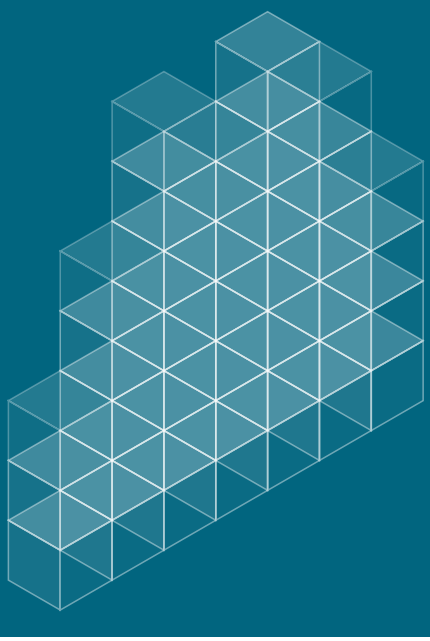
INSTANT REPORT

Offsite Construction for Italy's Housing Plan

How industrialised construction can support
the delivery of Italy's Piano Casa.
Evidence from Italian cases and policy recommendations.



EDERA

offsitehub ITALIA

October 2026
English edition

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01 EXECUTIVE SUMMARY

Summary

Italy's Piano Casa sets out to tackle the housing crisis with ambitious targets and limited resources: about 100 000 homes in ten years, starting with some 60 000 public housing units that cannot currently be allocated. This calls for lower and, above all, predictable costs and timescales: construction costs in Italy rose by 21% between 2020 and 2025 and are still rising in 2026 because of the energy crisis.

The European Commission has adopted an affordable housing plan. It estimates that more than 2 million homes are needed every year, about 650 000 more than are built today, including 100 000 to 150 000 in Italy. The first pillar of the European Affordable Housing Plan aims to boost supply, including through productivity and innovation in construction. The Commission stresses the need to increase supply in volume and productivity by industrialising construction value chains and moving part of the work from the site to the factory (offsite).

Offsite or industrialised construction produces parts of new or renovated buildings in a factory, with a quality and a technical and aesthetic variety unlike the "old prefabrication". International studies and experience point to several advantages: shorter timescales and lower costs under certain conditions, fewer defects, fewer accidents and deaths at work, lower life-cycle emissions.

The Italian evidence gathered by EDERA with companies and designers already using offsite methods shows a broad and mature range of solutions for both new construction and renovation. In new construction, the best Italian practices confirm the benefits observed internationally: timescales 20% to 50% shorter and costs up to 15% lower. On the first projects costs may match traditional ones, or exceed them while the process is set up; savings grow with volumes, through economies of scale and learning.

In industrialised renovation, using the EnergieSprong model, 1533 equivalent dwelling units have already been renovated, from Trento to Catania. Studies on public buildings in Milan show up to 60% less time on site when energy and seismic upgrading are combined. On a single project the best solutions cost about the same as traditional ones, and up to 15% less when replicated across a few dozen similar buildings. Where energy efficiency and seismic upgrading are combined, savings can reach 30% even on a single project.

These benefits can be secured from the first calls for tenders under the Piano Casa, for example with lots of similar buildings, which create economies of scale, and with award criteria that reward delivery time, life-cycle cost and guaranteed performance as well as price.

On the policy side, we suggest delivering 20% of the Plan's new construction and deep renovation offsite, with well-organised demand, in cooperation with the best-equipped local authorities, with dedicated award criteria and fast-track procedures.

In the medium term there is a case for tax support for companies investing in industrialisation and digitalisation, and for an industrial policy for offsite construction geared to social housing for students, older people and workers, and to schools.

Credits. Document prepared by EDERA under the scientific supervision of Politecnico di Milano (working group of the Department of Architecture, Built Environment and Construction Engineering, led by Prof. Gabriele Masera), with the support of Dr Paola Delmonte (Senior Advisor, NEAR S.G.R.) and Prof. Ezio Micelli (Università Iuav di Venezia, member of the European Commission's Housing Advisory Board).

02 FOREWORD

Introduction

Housing lies at the heart of Europe's social, environmental, economic and political balance. Italy's new **Piano Casa** sets out to tackle the housing crisis with ambitious targets: implementing it quickly and effectively is of the utmost importance if housing is to work again as **social infrastructure**.

Unlike the debate under way in Brussels and the initiatives of other European countries, Italian policy and public debate focus mainly on resources and procedures, and take the way homes are built or renovated as a given: indeed, little has changed in recent decades. Yet construction is facing a **paradigm shift**, already pursued successfully by a number of companies and by some national policies: **industrialisation**. Moving work from the building site to the factory can save time and money and improve quality, safety and efficiency, all of which are essential for the Piano Casa.

