

## Article

# A Sustainable Opportunity to Re-Inhabit Traditional Buildings in Italy: Energy Efficiency Actions and Fiscal Incentives

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**Abstract:** In recent decades, the Italian building trade has recorded an increasing interest in the renovation and improvement of both listed and unlisted existing buildings by the Ministry of Culture, growing the debate on adapting historical buildings to current sustainability needs. The Italian National Institute of Statistics (ISTAT) observed the increase in family commuting and the attractiveness of marginal territories. Despite the scarcity of services, one-fifth of Italian small municipalities are attractive according to some indicators, primarily the demographic growth in the last three years. The COVID-19 pandemic has contributed to the re-evaluation of inland areas. Remote working and the new need for open spaces could increase the return to small villages and be further boosted by the fiscal incentives. This paper considers the evolution of last year's real estate market, evaluating whether the regulatory tools for energy retrofit and tax relief meet the trade crisis with a possible benefit of preserving historical buildings. This research cannot ignore the European background; therefore, this paper offers an overview of EU regulatory strategies for energy efficiency recently issued to increase sustainability, focusing on tax credits for improving existing buildings. In conclusion, some considerations are proposed for future in-depth research.

**Keywords:** built heritage; energy improvement; tax credits



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## 1. Introduction

In recent decades, the building construction sector has seen an increasing interest in the renovation and improvement of existing constructions involving protected and unlisted historic buildings. After World War II, Italian cities underwent a great expansion due to a real need for new housing; however, since the 1980s, much has been built to meet actual needs [1]. The “real estate bubble” in Italy (2006–2007) brought a sharp decline in investments in new construction and led to increased investment in interventions on existing buildings [2]. The Economic, Sociological, and Market Research Centre in Construction (Cresme) recorded a considerable increase in investment in the renovation and maintenance of existing buildings (+14%) from 2006 to 2012, while investments in new buildings fell from 42 to 9% [2,3]. Despite the moderate increase in investments connected to new buildings in recent times, the main activities were still maintenance interventions: in 2017, building sites on existing buildings accounted for 74% of the total construction works, with an investment of EUR 126.2 million, compared to the EUR 41.4 million spent on new buildings [3]. On the other hand, it should also be remembered that the Italian building heritage is largely composed of traditional buildings, and this leads to the need for their maintenance, to the detriment of new constructions: the building stock is made up by about 30% of buildings dating back to before 1945 (18.4% before 1929, about 12% dated 1930–1945), and by about 61% of buildings built between 1946 and 1998 [4]. The loss of commercial value of the new buildings is another cause of the reduction in new buildings: the affiliated agencies Tecnocasa and Tecnorete [5] showed that in the first half of 2019, the trade of existing buildings was 79.2% of the total. In the years 2009–2010,

there was a loss in property value of 26.7%, about seven percentage points less than the loss in value of used properties [5]. Despite the COVID-19 pandemic, the beginning of 2020 showed a limited reduction in building prices: ISTAT's IPAB index (price index of both new and existing estate, purchased by households regardless of the purpose of use, i.e., whether it is for housing or investment purposes) shows a decrease, for in the first nine months of 2020 revenues were only 14%, lower than the 24% recorded in 2012, the year of the full construction crisis [6]. In 2020, house prices increased by 1.9% on average, with new house prices recording an increase of 2.1% and existing house prices—which account for more than 80% of the aggregate index—growing by 1.9%. In the year of the health emergency, this data recorded the greatest average annual growth (+1.9%) since the beginning of the IPAB index time series (2010). Such an increase is attributable to the prices of both new and existing buildings. It was driven by northern Italy, together with the south and the islands, where the index returned to rise, while in the centre, the data remained almost stable (0.2%) [7]. The monthly analysis of the 2020 building market highlighted, above all, redevelopment designs; the decline caused by the pandemic involved the five months from April to August, with peaks of reduction in May (−57.9%) and June (−42.6%), compared to the same period of the previous year. The building activity has returned to growth since September, with an increase of 6.5% [6]. At the end of 2020 and the beginning of 2021, the situation seemed to be just as described by Roberto Busso (director of Gabetti Property solution S.p.a.), who stated that the lockdown had induced a will “to regenerate the national building stock, which is old and [...] unsuitable to meet the demand of contemporary housing” [8]. Although the future market trend is still uncertain due to the vagueness of the pandemic and the consequent economic crisis, some statisticians in the sector trace the possibility of recovery and change [9]. The possibility to activate remote working and “south working” (i.e., living in southern Italy and working remotely for companies based in the north of the country) is allowing citizens who can work from their houses to move to second homes and small towns, a new situation that could help revitalise the markets of villages, which had already shown a greater dynamism than large cities at the end of 2020 [9].

