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## **BUILD CONNECTION**

**An open process to develop the market of energy efficiency and sustainable constructions in Emilia-Romagna**

**Executive summary of the final report**

**March 2017**

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### **EXECUTIVE SUMMARY**

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## Introduction

The final objective of the Buildinterest project is to create a permanent unit – a Regional financing platform - that can support the development of the market potential of the “sustainable constructions” sector. The first phase of this process has been the involvement of a group of relevant regional stakeholders who operate at different levels (construction companies, banks, regional policy-makers, private investors, house-owners) with the aim of collecting their opinions and suggestions on what are the real market needs and on what policies could foster such market.

In order to do that, a series of focus groups has been organized. The present executive summary represents a synthesis of the main findings of this consultation process.

## 1. Market analysis: key data

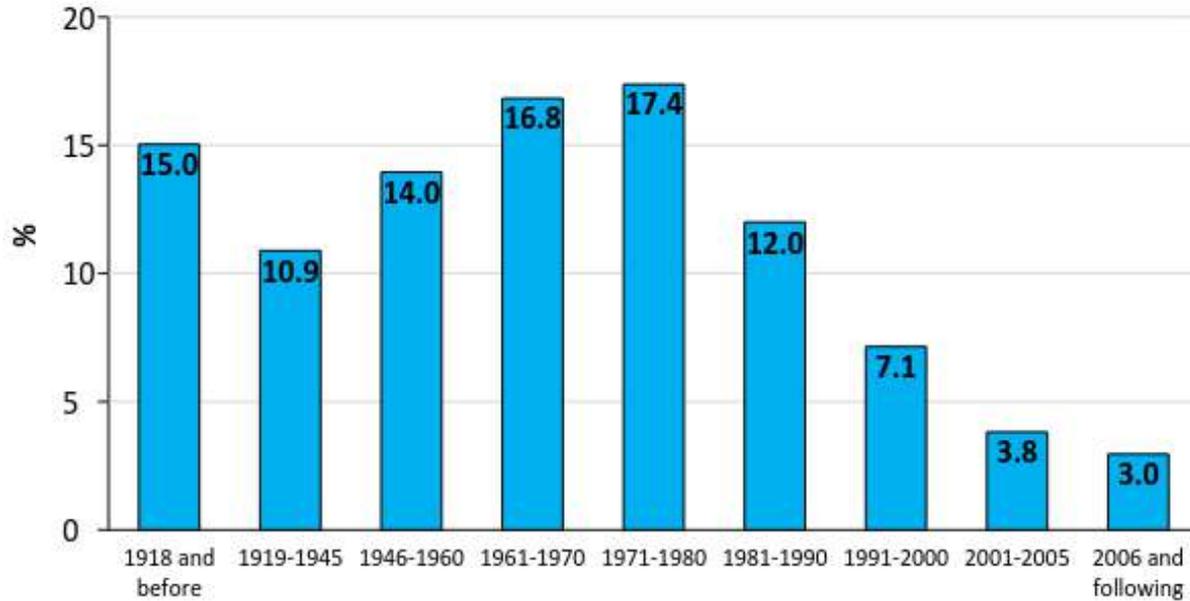
### Demand

According to the last census, 14,452,680 buildings exist in Italy, of which 84.3% have residential purposes. The total amount of residential units is 31,208,161, of which 77.4% is actually inhabited.

Most significantly, 56% of residential buildings has been built before the 1970s, when the first seismic (Law 1086 in 1971) and energy efficiency (Law 376 in 1976) regulations were introduced.

As for the public administration assets, although not all data is made public, the most accounts estimate that the Public Administrations own 800,000 buildings for a total of more than 300 millions of square meters. Most of these buildings are used for schools (71.8 millions square meters) and offices (34.8 millions of square meters).

