

## **Reasons, Concepts, and Methods for Soil De-sealing in the Regulatory Framework of the Italian Regions**

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### **ABSTRACT**

*Through the analysis of some regional laws, the contribution deals with the theme of de-sealing and actions for the selective demolition of built spaces. In the exploration of this set of laws of general interest or introduced for the treatment of more specific issues (urban regeneration and containment of soil consumption), some interpretative keys will be adopted to underline the operational translation of the “de-sealing project”. The interventions for soil de-sealing proposed by regional legislators, besides presenting themselves through different concepts (incongruous buildings, transfers of development rights, deconstruction, etc.) that propose interpretations of a complex action, highlight both the possibility of achieving different results and the need to relate to the complex planning system present in the various territorial contexts.*

## **1. THE ITALIAN REGIONS: TERRITORIAL ACTORS WITH INCREASING LEADING ROLE**

Regions have represented significant territorial subjects in Italian institutional history due to an importance that has gone beyond the ‘simple’, albeit unavoidable, legislative function. As the President of the Republic recalled in his speech on the 50th anniversary of the establishment of the Regions (with ordinary statute), these institutional figures have been “active protagonists, together with the State, for the development of the living conditions of the populations of the entire national territory”. Since their establishment with the implementation of constitutional indications on regional organisation, their functions, actions, and attitudes have been able to manifest themselves with increasing breadth and incisiveness. The conditions just mentioned, supported over the decades by the progressive strengthening of regional competences and by processes of administrative decentralisation (Filpa and Talia, 2009), are reflected in various fields and especially in legislative production. A strong imprint has been left on urban planning both from the perspective of governance and territorial planning, and the promulgation of regulations, thanks to the leadership held by a normative and institutional set-up influenced by ‘events’ of national importance. An important first signal came with Presidential Decree No. 8 of 15 January 1972, which transferred administrative functions concerning town planning, roads, and public works of regional interest to the regions with ordinary statute. This measure acted in a logic of ‘parallelism of functions’ within which the State retained, for the transferred subjects, a coordinating role to ensure the unity of the specific action of different regions (Filpa and Talia, 2009).

A few years later, another Presidential Decree (No. 616 of 24 July 1977) promoted a new and significant transfer of delegated powers in different territorial matters (such as town planning, tramways and automobile lines of regional interest, roads, aqueducts and public works of regional interest, navigation, and lake ports, etc.). In the 1990s, first the ‘Bassanini Law’ No. 59 of 1997 and, later, Constitutional Law No. 3 of 2001 (reform of Title V), represented a complex and dense transition towards the reconfiguration of administrative federalism and the distribution of competences among different territorial institutions (Cabiddu, 2010). With the definitive transition to ‘territorial government’ (Stella Richter, 2010), the semantic, normative, and cultural framework with which we continue to measure ourselves with respect to the relationship between the State and the Regions and the matters of concurrent legislation defined by Article 117 of the Constitution has been outlined.

In recent decades, the regulatory action of the Regions, in the field of urban planning and territorial government, has been lively and often characterised by events that, because of their weight, have maintained an undisputed relevance despite the passage of time or the action implemented by the constant calls for renewal encouraged by the

urban planning debate. The different laws approved have shown “a common attitude” towards the issues addressed, resulting in an increased focus on the issues of urban regeneration, reuse of existing built spaces, and the containment of soil consumption, which can also be traced to the need to fill gaps in national legislation (Torelli, 2017). This emphasis on issues now familiar to today’s disciplinary debate is not surprising, especially when observed through the concept of ‘generational analysis’ evoked by Giuseppe Campos Venuti in his presentation of the different ‘generations of urbanism’. Current interests reflect both the dynamism of an ever-changing knowledge (Gabellini, 2018) and the juxtaposition of reflections, needs and experiences at certain junctures, as “periods of urban evolution reflect general cultural, political, economic and social moments” (Campos Venuti, 1994, p. 37).

