

Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile

## The Italian Information and Training Programme: Evaluation of energy saving and analysis of drivers and barriers to energy efficiency in the industry

21<sup>th</sup> April 2021 Michele Preziosi ENEA – Energy Efficiency Department

# Information and training campaigns in the European and Italian legislative context



**Directive 2012/27/EU on Energy Efficiency** 

(41) «Member States should establish a favourable framework aimed at providing SMEs with

technical assistance and targeted information»

#### National Decree n.104/2012 Art. 13 Information and training programme

Information and training programme set up by ENEA to promote and facilitate the efficient use of energy for citizens and industry *«support, raise awareness and encourage enterprises and SMEs to carry out energy audits with subsequent intervention to use incentive instruments aimed at installing efficient technologies*»

- 1. Permanent technical tables with the main industrial associations;
- 2. Seminars and conferences;
- 3. Standardized reporting models for both operators and energy audit data processing;
- 4. Sectoral guidelines for energy audits and energy efficiency interventions



#### **Campaign targeted to industry**



Target → companies subject to mandatory energy audit requirement should notify the Italian Energy Efficiency Agency on the energy savings achieved each year, additional to those that already benefited from the White Certificates scheme (obligation scheme) or other incentive mechanisms

Identification of target companies and energy savings notified

Survey to selected companies

Energy savings from the information and training campaign



### **Campaign targeted to industry**



- Administration period → March-April 2019
- Respondents  $\rightarrow$  300 on a population of 500 companies
- Multiple choice ranging from 1 (not important) to 4 (very important)

1. Survey targeted to companies under the obligation of energy audit who notified additional energy savings to the public authorities

1.1 Companies (%) that did not obtained saving from (1) measures implemented to comply with the legislation and to remedy design errors and (2) measures implemented through state incentives  $\rightarrow$  63.33% 1.2 Companies (%) that considered the increased awareness on energy efficiency as significant role in the decision to implemented energy reduction intervention  $\rightarrow$  93.67%

1.3 Companies (%) that considered the information and training activities carried out by ENEA as "very important" in the decision to carry out energy efficiency intervention  $\rightarrow$  12.00%

2. Results multiplied by the energy savings notified to the public authority

3. Results multiplied by the correction factor (0.20)



### **Campaign targeted to industry**

| Energy s                        | avings f           | rom the i          | nformation | campaign         | for indu          | stries           |                | 7,74                   | 5  |
|---------------------------------|--------------------|--------------------|------------|------------------|-------------------|------------------|----------------|------------------------|--|
| Year<br>ktoe/year)              | 2015               | 2016               | 2017       | 2018             | 201<br>9          | Savings<br>total | 7<br>6         | 6,842                  | /  |
| 2015                            | 14.89              | 14.89              | 14.89      | 14.89            | 14.89             | 74.46            | 5              | -//                    |  |
| 2016                            |                    | 11.25              | 11.25      | 11.25            | 11.25             | 44.99            | /              |                        |  |
| 2017                            |                    |                    | 21.10      | 21.10            | 21.10             | 63.30            | 1,5            |                        |  |
| 2018                            |                    |                    |            | 4.47             | 4.47              | 8.94             | 1,5            |                        | 0,886  |
| 2019                            |                    |                    |            |                  | 6.14              | 6.14             |                |                        | 1.25   |
| umulated<br>savings<br>(ktoe)   |                    |                    | 19         | 7.83             |                   |                  | 0,5            | \                      | 0,364 0,2  |
|                                 |                    |                    |            |                  |                   |                  |                | e white Tatrelle       | altheres revenue chards on Policy mobility   |
| the cun<br>mount to<br>he energ | o 197.8<br>jy savi | 33 ktoe<br>ings no | · _        | onding<br>compar | to the<br>nies un | 4.8% of          | Nardaton scher | At. Messure Tax relief | Ar. Measure Basines Dand, O cosion Policy Ar. Measure Cosion Policy Ar. Measure Ar. Measure Cosion Policy Ar. Measure Ar. Meas |

the cumulated savings for the p amount to 197.83 ktoe, correspon the energy savings notified by companies under the obligation of energy audit



(ktoe/year)

Cumulated savings

0,307

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### Survey drivers and barriers to EE measures

- Target  $\rightarrow$  companies subject to mandatory energy audit
- Objectives → drivers and barriers to energy efficiency measures implementation
- Scale 1 (not important) to 5 (extremely important)
- Administration in 2020
- Respondents  $\rightarrow$  366/955 38.3%
- Size  $\rightarrow$  Large 55.7% Medium 33.4% Small 10.9%
- Sector of activity (NACE) → Manufacture of rubber and plastic products 12.6% - Manufacture of fabricated metal products, except machinery and equipment 8.6% - Manufacture of food products 7.8%



## Survey drivers and barriers to EE measures ITALIA

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| Mandatory legislation on energy consumption  | 3,0 |  |  |  |  |
|--|-----|--|--|--|--|
| Mandatory legislation for environmental protection   |     |  |  |  |  |
| The importance of energy efficiency measures for customers and suppliers                           |     |  |  |  |  |
| Public interest (NGOs, media, consumers) in energy efficiency measures                             |     |  |  |  |  |
| The possibility of incurring sanctions by the competent authorities                                |     |  |  |  |  |
| The activities carried out by public institutions through the National Energy Efficiency Agency    |     |  |  |  |  |
| information and training campaign to encourage the adoption of energy saving measures              |     |  |  |  |  |
| The adoption of energy efficiency measures by industry leaders                                     |     |  |  |  |  |
| Activities carried out by industry associations and/or professional organisations to encourage the |     |  |  |  |  |
| adoption of energy saving measures   | 2,4 |  |  |  |  |
| Obtaining energy tax incentives/deductions   |     |  |  |  |  |
| The adoption of energy efficiency measures by other companies in the sector                        |     |  |  |  |  |
| Obtaining incentives for savings   |     |  |  |  |  |
| Obtaining public funding   |     |  |  |  |  |
|  |     |  |  |  |  |



#### Survey drivers and barriers to EE measures



#### Role of internal and external actors in stimulating energy efficiency investments.

| Company management  |     |  |  |  |
|---|-----|--|--|--|
| Company energy manager  |     |  |  |  |
| External consultants  |     |  |  |  |
| Internal company staff  |     |  |  |  |
| Information and training activities carried out by the National Energy Efficiency Agency            |     |  |  |  |
| Information and training activities carried out by trade associations                               |     |  |  |  |
| Barriers  |     |  |  |  |
| Financial risk related to the investment (payback time and uncertainty about the economic return of |     |  |  |  |
| the investment)   |     |  |  |  |
| Other intervention priorities with respect to energy efficiency                                     |     |  |  |  |
| Financial capital needed to cover the investment  |     |  |  |  |
| Lack of incentives  |     |  |  |  |
| Uncertainty about the stability of the incentive mechanism in the medium to long term               | 2,6 |  |  |  |
| Reorganization of production processes for the implementation of energy efficiency practices        | 2,6 |  |  |  |
| Uncertainty about the actual payment of the incentive   |     |  |  |  |
| Inadequate and / or unavailable technology  |     |  |  |  |
| Access to information and expertise on energy efficiency practices                                  |     |  |  |  |
| Lack of skills within the company   |     |  |  |  |

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