Figure 1 – Number of residential units by years of construction - %



Source: Census Istat 2011

As for the performance of the construction sector, the economic crisis has not only caused a severe contraction of investments in new residential buildings, but it has also re-oriented the market towards a new direction. In fact, in 2015, roughly 72% of total production in the construction sector (165 billions of euros) has stemmed from extraordinary maintenance, which has continuously increased since 2004, even during the crisis.

In short, the construction sector has survived the crisis thanks to the increase in the demand of energy efficiency interventions. Proof of that is also the significant number of requests for fiscal deductions for such interventions, which amounted to more than 2 millions between 2007 and 2014.

Figure 2 – Investments in residential constructions (Millions of €) - (base year = 2010)



Source: ANCE elaborations on ISTAT data

### Supply

Energy efficiency interventions should be promoted, other than by construction companies, by a specific category of companies called Energy Service Companies (ESCOs), which operate exactly with the purpose of reducing the energy consumption of buildings. ESCOs foster these kind of interventions by proposing energy efficiency projects to companies as well as single households, taking care of all organizational aspects and then sharing the savings with the client.

In spite of the existence of several ESCOs, much of the investments in energy efficiency in Italy is still promoted “in house”, meaning that enterprises manage the interventions by themselves. In 2015 ESCOs promoted only 654 millions of euros of investments in energy efficiency on a total of 5.63 billions of euros spent on energy efficiency. A similar trend is seen also in Public Administration buildings, where ESCOs have a market share of roughly 15%.

The reason why ESCOs are not working properly in the Italian market is first of all linked to the structural dimension of these enterprises: 79% of Italian ESCOs has less than 5 million euros of revenues per year, making them inadequate to develop an aggressive business model, as well as to participate in public bids

Table 1 – Italian ESCOs profile

GROUP 1	GROUP 2 Revenues	GROUP 3
Less than 5 mln € of revenues	between 5 and 12.5 mln €	More than 12.5 mln €

Number of companies	79%	6%	15%
Average revenues	0.576 mln €	83 mln €	210 mln €
Average Net Assets Value	0.378 mln €	1.8 mln €	55 mln €
Average EBIT	0.005 mln €	0.04 mln €	2.4 mln €

Source: Nomisma, 2015

## Policy

The most relevant policy tool that has been used to trigger the energy efficiency market in Italy is fiscal deductions. In 2014 alone, roughly 300,000 requests have been submitted to this specific mechanism, which allows to get back more than half the value of the interventions in a ten year span.

In spite of its success, there are at least two elements that are still preventing this policy tool from exploiting its full potential. The first one is the difficulty to promote interventions in apartment buildings with multiple owners, due to the difficulty of finding a collective agreement.

The second critical element is the absence of an incentive to conduct deep retrofitting interventions. In fact, most energy efficiency interventions in the past years have been activated to substitute windows, which is less expensive but also less effective in terms of reduction of energy consumptions. In 2014, 209,000 requests for fiscal deductions have been activated for the substitution of windows, on a total amount of requests of 299,000.

## Financing

What is the role of the financial system in the energy efficiency sector? On the one hand, banks are strongly interested in the potential market, and they are already financing small private interventions: in the second semester of 2016 roughly 35% of loans to families have been granted to activate energy efficiency interventions<sup>1</sup>.

On the other hand, banks remain cautious, especially with regard to bigger interventions, where they are unable to assess the real risks and benefits of the operations.

<sup>1</sup> Osservatorio Prestiti Online

## 2. Results of the focus groups

### Methodology

A series of three focus groups have been activated to support the Buildinterest project in identifying strategies and tools to unlock the potential market of energy efficiency.

The meetings have been held in three separate moments: September, October and November 2016.

The first meeting has focused on the state of the art of energy efficiency in Italy: what are the tools that are available today to activate energy efficiency interventions and what are the obstacles to such interventions?

The second meeting has focused on which solutions the participants and their companies were promoting to tackle this potential market, if any.

The third meeting has focused on what collective solutions and new business models could be fostered to promote the market potential of energy efficiency.

