



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

# Energy poverty: The "efficiency" of energy efficiency measures in Italy

CA-EED, PM10: WG Session 10.1

*Tackling energy poverty via energy efficiency measures*

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Italian national agency for new technologies,  
energy and sustainable economic development

NATIONAL AGENCY  
FOR ENERGY EFFICIENCY



## **Support to the Ministry of Ecological Transition; regional and local authorities:**

- Transposition of energy efficiency directives into national legislation
- Implementation of energy efficiency measures and policies
- Policy support on socio-economic issue pertaining sustainable transition



## Presentation outline

1. Updated figures on Energy Poverty in Italy;
2. Overview on energy efficiency measures (structure and data);
3. Effectiveness towards energy poverty alleviation: reflections!

# Evidence from data: 2020 updates

## Energy poverty indicators: HBS, 2020 – Istat (1/4)

**National level: 8%**

**Regional level (national thresholds): 5%-18%**

**Regional level (regional thresholds): 3.5%-15.4%**



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# Evidence from data: 2020 updates

## Energy poverty indicators: HBS, 2020 – Istat (2/4)

Italy: 8.0%



### Employment status



[Employed]: 7.0%



[Other condition]: 7.8%



[Unemployed]: 15.0%

### Number of household's components



[1]: 5.6%



[2]: 6.8%



[3]: 9.4%



[4]: 10.4%



[5+]: 12.1%

# Evidence from data: 2020 updates

## Energy poverty indicators: HBS, 2020 – Istat (3/4)

Italy: 8.0%



### Tenure status



[Owner]: 5.6%



[Usufruct]: 9.4%



[Rent]: 13.6%

### Construction year (proxy of energy performance)



[1980']: 8.3%



[1990']: 5.9%



[2000']: 4.8%



[2010']: 7.7%

# Policy response to energy poverty: fiscal deduction schemes

## Fighting energy poverty in Italy

### Social bonus

**Bonus elettricità** 

- Economic hardship  
Poor/large households
- Severe health condition  
Life-support devices

**Bonus gas** 

- Economic hardship  
Type of service

### EE: tax deductions...

**Bonus casa** 

- DPR 917/1986
- 50%

**Ecobonus** 

- L. 296/1996 (Budget law 2007)
- 50%-90% (+ other incentives)

**Superbonus** 

- L.D. 34/2020 (Decreto rilancio)
- 110%



### ...and incentives!

**Conto termico**

- MD 917/1986
- Households and PAs

**Plus:**

- NP info and training  
- LD 73/2020
- Energy communities  
- MD 16/09/2020

...and Projects, by the way

# Policy response to energy poverty: fiscal deduction schemes

## Energy efficiency in buildings: fiscal deductions (ENEA)

	Bonus casa	Ecobonus (Single unit)	Ecobonus (Condos)	Ecobonus+ Sismabonus (Condos)	Bonus facciate	Superbonus
<b>Purpose</b>	Renovation of dwellings; Renovation of common parts of buildings.	Energy performance of existing buildings	Energy performance of existing buildings (condominiums)	Energy performance of existing buildings; Improvement of seismic performance.	Renovation of vertical opaque structures of external facades.	Energy efficiency, Sismabonus, PV, charging stations in residential buildings
<b>Legal framework</b>	DPR. 917/1986 (art. 16 bis)	L. 296/2006	L. 232/2016	L. 205/2017	L. 160/2019	L. 77/2020
<b>Percentage</b>	50%	50%-65%	70%-75%	80%-85%	90%	110%
<b>Period</b>	10 years	10 years	10 years	10 years	10 years	5 years
<b>Maximum amount*</b>	E: 96K (EUR/dwelling)	D: 30k,60k - 100k (EUR/dwelling)	E: 40k (EUR/n. dwellings)	E: 136k (EUR/n. dwellings)	None	Depending on intervention