In 1949 the *INA-Casa plan* deliberately chose little mechanisation and a large workforce, and excluded prefabrication: its purpose was to create jobs [1]. Today the situation is the reverse: skilled labour is scarce and Italian companies struggle to find trained construction workers [2]. This is why the **European Commission**, which has also taken up the recommendations of its *Housing Advisory Board*, is backing the industrialisation of construction [3].

Basing a national policy on generic international statistics is clearly difficult and risky, without being sure that the technology fits the built environment and the architectural and industrial culture of Italy, and without knowing whether the expected benefits are really within reach of Italian value chains. We have therefore gathered and summarised, for policy makers and implementing bodies, a general overview of offsite construction and the **first national evidence** on its results in terms of time and cost. These are the results of the many Italian companies and value chains now brought together in **Offsite Hub Italia**.

Although it takes the short form of an *instant report*, we believe it offers a first body of knowledge for legislators, public bodies and the companies that will share responsibility for implementing the Piano Casa. The studies and reports referred to, together with EDERA and its stakeholders, remain available to support any further analysis that may be needed.

EDERA

EDERA

EDERA Srl Impresa Sociale is a national non-profit innovation centre promoted by Near SGR, Fondazione Housing Sociale and ANCE, the Italian builders' association. It tests innovative solutions that reduce the time, cost and environmental impact of construction, and builds a market for them, working towards a sustainable and inclusive built environment.

It develops a national market for large-scale new construction, renovation and temporary housing through open innovation initiatives co-funded by its member companies, and supports public and private operators in developing highly productive and sustainable building solutions. In Italy it promotes and coordinates EnergieSprong, the international initiative for large-scale deep renovation, and Offsite Hub Italia, the industrialised construction network of 90 organisations.

03 THE PIANO CASA

Italy's housing plan: the Piano Casa

In response to the housing crisis, the Council of Ministers approved the Piano Casa on 30 April 2026; the decree (Decree-Law No 66 of 7 May 2026) was converted into Law No 116 of 2 July 2026. The aim is to make about one hundred thousand homes available in ten years, with public resources that are limited compared with needs.

over 650 000
households on Italian municipal waiting lists for public housing [4]

about 60 000
public housing units that cannot be allocated for lack of maintenance [5]

+21%
rise in the construction cost of a residential building between 2020 and 2025 [6]

THE PLAN AT A GLANCE · THE THREE PILLARS

The Piano Casa rests on three pillars: one mainly publicly driven, one driven jointly by public and private actors, and a third mainly privately driven.[a]

FIRST PILLAR **Public housing (ERP) and social housing (ERS), mainly publicly driven** Articles 2 and 3	An extraordinary programme to make public housing units excluded for lack of maintenance available for allocation again, and to recover public buildings for social housing, to be identified through a forthcoming public call: from 2026 to 2030, €700 million is available (about €31 000 per dwelling), managed by Invitalia through calls for proposals addressed to local authorities and the former IACP public housing institutes for ERP, plus €270 million for ERS. A further €4.8 billion could be added from 2027 to 2034. The Extraordinary Commissioner, the architect Felice Squitieri, in office until the end of 2027, assesses needs and plans the projects.
SECOND PILLAR **ERS and ERP, publicly and privately driven** Articles 7 and 8	A fund of funds, the Fondo Housing Coesione (Housing Cohesion Fund), managed by Invimit SGR, with regional sub-funds fed by national and EU cohesion resources: €100 million of public units in 2026, to which up to about €3.5 billion from the past and new EU programming periods may be added, channelled through the regions. Invimit sets a minimum target return of 2% over the life of the fund, at least 30% private co-investment and homes delivered by 2030, mostly ERS but with a smaller share of ERP. Under the second pillar, Invimit has just launched a public call to identify potential prospects [7].
THIRD PILLAR **Integrated housing development, mainly privately driven** Articles 9 and 10	Private investment programmes with simplified procedures: at least 70% of the investment must go to price-controlled housing (edilizia convenzionata), with prices or rents at least 33% below market values and a thirty-year commitment. It is open to all, but direct investment programmes above €1 billion, including those spread over several development areas in different places, can access a substantial package of incentives once declared of national strategic interest and placed under an extraordinary commissioner appointed by the Presidency of the Council of Ministers: price-controlled floor space deducted from the project's gross floor area, a fast track and wide planning and administrative derogations, and remediation costs offset against development charges within the limits of municipal budgets.

[a] "Mainly", because all three pillars are open to forms of public-private partnership.