**Table 2 – Participants of the focus groups**

COMPANY	DESCRIPTION	CATEGORY
<b>ACER Ferrara</b>	<i>Management of Public Residential Buildings</i>	<i>DEMAND</i>
<b>ACER Reggio Emilia</b>	<i>Management of Public Residential Buildings</i>	<i>DEMAND</i>
<b>BPER</b>	<i>Financial institute</i>	<i>FINANCE</i>
<b>CIRI Edilizia Costruzione</b>	<b>Research lab</b>	<i>ANALYSIS</i>
<b>Fondazione Cariplo</b>	<i>Foundation</i>	<i>FINANCE</i>
<b>Energyway</b>	<i>Start-up</i>	<i>SUPPLY</i>
<b>Harley&amp;Dickinson</b>	<i>Financial arranger</i>	<i>SUPPLY</i>
<b>Manutencoop</b>	<i>Facility management</i>	<i>SUPPLY</i>
<b>Ongreening</b>	<i>Association</i>	<i>ANALYSIS</i>
<b>Prelios SGR</b>	<i>REIT</i>	<i>FINANCE / DEMAND</i>
<b>Renovate Italy</b>	<i>Association</i>	<i>SUPPLY</i>
<b>Regione Emilia-Romagna</b>	<i>Policy</i>	<i>POLICY</i>
<b>SECI Real Estate</b>	<i>Real Estate Developer</i>	<i>SUPPLY</i>
<b>Sicrea</b>	<i>Construction company</i>	<i>SUPPLY</i>
<b>Sinloc</b>	<i>Consultancy</i>	<i>ANALYSIS</i>

UniCredit

Financial institution

FINANCE

## Key messages: what works and what doesn't

### **FIRST MESSAGE. *Uncertainty is blocking the market***

For banks, uncertainty means that they are not able to estimate the real obtainable savings and the expected cash flows. For companies who perform energy efficiency interventions, the uncertainty is related to long-term returns and clients' solvency. For house-owners, uncertainty means that they are unable to understand the real advantages of such interventions in terms of final consumptions, timing of the intervention and value-added to the asset.

In this regard, there is a strong information gap that should be addressed by providing products with very detailed and guaranteed costs, timing and savings and also by developing a more efficient way to collect and share data on actual consumption of families and apartment buildings.

### **SECOND MESSAGE. *A strong need of a public orientation***

Public administrations can play a significant role. First of all, with regard to incentives and fiscal policy, the policy-maker can activate mechanisms to promote deep-retrofitting rather than the simple changing of windows.

Other than a better use of the fiscal tools, public administrations can be powerful agents through the use of a public communication strategy to convey messages related to the common benefits of energy savings and to define specific common objectives that can motivate the public opinion.

### **THIRD MESSAGE. *There's a lack of an integrated offer.***

The potential market of energy efficiency is not fully developing because there are still too few innovative businesses in this sector. To foster energy efficiency the future offer will have to put together strong technical competences with a strong integration between the several companies that are now active in this field (construction, energy, software, maintenance, finance).

On the other hand, energy efficiency is not the same for all customers: hotels, apartment buildings, public offices, shopping malls, factories, they all present specific features that require the ability to mold the interventions accordingly.

## Recommendations for the development of the sector

### **FIRST MESSAGE. *Policy must operate on three fronts***

The policy-maker will have to act on the following factors:

- a) **Orientation of incentives and fiscal deductions towards deep-retrofitting**
- b) **Marketing and public communication initiatives**
- c) **Guarantee funds**

### **SECOND MESSAGE. *Banks can be involved by reducing the level of risk***

Banks see a strong potential in energy efficiency, but they need two instruments:

- a) The first is an independent service to assess and technically certify the interventions.
- b) The second is the launch of public guarantee funds that would reduce the solvency risk and therefore allow the banks to finance more projects

### **THIRD MESSAGE. *Demand must be persuaded to aggregate***

Small interventions are less attractive for banks. The aggregation of the demand in the form of a group of municipalities or groups of apartment buildings could increase the interest of banks and reduce the costs for the demand.