Within the regulatory framework proposed by the Italian Regions, in addition to the general issues mentioned above, other more specific indications can be recognised. The latter testify to the legislator’s interest, as part of the broad review of rethinking the city and urbanised territories, in interventions aimed at restoring soil permeability through the redesign of existing built spaces. These techniques adopted and promoted by the regulatory system refer, therefore, to the action of de-sealing built-up areas and to some concepts found in the most recent specialized and scientific literature with reference to different geographical and institutional contexts.

This contribution offers a comprehensive interpretation of the de-sealing of urbanised spaces. In the analysis of a number of regional laws, both choices aimed at favouring actions on ‘two-dimensional urban components’, such as parking lots, roads, or private surfaces and the more complex works to demolish ‘three-dimensional elements’, such as buildings of different size and function, were highlighted. In both cases, the ‘shrinkage project’ of the impermeable city (Garda, 2015) is shown as a reform action aimed at addressing the problematic conditions (Merlini, 2019) of contemporary territories, and as a fundamental preparatory act to ensure the subsequent reactivation of many properties lost by soils after their sealing (Adobati and Garda, 2020a; Adobati and Garda, 2020b).

The anthropogenic sealing of urban soils (Scalenge and Ajmone Marsan, 2008) has long been identified as a factor with the capacity to negatively affect the water cycle (Haase, 2009; Depietri et al., 2012) and to significantly reduce the volume of infiltration into soils (Hou et al., 2019) and groundwater recharge (Vurro et al., 2007). These processes do not only affect the hydrological cycle and the relationship between city and water but may have other negative consequences that may include climatic and micro-climate variations (Pauleit et al., 2005), with changes in the urban heat island in a negative sense (Scalenghe and Ajmone Marsan, 2008), or concern the threat to food security (Gardi et al., 2015) due to the reduction of potentially cultivable soils.

The annual research report of the *Istituto superiore per la protezione e la ricerca ambientale* (ISPRA), published in 2022 (Munafò, 2022), reported that soil consumption in Italy has continued to transform the Italian territory at a high rate. In 2021, the new impervious materials affected an additional 69 km<sup>2</sup> with an average of about 19 hectares per day (highest value of the decade) equivalent to 2.2 square metres of soil every second.

The contribution, conscious of the problems just outlined, deals with the strategies and actions needed to ensure increased porosity of built spaces by recalling the contents of some regional laws. In exploring this dense set composed of measures of general interest (general land-government laws) and others approved to deal with specific issues (e.g., urban regeneration or the containment/reduction of land consumption), emphasis will be placed on the recognition of the principles, objectives and techniques proposed to support the selective removal, reconfiguration and renaturalisation of built spaces.

The de-sealing mechanisms identified in the sample of regional laws considered, in addition to adopting several technical concepts that are essential to provide a common and unambiguous glossary, propose a holistic and operational translation of a complex set of interventions whose application allows the achievement of different positive outcomes. The main benefits referred to in the laws include: the prevention or reduction of hydrogeological risk (control and containment of urban flooding); contrasting the urban heat island phenomenon; recomposition and redevelopment of the natural landscape; increasing the provision of green areas; and improving the aesthetic values of urban areas.

Through an analysis with some key words, the contribute will help to recognize: the motivations that led the regional legislator to the introduction of soil de-sealing; the type of spaces affected by the application of the different regulatory indications; the technical-administrative tools considered to stimulate, favour or mandate selective de-sealing processes; and the incentive tools possibly proposed to encourage the activation of these actions. The final part of the contribution will explore the concept of incongruity, focusing on its assimilation and interpretation in the regulatory framework of some Italian regions in relation to the issue of buildings demolition and soil renaturation.