# The Ecobonus in numbers

## L. 296/2006, refinanced yearly by annual National Budget Laws

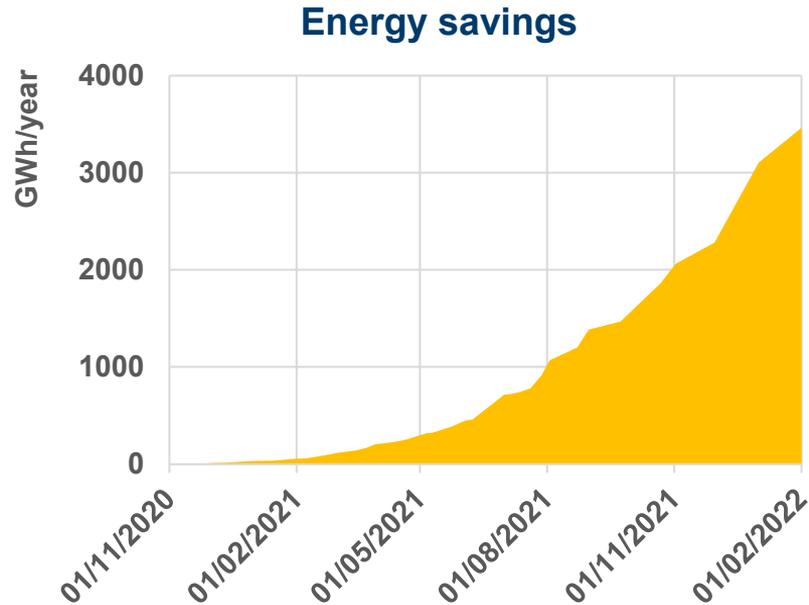
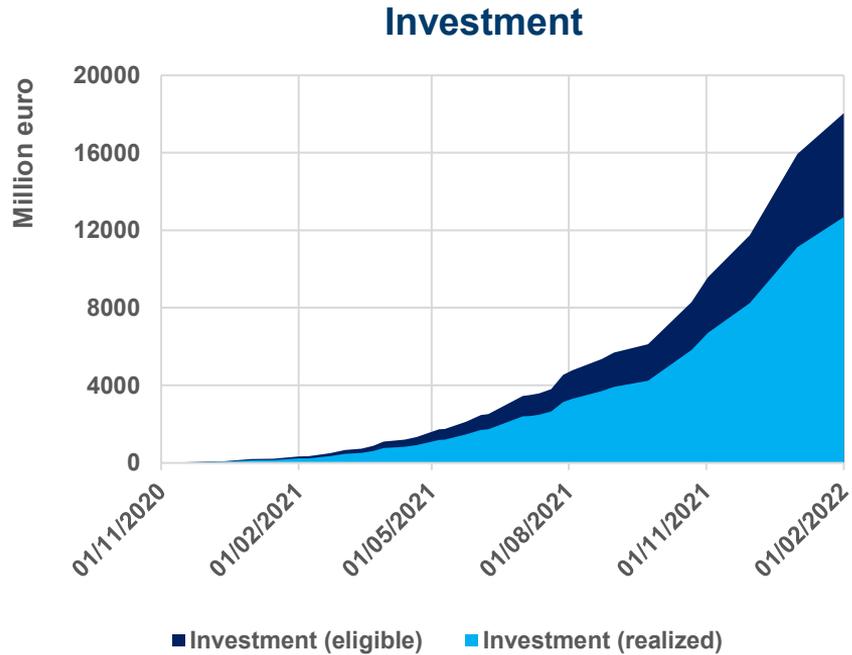
2020:

By intervention	Number of interventions	Investment (EUR million)	Energy saving (GWh/year)
Condominiums	360	103.1	24.3
Global retrofitting	2,117	175.3	69.7
Envelope insulation	14,234	504.1	296.6
Windows replacement	140,594	1,112.7	347.5
Solar shading	94,958	269.5	19.4
Solar panels for sanitary water	4,664	36.0	29.2
Winter air conditioning	230,496	1,115.2	572.9
Building automation	1,710	20.3	2.5
<b>TOTAL</b>	<b>489,133</b>	<b>3,336.17</b>	<b>1,362.1</b>