After World War II, dominant economic strategies concentrated on investments and resources in strong territories. Big infrastructures (fibre optic backbones, high-speed trains, airport development) were constructed and placed significant events in major metropolises. The result was the exit of the most dynamic populations who had the opportunity to migrate. The failure of this economic model has shifted the attention to inland areas [10,11]. Recently, projects, actions and policies have been conducted to reactivate the most marginal areas and heal inequalities. Among the action strategies, the National Strategy for Inland Areas (SNAI) is the most important [11]. Inland areas are defined as territories that are significantly distant from supply centres for essential services (education, health, and mobility), feature important environmental and cultural resources and are highly diversified by nature due to their centuries-old anthropisation. Inland areas represent approximately 53% of the Italian municipalities, hosting 23% (over 13.5 million inhabitants) of the Italian population according to the latest census [10,11]. Marginal areas have shown a strong dynamism, and the attention caused by the COVID-19 pandemic has simply speed up processes that were already underway [10]. The new forms of telework have produced new needs for working spaces and dwellings [12–14]. The recolonisation of traditional historical villages has reopened the need to adapt historical buildings to current housing standards [15].

Starting from this quick analysis of the real estate market in recent years, this research work focuses on the regulatory tools for retrofitting and the tax strategies to meet the trade crisis with the possible benefit of preserving traditional historical buildings. An important need is energy improvement, according to the principles of sustainability. This topic is contextualised in the background of European regulations and research from which Italian studies and regulations have come out. It is important to emphasise that energy efficiency is not the only condition to ensure attractiveness in smaller contexts. The

energy adaptation actions concerning the built heritage can be considered only one of the conditions capable of guaranteeing or declaring a new attractiveness of marginal urban contexts. However, it is one of the most relevant and impact factors in light of the recent economic development strategies implemented by the Italian government in response to the pandemic. The Italian government, in fact, has activated a series of tax incentives in the COVID-19 period, which have encouraged a large part of the population to start restoration, adaptation, and energy efficiency projects. This has generated reflections on the adaptation to the new needs (regulations, different uses) and its connection with the preservation of historical building techniques. These tools can lead to the re-inhabiting and preservation of traditional historical buildings. The pandemic is still underway; therefore, the actual size of the current recolonisation phenomenon cannot be determined, and it is unknown whether it will last over time. Still, the data have shown how today's situation has influenced the real estate market's performance.

The paper presents aims to lay the foundations and position the ongoing research within today's landscape influenced by the pandemic and the economic crisis. It analyses some actions improved to mitigate these effects in the construction field. It is the first part of a more in-depth research study and it presents a critical analysis of the background, of the data about real estate in Italy, and the potential opportunity to re-inhabit the traditional architectures in inland areas.

## **2. Method and Materials**

The research method includes three phases: data collecting, description and analysis, discussion. The first phase involves collecting the data on the real estate in Italy, and on the regulatory process of energy improvement and the activated tools to improve traditional architecture. The second step is the description and the critical analysis of the collected information. The presented study concludes with the discussion on data to define some of the potentials for rehabilitating traditional Italian architecture and small rural towns. The research tools are the data on real estate agencies, research centres on the construction market, and the regulatory framework on energy improvements of historic buildings.

In the last three years, energy recovery interventions in Italy have significantly influenced the market, occupying a preponderant role in building activities. Despite the existence of directives and guidelines capable of governing these situations, a different level of attention has been noted, especially concerning historical buildings of low historical and architectonic value. The interventions preferred the technical aspect and the achievement of the legal parameters more than a more outstanding balance between effectiveness and respect for the architectural and historical peculiarities of the building. These interventions' results have shown critical issues from a conservative and architectural point of view. For this reason, the next two chapters separately analyse the two main issues involved in this process: energy efficiency for historical buildings and the tax incentives implemented during the pandemic period. The conclusions of this paper propose some critical considerations and a base for future in-depth studies.