## **2. CONCEPTS, ACTIONS, AND SPACES FOR A COMMON PROGRAM**

The contribution deals with three different macro-categories of regional laws:

a) General measures intended to reconfigure the entire reference framework of urban and territorial planning (e.g., Regional Law No. 24 of 2017 of the Emilia-Romagna Region).

b) Specific laws of partial modification of existing norms introduced to deal with the recovery of existing built spaces (e.g., Regional Law No. 7 of 2017 of the Lazio Region).

c) Specific measures of partial modification of existing norms introduced to regulate the containment of soil consumption (e.g., Regional Law No. 31 of 2014 of the Lombardy Region).

After an initial identification and review of the main laws in the different Italian regions, however belonging to the three macro-categories outlined above, a more limited group of laws (10 in total) was identified. This group, which is representative of the different Italian regions, was defined by considering only those measures that deal with the topic of de-sealing, although with different declinations and purposes. The study and comparison of the various selected cases has led to the identification of five key concepts, which are presented below with reference to some specific examples. These concepts as a whole return to the main themes that the author has considered as distinctive for the implementation of the theme of de-sealing within urban planning.

The first and somewhat fundamental concept concerns the reasons given by the legislature for the introduction and implementation of the ‘subtraction project’. Among the various motivations present in the selected laws, the following emerge: the need to address the issues of hydraulic and hydrogeological risk (e.g., Regional Law No. 11 of 2015 of the Liguria Region); the need to encourage landscape restoration and interference reduction (e.g., Regional Law No. 14 of 2017 of the Veneto Region); the possibility of increasing existing ecological and environmental endowments (e.g., Regional Law No. 24 of 2017 of the Emilia-Romagna Region) the desire to increase the provision of green areas (e.g., Regional Law No. 7 of 2017 of the Lazio Region); the need to reduce or eliminate conditions of dimensional, typological, or locational contrast with the landscape, urban, and architectural context (e.g., Regional Law No. 19 of 2002 of the Calabria Region). In the different categories it is possible to recognise the sometimes-implicit reference to the concept of incongruity and incompatibility between buildings and the geographical context in which they are located (a specific topic discussed in the following paragraph). Increased awareness of an issue that is often strongly emphasised as ‘contrast’ should be seen as the driving force for the activation of complex processes of relocation of existing activities, demolition of building structures and, finally, re-naturalisation of soils.

The second theme concerns the concepts used by laws to regulate demolition actions and satisfy the requirements presented above. The main concepts recognised in the analysis can be grouped into two groups. The first group includes those terms that clearly and directly express the action of increasing and restoring permeability, often assuming the role of a synonym. In this first case, where the increase or restoration of

permeability is seen as a primary purpose, there are the concepts of *desigillazione* (desigillation) (e.g., in Emilia-Romagna's Regional Law 24/2017), *deimpermeabilizzazione* (de-sealing) (e.g., in Lombardy's Regional Law 18/2019) or *reimpermeabilizzazione* (re-impermeabilisation) (e.g., in Apulia's Regional Law 21/2008). The second category includes expressions that evoke removal as a secondary intervention or result of another priority action aimed at solving specific problems. In this case, it is possible to refer to the complex and common theme of delocalisation present in many regional laws as a hydrogeological risk mitigation measure (e.g., in Calabria's Regional Law 19/2002), or as a solution to reduce incongruities between built-up spaces and agricultural open spaces (e.g., in Lombardy's Regional Law 31/2014) by favouring environmental restoration processes and subsequent renaturalisation (as regulated, for example, by Piedmont's Regional Law 16/2018 thanks to the principle of "deconstruction").