**2007-2020:**    ■ Interventions: 4.5+ million    ■ Investment: 4.5+ EUR billion    ■ Energy saving: 19 TWh

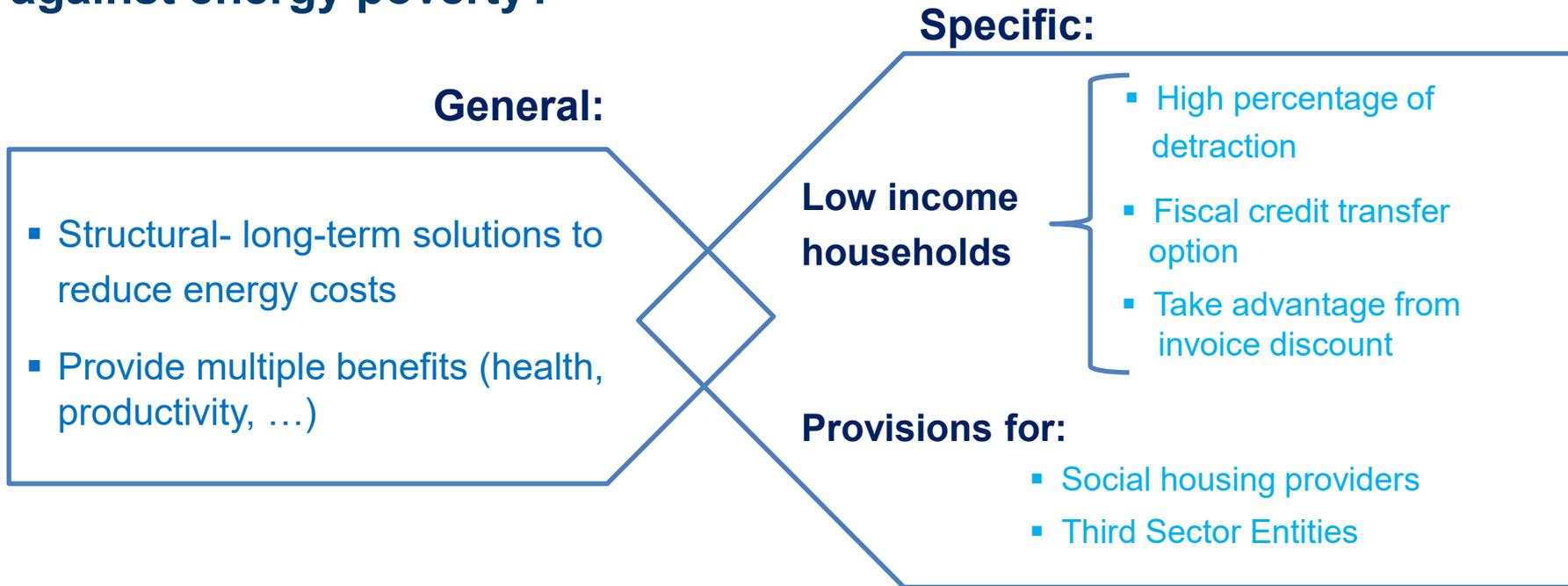
# The Superbonus in numbers

## L. 77/2020, updated by 2021 National Budget Law



# Potential impact in terms of energy poverty alleviation

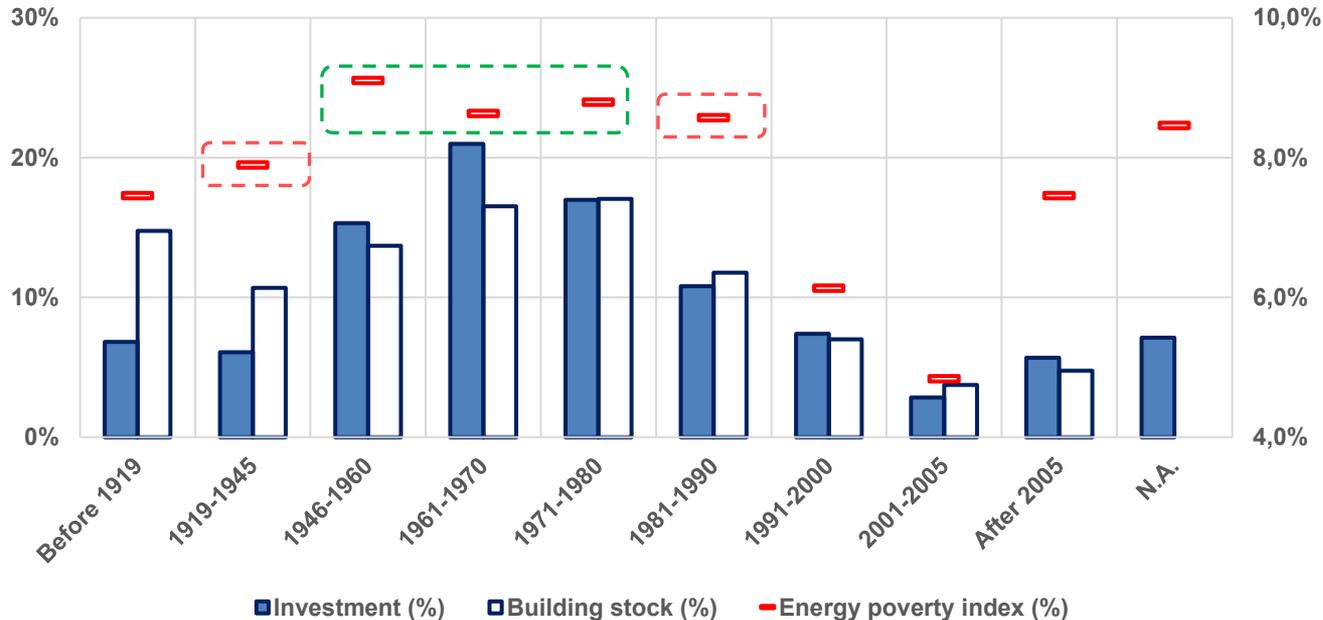
## How do fiscal deductions for energy retrofitting in buildings work against energy poverty?