## **3. Energy Efficiency and Built Heritage: The Regulatory Framework**

The energy efficiency of the built heritage is a much-debated topic in European research, especially in the current context where the building market is concentrated mainly on the recovery of existing structures and encourages to improve the major components of historical buildings [16]. The situation is even more extensive and complex if we focus on the whole Italian built heritage. The latter includes buildings known as "value buildings", protected by the Code of Cultural Heritage and Landscape [17], and numerous structures not subjected to restrictions by the national legislation, of which the peculiar characteristics and the material and architectural integrity must be safeguarded. Historical buildings are an integral part of the urban fabric, and their characteristics contribute considerably to determining the identity of the different places. Therefore, the conservation of the architectural peculiarities is primary to keep this close interconnection unchanged. Attention

to environmental and energy issues in the construction field gives a new value to the building envelope as a dynamic and interactive interface between the internal and external climatic factors.

Until 2000, the studies focused on the sole purpose of increasing the functionality and effectiveness of a specific intervention or material. This attitude was often detrimental to the conservation of materials, as well as the technical and architectural characteristics of historical artefacts. We have been trying to overcome this approach during the last 20 years in favour of operations to satisfy specific energy and quality standards and safeguard the peculiarities that distinguish the historical architectural heritage [16]. The numerous research projects already underway since the end of the 1990s bear witness to this process. They aim to increase the knowledge of methodologies, techniques and new materials with particular attention to the theme of safeguarding [18]. Among these, we can mention the most complete projects at different scales of study and analysis: RE-START [19], BRITA in PuBs [20], New4Old [21], TABULA [22], 3ENCULT [23], EFFESUS [24,25], EPISCOPE [26], RIBuild [27,28] and BIPV meets history [29]. They considered bound and unbound buildings that are heterogeneous in terms of historical periods, materials and typologies and focused on different aspects of energy retrofit. They allowed us to verify how numerous methodologies and interventions on built heritage can be positively implemented. The common strengths were, first of all, the in-depth knowledge of the elements on which to operate, the multidisciplinary and multisectoral approach to the issue, particular attention to architectural, technical and economic characteristics, the involvement of professionals and operators, and finally, the dissemination of information and processing to raise the level of awareness of these issues. Between these, the IEE projects TABULA (Typology Approach for Building Stock Energy Assessment, 2009–2012) [22] and EPISCOPE (Energy Performance Indicator Tracking Schemes for the Continuous Optimisation of Refurbishment Processes in European Housing Stocks, 2013–2016) [26] deserve some more specifics. They have deepened the energy renovation using a typological approach, developing operational models for building-stock analysis. The TABULA and the EPISCOPE project extended the research to local, regional, and national levels in order to map the current state and energy performance for each of the building stocks considered. In addition, the project assessed the potential energy savings that can be achieved through the renovation of the building envelopes and the thermal systems, dividing them into two categories: traditional energy redevelopment and advanced energy redevelopment, thanks to the use of innovative materials and technologies [30]. The EPISCOPE project progressed in continuity with the previous one in order to make energy saving processes in the European housing sector more transparent and effective through the definition of energy improvement interventions on existing residential buildings.

Interventions on historic windows are another issue on which many of these research projects have focused, considering the wide use of brand-new thermal windows instead of intervening on existing ones. Some European institutions [31,32] have developed useful and detailed guidelines to ensure adequate energy efficiency while safeguarding the historic details and characteristics of the building. The proposed solutions were quite the same. Rather than carrying out integral replacements, even with copies of the historic windows, it is recommended to replace the simple glass with high-performance double glazing, to insert seals against drafts, or to add a second frame internally. The main guiding element for the choice remains the real state of preservation of the window, not only the reduction in heat loss [33–36].