The type of urban planning tool adopted to guide or implement de-sealing interventions represents the third issue. It should not be forgotten that this type of intervention can potentially involve all levels of planning and implementation under the national and regional regulatory framework according to different roles and responsibilities. What emerges, first, is the possibility of activating de-sealing processes through traditional planning tools (e.g., with implementation plans, in Italian *piani attuativi*), or by applying directly to building permits as in cases of less complexity and spatial scale. This first case may include all the examples that have acted by radically reconfiguring the layout of the existing building fabric, with actions of demolition and reconstruction of buildings with reduced soil coverage, transforming the morphological structure of settlements and, in some cases, modifying the functional nature of spaces (typical in processes of redevelopment of disused industrial sites into new residential districts). These were initiatives that promoted the de-sealing of soils or acted without fully understanding what was the real variety of multifunctional, hydraulic, ecological, and aesthetic benefits that, with that single implementation plan, was transferred to the city by increasing permeable green areas or de-sealing an area designated for new public spaces. These initiatives were also characterised by the choice to act on the built spaces by reshaping urban parameters and indicators, between the previous state and the redevelopment, acting with the traditional sequence of urban planning tools at the municipal level (from the urban plan to the individual intervention at the building scale).

There are cases in which the issue of de-sealing is found in new planning and implementation instruments, characterised by a certain degree of innovation, introduced by the regional legislature to address more specialised issues (such as urban and territorial regeneration). One example is represented by the *Programmi di rigenerazione urbana* (Urban Regeneration Programmes) proposed by the Lazio

Region in Law No. 7 of 2017, which aimed to operate on large portions of the built-up area and encourage urban planning, building and socio-economic interventions in compliance with the principles of environmental, economic, and social sustainability. These are “trigger instruments”, then implemented with the usual *Programmi Integrati d’Intervento* (Integrated Intervention Programmes), which address the issues of new permeability by guaranteeing forms of incentives (e.g., additional *Superficie lorda di pavimento*/gross floor area) in exchange for the reduction of the “sealed soil surface”, otherwise providing for rehabilitation for the areas freed up as a result of volumetric delocalisation interventions.

The fourth theme identified, from the standpoint of the indications and procedures adopted to support these techniques, reference is often made to volumetric incentives to be provided in urban planning to offer the possibility of increasing pre-existing quantities, or to be granted an increase in the building rights attributed by municipal plans. In addition to the aforementioned law in Lazio, which proposes increases in the achievable gross floor area in cases where the existing sealed soil surface is reduced by at least 15 percent in favour of permeable surface (Article No. 2), other regions have also followed the same approach. Lombardy, for example, in Law 18/2019 (Article No. 4) has regulated the possibility of increasing the maximum development rights provided by municipal plans or the existing floor area ratio to activate interventions aimed at ensuring a “decrease in soil footprint of at least 10 percent”. Other ‘stimulus measures’, although to be placed in more complex initiatives that also include the possibility of increasing the permeability of urban soils, concern the reduction of taxes due for the implementation of transformations (as often used to support different types of benefits).

In addition, the provision of development rights for the demolition of buildings located in peripheral conditions (and consequent renaturalisation of the areas), to be used in the context of interventions located in more accessible and central areas (through the mechanisms of transfer of building rights), can be configured as an incentive measure. This consideration also applies, for example, to underused or disused buildings not affected by the presence of historical-monumental protection constraints, which see their volumes as the only element of economic value. In these cases, the allocation of development rights to be transferred to other parties represents a positive opportunity to enhance the valorisation of buildings that would otherwise be unusable or lack significant functional value. Finally, it is worth mentioning the existence of regulations that require the mandatory demolition of buildings, with consequent de-sealing and renaturalisation of the land, as in the case of voluntary ‘volumetric delocalisation interventions’ associated with the recognition of development rights (as established by Lombardy Regional Law No. 31 of 2014), which represent the most binding and pragmatic approach for effective implementation.