### **FOURTH MESSAGE. *Innovation is the main driver***

Innovation in the case of energy efficiency means especially two things. First, successful companies will have to be able to propose integrated products, with clear costs and benefits, that include intervention, maintenance and management.

Secondly, a new set of marketing and communication strategies will be needed to communicate the importance of such interventions in terms of collective well-being and private interests, especially with reference to the increasing value of the property.

## **3. Operational proposals for the Emilia-Romagna region**

### ***Indications for a strategic mission***

Building on the indications that the focus groups conveyed, the Buildinterest project has the ambition to expand its activities and become a reference point for the promotion of the energy efficiency market at regional level.

Such “infrastructure”, that we have called BUILD LAB, should have the following characteristics:

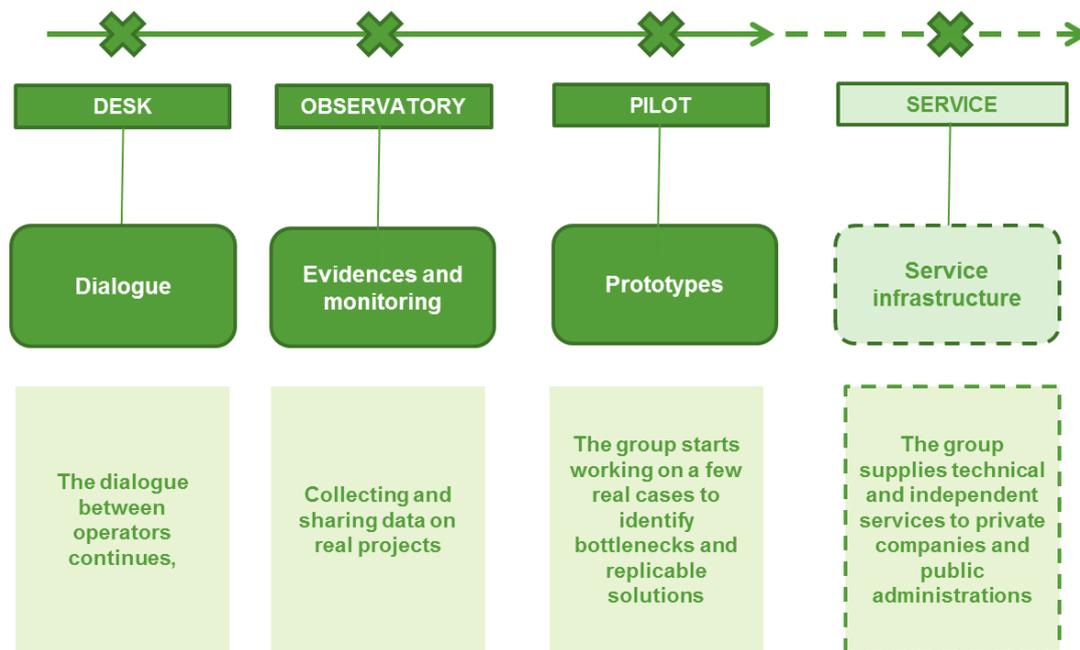
- BUILD LAB as a regional reference point, with private participation but also public commitment.

- BUILD LAB as a collective tool to identify business and policy models
- BUILD LAB as a cross-sector instrument to address the different needs of sustainability and energy efficiency
- BUILD LAB as a sustainable and competent centre to evaluate and assess the feasibility of projects

In this sense, the activities that BUILD LAB should be able to carry on are:

- Independent technical certification of interventions
- Certification of the economic and financial plans
- Policy advice to promote public interventions when needed
- Consultancy on the use of existing incentives and fiscal deductions

Figure 3 – Possible development scenarios for Build Lab



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