Finally, it is interesting to mention the BIPV meets history project [29] concerning the integration of renewable technologies in urban contexts and in the existing building stock in Italy and Switzerland. The research highlights the opportunities offered by BIPV systems (building integrated photovoltaics) in building renovation by defining a common methodology for overcoming the problems of diffusion of photovoltaic systems for the energy improvement of the built heritage. The project integrates and promotes a series of

tools that allow easy and practical consultation of case studies and solutions that can be integrated into traditional construction systems.

Despite this awareness and the advancement of research, many professionals in the sector and the owners of historical buildings believe that protection and conservation are joined with extreme difficulty towards innovative energy improvement techniques even today. This consideration is generated by an erroneous concept: the newest energy efficiency methods are directed almost exclusively toward new designs. This is in reference to innovative insulation techniques, for example, through reduced thickness vacuum panels, which are rarely used due to the complexity of the operations on a protected building. These interventions can be impossible in some cases due to the characteristics of the buildings or are often discarded as too expensive or too complex from the operational point of view. A second negative factor is the lack of knowledge of the newest energy improvement techniques, which are often judged as too complex, ineffective or expensive, and often require a complex authorisation process. This is particularly evident if the object on which to intervene is part of the heritage protected by the Code of Cultural Heritage and Landscape [17]. However, case studies and regulations show that designing in harmony with the building and the environment is a priority that must become a common practice [37], even in the case of existing buildings. Therefore, the consolidation and identification of universal guidelines (as far as possible) are of particular importance in order to realise interventions that are appropriate to the areas and needs involved.

Energy improvement interventions must follow the criteria, methodologies and specificities of restoration based on conservation principles to outline a more balanced synergy with energy needs. The challenge we face is sustainability, combining the principles of environmental protection with those of innovation, competitiveness, economic efficiency and social equity, which can only be achieved through close collaboration by all stakeholders [38]. Complete collaboration necessarily requires clear and shared tools and methods which take into account the heterogeneity of all subjects involved, directly or indirectly. In Italy, the first energy-saving laws date back to the mid-1970s, but the issue of existing buildings was introduced as late as in the early 2000s with Article 6 of the European Directive 91/2002/EC [39]. The application of this directive has raised many criticisms from an architectural point of view, especially in central European countries. For example, replacing existing windows with new, better-performing ones has completely changed the perception of the structures, and interventions on external walls have a substantial impact on the landscape. These operations were often spontaneous and did not require any authorisation, as they involved non-restricted buildings. These interventions have substantially modified the shapes and materials of the elements involved, thus changing the appearance of the buildings, in some cases eliminating or hiding their distinguishing historical-architectural characteristics. The problem, therefore, shifts from the purely energy-related side (issue solved) to the architectural side. The importance of this issue and its impact on the environment and the economy has led the European Community to develop further regulations to investigate the problems that have emerged and all their possible levels. Directive 2006/32/EC [40] has established the indicative objectives, mechanisms, incentives and institutional, financial, and legal frameworks necessary to eliminate the market barriers and imperfections that hindered the efficient final use of energy. Amendments and additions were required to provide clarifications regarding the application of some points of the previous directives [28,41], merged into Directive (EU) 2010/31 [42] on the energy performance of buildings and European standard EN 16883/2017 [43]. In addition to the European regulatory framework, the publication, in Italy, of the “Guidelines for the improvement of energy efficiency in cultural heritage. Architecture, historical and urban centres” [44] by the Ministry of Culture (formerly MiBACT) in 2015 provided some interesting insights. The primary purpose of the said guidelines is to provide specific indications to the designers and staff of the Ministry itself, who must manage the energy transition of the built heritage. The text focuses extensively on analysing the technical-constructive characteristics of historical buildings, offering some considerations on the assessment of environmental quality

and the analysis of the existing plant system. The MiBACT document explores the topic of energy efficiency assessment for historical buildings and deepens energy improvement interventions. The operations concerning the building envelope are specifically analysed, and an evaluation method is introduced in terms of compatibility, reversibility and invasiveness, validated for a good number of efficiency actions. However, said guidelines are not configured as real prescriptions. They aim to equip the institutions in charge of protecting the built heritage with tools and criteria for a critical evaluation of the projects. Their aim is to “guide the intelligence and sensitivity of employees and planners for the primary institutional achievement of the protection and conservation of cultural heritage, optimising, where possible, the level of energy performance” [44] (p. 6). Finally, the UNI EN 16883/2017 standard [45] came into force in 2017. This applies to buildings officially designated as cultural heritage and to historical buildings of all types and chronology. It analyses the regulatory procedure for assessing and identifying direct operations functional to improve energy performance through the full knowledge of the buildings subjected to interventions. This cognitive study considers the building as a generic entity and then moves on to the structure, diagnostics and significance of its being a cultural resource. The standard examines the interventions and, in particular, their impact on individual technological elements based on their relative state of conservation.