The last and fifth theme considered concerns the spatial dimension and the main types of contexts indicated by some regional laws and related to the application of soil de-sealing actions. These geographies demonstrate the greater potential of some areas to be affected by de-sealing interventions due to specific conditions that the regional legislature has been able to identify and emphasise. Although there are principles and mechanisms based on the recognition of critical issues of different kinds (different types of risks, physical degradation, incompatibility with the context, etc.), connected to factors that may act singularly or jointly, some examples of areas can be recalled:

- a) Agricultural areas characterised by the presence of buildings that contrast with the context of insertion (as in the case of areas affected by the application of the “deconstruction rules” provided by Piedmont’s Regional Law No. 16 of 2018).
- b) Buildings located along linear elements such as rivers (in the case of hydraulic and hydrogeological risk) or mobility infrastructures (if the problem is related to inconsistencies or other forms of interference).
- c) Areas of the consolidated urban fabric with a strong functional, historical, or typological connotation concerned by urban regeneration (e.g., brownfield).

### **3. INCONGRUITY, DEMOLITION, AND GREENING**

In their legislative action, Regions have dealt with the issue of the “subtraction” of built spaces through the introduction of mechanisms based on the recognition of the incongruous condition of certain categories of buildings. This condition allowed the regional legislature to highlight the presence of situations of strong incompatibility between certain architectural structures and their spatial contexts, due to discrepancies whose seriousness was also emphasised by an increased or new awareness on the part of institutions for the negative effects induced by that specific presence.

The admission by the community institutions (at the local and regional level) of the existence in local territories of such ‘irremediable fractures’ to be subjected to demolition without reconstruction, as well as bringing urban planning closer to the tool of deconstruction (Coelho and Brito 2011), focused attention on what, for different reasons, appeared ‘unrecyclable’ (Lanzani et al., 2014). Upholding the principle that a part of the building asset, lacking significant aesthetic, functional, and historical values, but characterised by locational conditions that have become erroneous over time, can be reinterpreted as not reusable, culturally supports the path of demolition (Merlini, 2019). At the same time, removal consolidates the idea that such radical actions can provide an alternative to the usual policies of reuse and regeneration (Rusci et al., 2021). This change in the way of conceiving urban planning action must be carried out without underestimating the real difficulties of true cultural advancement, since the “logic of the market is very insensitive to the mistakes we have made in the past and which, in order to be repaired, require mobilisation of financial capital and

resources that are difficult to obtain if not adequately remunerated” (Clementi and Pavia, 1998, p. 57).

Recognition of these incompatible situations, therefore, has led institutions to promote as a solution the radical measures of demolishing-built spaces without their simultaneous reconstruction, according to an awareness that has grown over time with respect to the reasons for the conflict. While at an early stage the legislature’s choices were more oriented toward the treatment of landscape and ecological issues, in more recent years they have come to intercept other critical issues such as those inherent to the safety of the territory.

### *3.1 The Experiences of the Italian Regions*

By Law No. 16 of 2002, the Emilia-Romagna Region identified ‘incongruous buildings’ (*opere incongrue*) as ‘constructions and the results of land transformation interventions that, due to their visual impact, planivolumetric dimensions or typological and functional characteristics, permanently alter the historical, cultural or landscape identity of places’ (Article 10, paragraph 1). Thanks to these regulations, the Region intended to give municipal administrations, when drafting their Municipal Structural Plan (*Piano Strutturale Comunale-PSC*), the opportunity to identify these situations of incongruity, qualifying them as ‘environmental detractors’ (Stanghellini, 2010) and interferences with the context of insertion (according to a relatively multi-thematic perspective), and to define ‘the objectives of territorial qualification that with the total or partial elimination of these situations are intended to be achieved and the guidelines and directives on the interventions to be implemented’ (paragraph 4).

