality and the ESCO (Energy service companies).

# What's next

- **Winter Package**, while revising EED and EPBD Directives, mentions energy poverty several times; in particular, the Commission outlines a **strategy** to fight energy poverty essentially **based on improving the energy efficiency of housing**.
- The Commission has set up an **Energy Poverty Monitoring Observatory**, operational in 2017, with the task of producing reliable and comparable statistics, disseminating good practices and involving the various actors concerned
- The Italian government has also recently announced the **establishment of a working group** with similar tasks.
- It should also aim to reinforce and complement existing tools for fighting existing energy poverty (e.g. electricity and gas bonuses) in view of the full liberalisation of retail energy markets, such as foreseen in a "competition law" proposal.
- 8 years after the introduction of electricity and gas bonuses and their improvements, the two measures can further be strengthened, learning also from some limitations on their effectiveness.
- ENEA is envisaging to start working on energy poverty, also **combining ISTAT data on energy expenditures with the administrative data on fiscal deductions**

## Conclusion

*«Ogni cittadino italiano ha diritto ad avere assicurata una quantità minima di energia elettrica e di riscaldamento, occorre quindi mettere in campo nuovi strumenti per vederlo riconosciuto in modo semplice, senza perdersi nella burocrazia. Per questo chiedo a istituzioni, enti e associazioni dei consumatori di continuare a lavorare su proposte tecniche credibili, orientate ad aggiungere al nostro welfare la parola energia.»*

*Vice Minister of Italian Ministry of Economic Development Ms Teresa Bellanova*

<http://www.sviluppoeconomico.gov.it/index.php/it/per-i-media/comunicati-stampa/2036040-bellanova-aggiungere-al-nostro-welfare-la-parola-energia-per-contrastare-la-poverta-energetica>

**LET'S WORK TOGETHER ON THIS!**



# Credits

***Thanks for your attention***

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