The critical analysis of the regulatory framework showed the lack of an overall theoretical elaboration. Although energy saving in the restoration and sustainability fields are highly topical issues, there were no univocal and shared procedures up to 2015. On the contrary, there was a wide margin of interpretation and the need to prepare an adequate methodological framework. With the introduction of the 2015 MiBACT guidelines and the UNI EN 16883/2017 standard, a significant step was taken in this direction. The process must be embedded in the design phase of energy retrofit interventions and implemented according to the different possible actions. The MiBACT guidelines are framed in this perspective and provide some interesting reflections and useful tools for evaluating and selecting the most suitable interventions without however delving into all the necessary implications of energy improvement projects for historical buildings. The assessment criteria shown at the end of the document can be considered a valid starting point to be acquainted with the energy conditions of a building. However, these criteria should be accompanied by further reflections on construction technologies, necessary operations and their purposes. There is a need to compare the variable factors: energy efficiency before and after an intervention and the level of invasiveness and conservation for the technological units involved [46]. An intuitive checklist with all the steps required for an energy improvement project could be a useful tool to help professionals, technicians and end-users to select interventions and draft projects. Such a checklist would make it possible to provide an adequate methodological procedure in line with the MiBACT guidelines and the UNI EN 16883/2017 standard. The said tool, to be drafted by the MiBACT, would also allow introducing of analytical and evaluation processes enabling to reach minimum standards of quality and efficiency. The result, or the new starting point, would make it possible to specify and evaluate the various components for conservation and energy improvement. The purpose of these new guidelines or European directives in the next future must be to provide for a simplified system introducing common practices for the safeguarding of the historic, architectural, and material characteristics of the buildings able to guarantee effective energy improvement. The standardisation of knowledge, description and evaluation processes would bring additional advantages to stakeholders: a structured and shared container of homogeneous and comparable data.

#### **4. Fiscal Incentives and Opportunities to Restore Traditional Built Heritage**

In the early years following World War II in Italy, building changed with the industrialisation of the construction process and sites. Considering 1946 as the approximate break between a traditional way of building and an industrialised construction process, one could assume that buildings that existed pre-1946 are bearers of historical and testimonial

value [4,47]. In Italy, the number of listed historical buildings is about 60,000 [48], i.e., only 3% of the whole pre-1946 building heritage, and approximately all of this heritage is of historic value. For some categories of constructions (e.g., churches, historic municipal and university sites), the percentage of listed buildings is close to 100%, while it is much lower for other categories [4,48]. The traditional buildings, both rural and urban, are considered the most fragile architectural heritage in preservation terms. Pre-industrial rural buildings have become part of the national cultural heritage in the last forty years, but this has not been matched by duly refined attention and protection [49]. Indeed, the common popular trend has not been restoration but the banal invention of an architectural style, naively evocative of the traditions and usually devoid of any cultural connotation [49]. The new will to recolonise inland fragile areas includes aspects of socio-economic reactivation and safeguarding cultural features that are the strong points of many traditional villages. ss

The analysis by Cresme shows that the strategies implemented in response to the COVID-19 crisis are strongly transforming the national and international market [6,50] (see par. 1). The slight growth of the building activity has been encouraged by the incentivisation of improvements to existing constructions through a series of government incentive instruments, as part of the “Urgent measures in the field of health, support for work and the economy and social policies related to the epidemiological emergency COVID-19” (Relaunch Decree). The building market has been under the effects of tax deductions since 1998 first, and then since 2007, and the applicability of these tax deductions has been the subject of many extensions and changes over the years. The budget laws of 2017, 2018, 2019, 2020 and 2021 extended the application of these deductions and introduced important innovations for anti-seismic measures, the effects of which cannot be quantified autonomously based on redevelopment and restoration interventions as they are part of the complex of investments incentives [4]. Various fiscal tools (tax credits) were activated for the period 2020–2022. The ‘bonuses’ for restoration and energy retrofit are the most interesting in support of the rehabilitation of small villages and rural houses. In relation to the described phenomena, the two main important tax credits are *bonus facciate* and *superbonus*.