Subsequently, in accordance with the provisions of the PSC, it was established to act through the Municipal Operational Plan (*Piano Operativo Comunale-POC*) ‘regulating the transformation interventions to be carried out for the total or partial elimination of the incongruous structures and for the restoration and redevelopment of the landscape, architecture or environment of the site’ (paragraph 5). The approval of the POC determined the subjection of the incongruous buildings and the areas subject to restoration to a constraint preordained to eminent domain, resulting in the declaration of public utility. For the implementation of these measures, municipalities will activate a negotiation procedure with the owners of the areas, promoting the participation of stakeholders in the completion of the restoration operations through a public procedure. From the economic point of view, a relevant issue for the effective implementation of the regional policy, the Law opened up the possibility for municipalities to access regional grants to support the elimination of incongruous structures, financing their acquisition (for the expropriation compensation and procedural costs) and the implementation of restoration works (including planning costs). With the complex Law No. 24 of 2017, Emilia-Romagna renewed its interest

in the concept of incongruity and the issues synthesised by this expression, reconfirming the contents of the 2002 measure and introducing some integrations to the previous operative and applicative contents (such as the possibility of recognising development rights for interventions as an alternative to eminent domain).

The Veneto Region has also dealt with this issue on several occasions. A first important signal came with Law No. 11 of 2004, which provided for the possibility of identifying “any incongruous buildings, elements of degradation, interventions to improve urban quality and reorganise the agricultural zones” (Article 26, paragraph 1), thanks to the criteria established by the Land Use Plan (*Piano di Assetto del Territorio*). The innovation introduced by this law, later taken up by other regulatory measures in 2017 and 2019 and in other regions, lies in the use of mechanisms for the generation and transfer of development rights (Garda, 2015), identified here by the expression ‘building credit’ (*credito edilizio*). The latter concept meant the establishment of a specific freely negotiable amount granted by municipalities to various stakeholders to support the demolition of buildings and the transfer of areas by landowners to the municipal administration.

As anticipated, in the following years Veneto has taken up these aspects within two new laws that are quite innovative in terms of the topics covered. In 2017, Law No. 14 extended the meaning of incompatibility by associating it with those locational, morphological, structural, functional, volumetric, or aesthetic characteristics such as to classify the buildings as “not congruent with the landscape, environmental or urban context, or in terms of health and safety” (Article 2).

The above definition includes, for example, the regulations for building and environmental redevelopment (Article 5), which in their purpose have also placed alongside the complete demolition of incongruous structures those relating to “buildings in areas of hydraulic and geological risk, or in road buffer strips, with restoration of the natural or semi-natural soil”.

This last annotation is quite significant because it emphasises the interest in the demolition and renaturalisation of built spaces as a necessary dialectical link to intervene on different settlement structures and territorial problems, going beyond purely landscape aspects (although relevant). The main application hypotheses of ‘demolitions without reconstruction’ are combined with the scenarios suggested by Lanzani (2013) on the multiple opportunities of ‘volumetric relocations’, meaning the processes of virtual relocation of incongruous structures to be achieved through the removal of building structures, soil renaturation and reconstruction of volumes in another site. According to the author, in fact, relocations can be proposed to respond to certain needs and to measure up to different geographies such as: i) along river flooding areas; ii) within territorial settings of landscape value; iii) close to mobility

infrastructures with a significant acoustic impact; iv) within those situations that, due to excessive scattering, induce critical mobility issues.

Of the Veneto Law, it is also worth mentioning the decision to establish a “Regional Fund for Sustainable Urban Regeneration and Demolition” (Article 10), which, among the different operational cases suggested, provided for the possibility of financing the costs of demolishing incongruous structures declared to be of public and priority interest by the municipal administrations (following a proposal by the owners). Thanks to this decision, since 2018 the Region has periodically published funding calls aimed at supporting part of the costs required for demolition and soil restoration operations (up to a maximum of 50%). Overall, the different projects supported show a wide variety of situations from the point of view of location geographies, dimensional characteristics of the buildings and the functional nature of the real estate subject to intervention.