# EE fiscal deductions VS Energy poverty

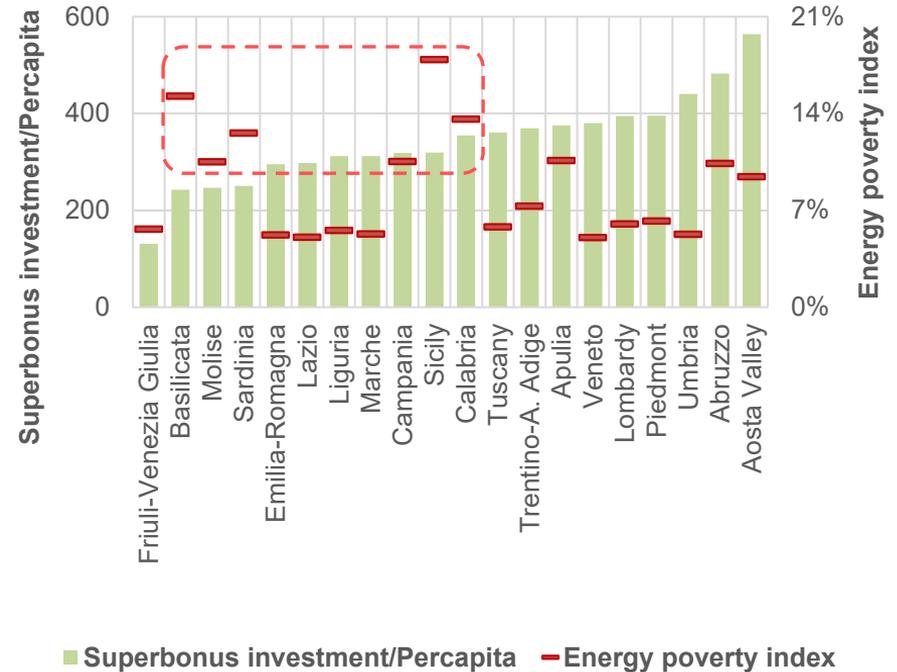
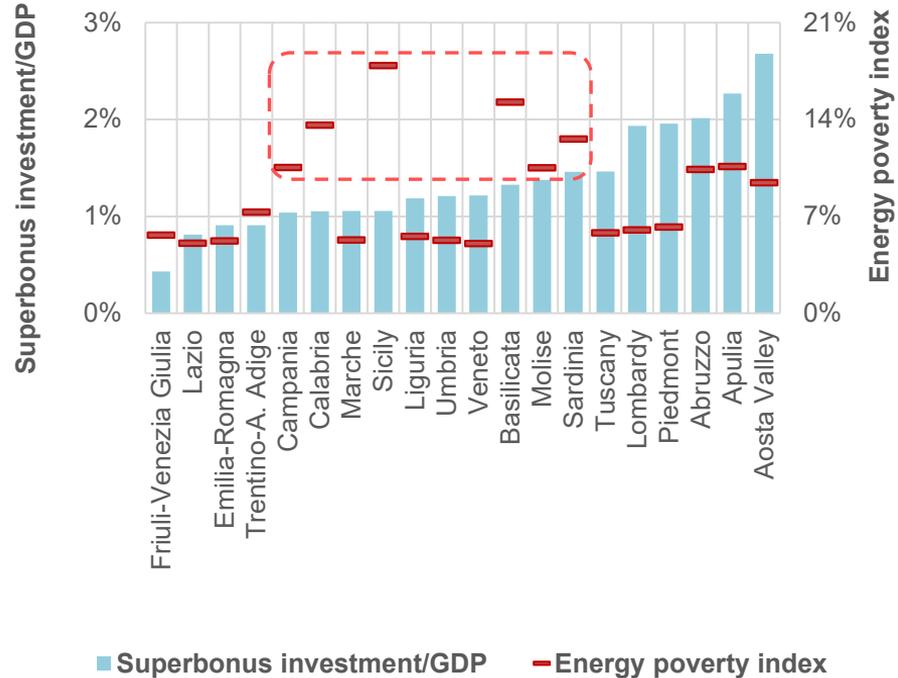
## Ecobonus (2020)