The *bonus facciate* is a 90% tax deduction to restore the external façades of buildings in public spaces. Private citizens can use it for their properties in the homogeneous areas A—historic centres or B—completion areas in urban planning [51,52]. However, this bonus has been now reduced to 60% of the expenses incurred in 2022.

The Relaunch Decree increased the deduction rate to 110% for energy efficiency interventions (*ecobonus*), seismic risk reduction, installation of photovoltaic systems, electric vehicles charging systems in buildings (*superbonus*). The incentive allows interventions on common parts of buildings, independent real estate units and autonomous homes; it concerns the design and implementation of energy redevelopment operations, the addition of photovoltaic systems and removal of architectural barriers, accompanied by at least one “driving intervention.” The latter includes thermal insulation of the envelope for an incidence exceeding 25% of the gross dispersing surface, replacing existing winter air conditioning systems, and anti-seismic interventions (Legislative Decree 63/2012, art. 16, cc. 1bis-1-septies). To be eligible for the *Superbonus*, redevelopment interventions must ensure, as a whole, to improve a building by at least two energy classes or, if this is not possible, the achievement of the highest possible energy class. The Decree introduced the possibility of receiving an advance contribution in the form of a “discount on invoice” to be applied by the service suppliers or as a transfer of the deduction corresponding credit to be performed by banks for the expenses incurred up to 31 December 2023 [53,54]. This measure gradually decreases to 65% for expenses incurred from 1 January 2024 until 31 December 2025.

The *Superbonus* 110% was originally due for expenses incurred from 1 July 2020 to 31 December 2021, but due to subsequent regulatory changes (Budget Law 2021, Law Decree 6 May 2021, n.59, National Recovery and Resilience Plan, Ministerial Decree 6 August 2021, Aid Decree), was extended to 31 December 2022. There are some different cases that may be entitled to extensions, depending on the types of interventions and their applicants. The deduction can be requested until 31 December 2025 for condo-

miniums' interventions, but with a progressive reduction in the tax deduction (110% until 31 December 2022, 100% until 2023, 70% until 2024, 65% until 2025). Entities with social purposes can apply for the bonus until 31 December 2023, provided that work has been carried out for at least 60% of the total intervention; only for interventions carried out in earthquake areas is there an extension to 31 December 2025.

In 2019, the applications for tax deductions were 1,763,198 and, in 2020, they were around 1,519,863. Cresme declared that in 2019 the value of investments was the highest since 1998, when the State launched tax incentives. Of the 2019 incentivised interventions, 53.9% were for extraordinary maintenance works, i.e., 38% of the overall extraordinary maintenance works carried out in Italy; in 2020, maintenance works amounted to 54.6% of total building activities [6]. Furthermore, the 2019 investments, which benefited from tax incentives, were approximately EUR 28,762 million, slightly lower than the forecasted EUR 28,963 million reported in the previous year's Report [6]. In 2020, the forecast for the first nine months estimated the value of the interventions at EUR 25,105 million, with a 12.7% decrease compared to the previous year. This value includes EUR 22,065 million for building restoration and EUR 3040 million for energy retrofit. As of 31 July 2022, 223,951 certifications of building sites were registered for EUR 39,752 billion (70.9% construction works completed), of which 121,925 certifications for single-family buildings (investment of EUR 13.72 billion and 73.4% of construction sites completed, report ENEA monthly data) [55].