The second important ‘event’ concerned the promulgation of Law No. 14 of 2019, which right from its title (Veneto 2050: Policies for Urban Redevelopment and the Renaturalisation of the Territory) showed a willingness to propose a new and ambitious territorial policy programme. Within this measure, the ‘renaturalisation of the territory’ is reflected in different ways. Among the definitions reported in the second article, three strongly related concepts emerge that take up and further integrate the framework provided by the previous initiatives:

- a) ‘incongruous artefacts’ (*manufatti incongrui*), understood as incongruous structures or elements of degradation identified, also at the request of private stakeholders, by the municipal planning instrument.
- b) ‘soil renaturation’ (*rinaturalizzazione del suolo*), which includes the restoration of urbanised land to natural or semi-natural conditions through the demolition of buildings and surfaces that have made an area impervious. With the restoration of natural permeability conditions, including any environmental remediation, the restored surfaces will allow for the natural flow of rainwater.
- c) ‘renaturation building credits’ (*crediti edilizi da rinaturalizzazione*), which represent the development rights recognised by municipal plans following the complete demolition of incongruous buildings and the renaturation of the land.

The third definition constitutes an interesting underlining of the regional legislature, which, with this innovation, intended to emphasise the relevance of the issue of soil de-sealing and renaturation by introducing a specific category of development right within a regulatory framework that had already provided for this ‘device’ since 2004. The law also required municipalities to initiate a specific procedure to amend the urban plan aimed at identifying incongruous buildings to be subjected to demolition because of a public interest that would take into consideration the value derived for the community and the landscape as a result of the elimination of such elements. To

intervene, the urban plan assigned development rights defined based on certain parameters: i) location, volumetric or surface consistency, and intended use of the existing building; ii) costs of demolition and possible land reclamation, as well as renaturation; and iii) differentiation of rights according to the specific intended use and types of areas or zones of subsequent use.

In the regulatory framework of the Italian regions there are frequent signs that demonstrate awareness of the principle of incongruity and the different problems induced by incongruous structures. The Liguria Region, through a significant amendment to its urban planning law, introduced regulations that connected demolitions, relocations, and the transfer of development rights to hydrogeological risk. The new article established that, to ensure building and urban renewal, the municipal urban plan could identify “in the transformation areas and districts the existing buildings or complexes of buildings susceptible to building or urban renewal” also in relation to “conditions of hydraulic risk or hydrogeological instability” (paragraph 1). In cases of total or partial demolition of buildings, as in hydraulic risk mitigation and land protection interventions, the municipal urban plan must establish parameters for the use of the corresponding development rights.

### *3.2 Proposals for the Lombardy Territory*

In 2014, the Lombardy Region approved Law No. 31 of 2014 for the reduction of soil sealing, giving municipalities the possibility of identifying incongruous structures on agricultural land for which voluntary demolition and contextual renaturalisation of the areas should be envisaged. As in the case of the Veneto and Liguria regions, the demolition of built-up areas and the natural restoration of land are supported by the recognition of development rights based on criteria established by the territorial government plans (*Piano di Governo del Territorio*-PGT). The use of these building rights takes place exclusively in appropriate areas always identified by the urban plan within the existing urbanised area. The last comment recalls the need to correlate, with the fundamental contribution of the municipal town-planning scheme, the demolition of buildings located outside the urbanised area with selective densification operations of the urban space (involving fabrics or areas subject to urban redevelopment/regeneration). In this way, using transferable development rights would activate a principle oriented toward territorial rebalancing, aimed at intervening on certain ‘contradictions’ present in contemporary territories (such as the presence of urban fabrics characterised by too low densities).

To support municipalities in dealing with these issues, Law 31/2014 provided for the publication of specific guidelines for municipal urban plans to be considered when identifying incongruous structures on agricultural land. The criteria issued in 2016 by the Regional Council further deepen the concept of incongruity by looking at it with

the attention to complexity and variety in interpretation observed in other regional initiatives. Different issues were addressed in the text. The first of these concerned the need to provide local administrations with a list of characteristics to be considered to recognise the status of incongruous building. Among the conditions mentioned in the act of the Lombardy Regional Government, we recognise connotations of different nature, which can be traced back to a few categories:

- a) Formal and functional characteristics of the building: i) site plan dimensions; ii) functions and uses; iii) building typology; iv) materials and state of maintenance.
- b) Interference with the qualitative values of the territorial context that may be characterised by the presence of: i) agricultural areas of high productive value or multifunctionality; ii) a particular landscape-environmental system; and iii) protected areas and/or other components of the ecological network.
- c) Existence of territorial risks associated, for example, with the presence of rivers.