Investment and energy saving (%), Building stock (%), Energy poverty index (%)



# EE fiscal deductions VS Energy poverty

## Superbonus (at 1st February 2022)

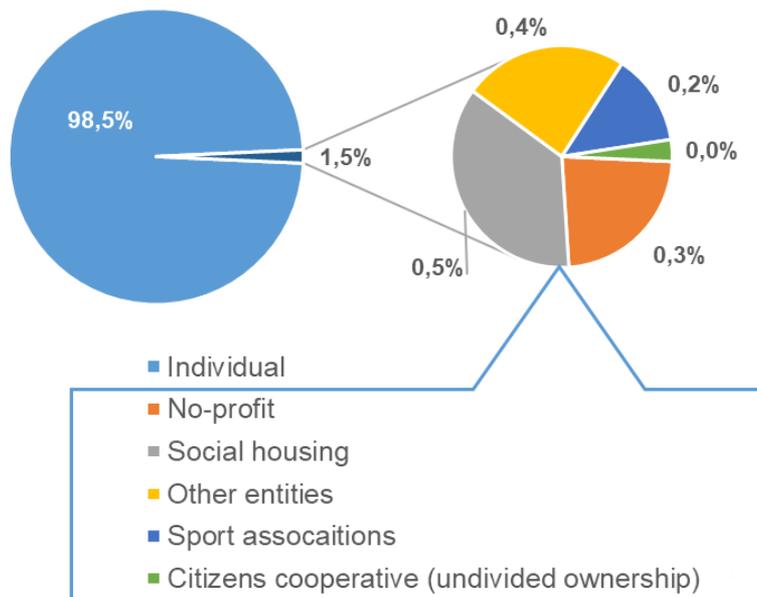


# EE fiscal deductions VS Energy poverty

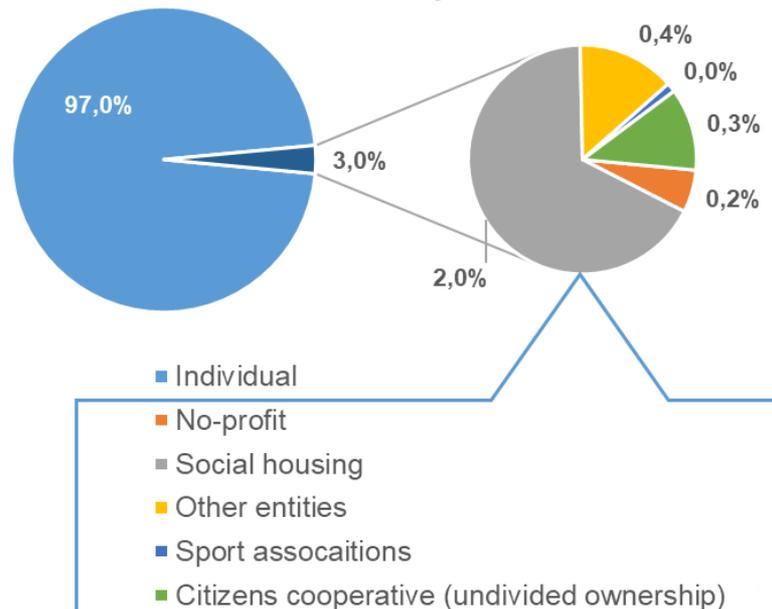
## Superbonus

### Share of investment (by type of beneficiary)

>March 2021



>January 2022



# Challenges

- **Fiscal deductions: many solutions (many actors)**
  - Set-up simplified "structural" measures
- **Superbonus: technical and procedural complexity**
  - Improvement of the EPC of the building by at least 2 classes
  - Compliance with the (techno/economic) "accuracy of expenses" principle
- **Complex tax legislation (but still evolving)**
- **Optimization among measures**
  - Superbonus/Energy efficiency; Superbonus/Renewables

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