## 5. Discussion

The government's fiscal tools have proved to be fundamental to revive the real estate market [8]. Various industry experts have observed an increase in the restructuring market. Mario Condò de Satriano, head of the Studies Office of the Italian Federation of Professional Estate Agents (Fiaip), underlined how, if it is true that to buy a property today, you have to deal with a credit crunch, those who can afford to buy look for large homes or investment properties. Santino Taverna, president of the Italian Federation of Business Agents Mediators (Fimaa), declared that the request for large and comfortable properties and the availability of outdoor spaces was the leitmotif of 2020 and 2021, with an increase in requests for housing in the hinterlands of large cities. Fabiana Megliola, Tecnocasa Studies Office, highlighted that while the new homes are built in such a way as to meet the new needs of the buyers, an increased interest is expected in existing buildings for which restoration works have been planned and whose energy efficiency can be facilitated by the *superbonus* [9].

This research summarised and discussed the data published by real estate agencies and public institutions. The phenomenon of the relaunch linked to tax bonuses is still underway, however. In only a few years will it be possible to definitively understand the results of tax incentives in Italy.

The main limitation of this research concerns the lack, to date, of data on the recolonisation of small rural towns from the beginning of the health emergency.

The conclusion can, therefore, only remain a hypothesis. However, two important aspects should be pointed out: the increase in household commuting and the attractiveness of small towns. One-fifth of small municipalities, despite the scarcity of services, are attractive according to some indicators, especially related to the demographic growth in the last three years [55]. With the novelty of telework and remote work, even when only applied partially, and the new need for open spaces, the tax credits could further increase the return to villages. The new economic development strategies implemented by the Italian government in response to the pandemic have also become involved in this trend. Indeed, the Relaunch Decree introduces extraordinary measures to support the recovery of the building sector through advantageous incentives for interventions aimed at improving the energy efficiency of existing buildings. The issue of energy improvement is only one of the points of contact between the global goal of sustainable development and the cultural and architectural heritage, two areas that have come very close in the last two decades. The government incentives represent a first response to the economic and social



consequences of the pandemic, the financial crisis and to the opportunities that combine the energy transition objectives with the phenomena of territorial marginalisation. These measures will significantly impact the conservation of historic residential centres, villages and built heritage, which contribute to determining the cultural and landscape value of many marginal territories.

Furthermore, this process of traditional building retrofit is strengthened by the Government's approval of the National Recovery and Resilience Plan (2021). The measure has the goal to relaunch the Italian economy after the COVID-19 pandemic and allow the country's green and digital development. The NRRP is part of the European Union's Next Generation EU program, a EUR 750 billion "recovery fund". Italy was awarded EUR 191.5 billion. As part of mission 1 (digitization, innovation, competitiveness, culture, and tourism), the NRRP Borghi project was launched for the redevelopment and enhancement of Italian villages. As a part of mission 2 (green revolution and ecological transition), there is the goal of energy efficiency and building renovation (investment: EUR 15.36 billion). The Regions opened calls for the presentation of a proposal for restoration and valorisation of the rural architectural and landscape heritage (financing under the NRRP, Mission 1, Measure 2 "Regeneration of small cultural sites, cultural, religious and rural heritage", Investment 2.2: "Protection and enhancement of architecture and rural landscape" funded by the European Union—NextGenerationEU). The calls are still in progress, and it is not possible to know the results now, but it is an important opportunity for private investors.

## 6. Conclusions

The retrofitting of buildings due to the tax breaks could have contrasting effects precisely due to the exception made for historic buildings without the ministerial declaration of cultural interest. These buildings technically cannot improve their energy efficiency by two energetic classes. Moreover, this situation would also be amplified by the current absence of shared procedures for planning and controlling these interventions, as well as considering the large catchment area that these incentives will have. Some results are visible in several old towns, because many interventions involved the reconstruction of facades with external insulation, distorting the original appearance of the historic buildings. This situation would be amplified by the current absence of shared procedures for planning and controlling these interventions, as well as considering the large catchment area that these incentives will have.

It will be essential to investigate the impact of the energy transition process on the historical buildings widespread in Italy. The systems in use today to make historic buildings more energy efficient are often not sustainable from an environmental point of view because they are poorly grounded on nature-based techniques, such as insulating materials. Even interventions designed to protect historic buildings from the consequences of climate change are often expensive from an energy point of view or too impactful to reach the efficiency parameters of new buildings. This would also allow us to think about energy management, especially on its scale and extent, at the level of units, buildings, complexes, towns, or even energy communities.

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