The second topic concerns the recognition and implementation of development rights that are considered as a form of compensation for the de-sealing of built-up areas. In particular, municipalities are suggested to determine development rights on the basis of: i) the size of the incongruous structures; ii) the level and type of incongruity and the degree of priority that the municipality assigns to the removal of the buildings and the contextual redevelopment of the agricultural area; iii) the costs for demolition and soil restoration (including any interventions for soil reclamation); iv) the possible value of the receiving areas as they are generally located adjacent to other buildings and in accessible areas with more services.

Soil restoration, the last issue addressed by the Resolution, represents a step with strong design implications due to the ability of the entire process of building demolition and renaturalisation to affect the aesthetic, ecological, landscape, and systemic values of the territory. This consideration is valid for the choice of building fabrics or single buildings to be subjected to demolition, which must be supported both by the will to voluntarily remove 'inconvenient presences' that the community has recognised as problematic, and by the choice to reinforce the characteristics of a particularly vulnerable part of the municipal territory. The Regional Council affirmed the importance of these specific interventions in configuring themselves as possible elements of the rural-landscape-environmental system. It is also emphasised that agricultural spaces and landscape valued areas on which to promote the demolition of incongruous structures must be identified in function of the implementation of the ecological and/or green network, the enhancement of areas of environmental quality, the reconstruction/consolidation of the rural landscape, and river redevelopment actions. Local administrations and municipal planning instruments acquire a different role in the construction of an overall project of the open space system and restoration

actions, so that they are in line with the objective of upgrading the agricultural space and landscape value.

As the Resolution states in its final part, it is necessary “to consider the identification of the object of the demolition operation not so much and only as an operation of elimination and consequent creation of a ‘void’, generating an aesthetic-visual improvement, but also as an opportunity for the redesigning of the agricultural context and landscape value, which produces an increase in the quality of the landscape and, more generally, of the entire territory”.

## **CONCLUSIONS**

In the regional legislative initiatives considered, the issues of built-up space removal and soil de-sealing emerged as a complex and multifaceted theme. This is an assumption that finds support in the variegated repertoire of expressions found in the laws to recall – in some cases latently as the contribution wished to underline – the different objectives sought with subtraction, the importance given to it, the mechanisms adopted for its implementation and promotion, otherwise the spatial contexts of application. This plurality, regardless of the different treatment and relevance given by regional policymakers to this set of actions, demonstrates the presence of selective demolition in the toolbox of spatial government institutions.

The inclusion of this issue in the regulatory framework witnesses the determination of the regions to deal with the problems produced by excessive soil sealing (increasing temperatures in urban areas, hydrogeological risk, losing Ecosystem Services, etc.) with more radical actions, like teardown, in addition to the maintenance and reuse of existing built spaces.

The positive remark cannot compensate for some critical issues. As in the case of other, much more extensive, and complex issues (e.g., urban regeneration or soil sealing), there is still a lack of a uniform and shared approach between the various regions due to the absence of (for example) a national-level law dealing with these issues. A second aspect not to be underestimated concerns the implementation dimension of this type of action. Both the technical and procedural complexity required to initiate and manage a de-sealing process, and the economic costs required to carry out de-sealing (for demolition, debris removal, soil clearance, site preparation, etc.) represent critical elements that can condition the decisions of private and public stakeholders. These are two important issues that may undermine the operational implementation of an otherwise unquestionable principle that still struggles to find its proper place in ordinary land planning and management.

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