04 THE PIANO CASA AND OFFSITE

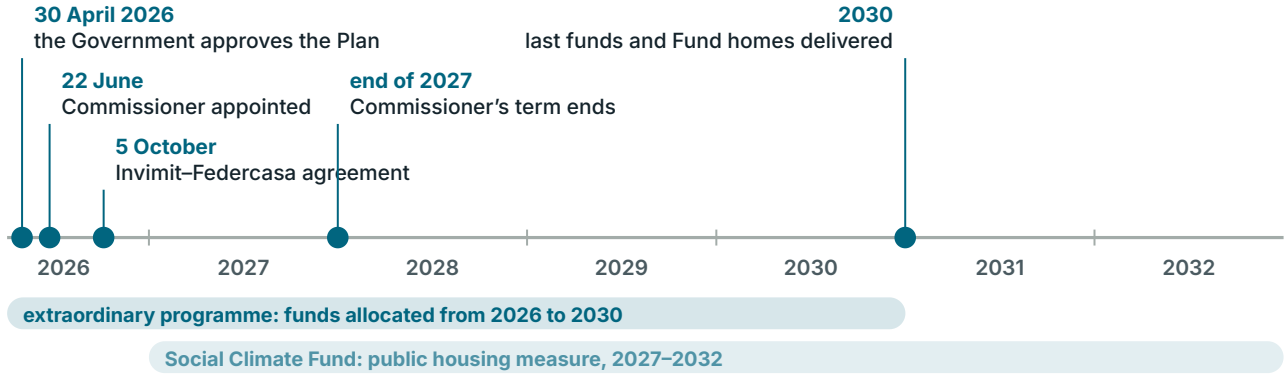
Piano Casa: resources and milestones

Resources of the Piano Casa: allocated and linked

2026	2027	2028	2029	2030	Total
116	**216**	**228**	**180**	**230**	**970**

€ million allocated by law to the extraordinary programme. Also linked to the Plan are part of the Social Climate Plan, worth about €9.35 billion in total, which earmarks about €1.95 billion in 2027–2032 for the energy renovation of public housing [8], part of the grants to municipalities for urban regeneration (€4.8 billion) and the cohesion resources in the regional sub-funds of the Fondo Housing Coesione (about €3.5 billion) [7].

Milestones of the Piano Casa





Public housing built with a prefabricated system: 28 ALER homes in Monza. Photo: Wolf Haus.

What the Piano Casa requires

Many homes in a few years, with limited resources and rising construction costs: the extraordinary programme funds about €31 000 per dwelling, the Fondo Housing Coesione aims to deliver by 2030 with a modest target return, and integrated housing development must carry a 70% share of price-controlled housing.

Where offsite comes in

Predictable costs and short timescales are needed for all three pillars. The following pages summarise the EU approach, what offsite construction is, its documented benefits and the first Italian evidence; pages 11–13 show how it can be used in the Plan.

05 THE EUROPEAN FRAMEWORK

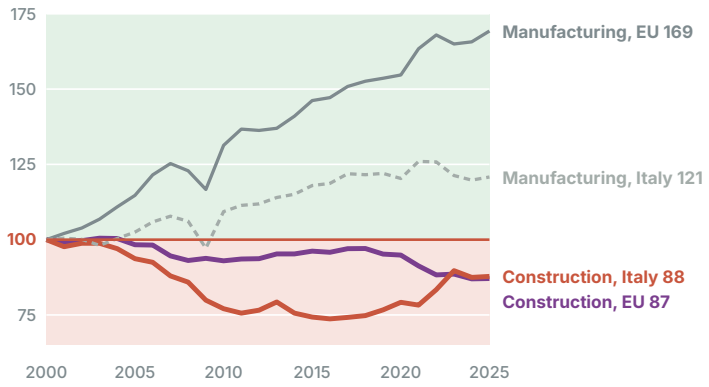
The EU approach: boosting supply by strengthening the value chain

According to the Commission, the Union needs more than two million homes a year, about 650 000 more than are built today, of which 100 000 to 150 000 in Italy, requiring additional investment of about €150 billion a year; since 2013, house prices have risen by more than 60% and rents by about 20% [9].

The European Affordable Housing Plan, presented by the Commission on 16 December 2025, rests on four pillars: boosting supply, mobilising investment, enabling immediate support while driving reforms, and supporting the most affected. The first pillar focuses on productivity and innovation in construction, given the sector's gap with manufacturing. The European Strategy for Housing Construction promotes offsite construction and harmonised standards for construction products, a process in which EDERA takes part on behalf of Offsite Hub Italia. With its Recommendation of 9 September 2026 on housing affordability and supply in areas under housing stress, the Commission calls on the competent authorities to support the procurement of housing units built using modern methods of construction (MMC: design and production techniques that move much of the work from the site to the factory or make on-site work more efficient) and to develop harmonised European standards for offsite construction products and modular systems.

Labour productivity, index 2000 = 100

Below the red line, productivity is lower than in 2000: construction −13% in the EU and −12% in Italy; manufacturing +69% and +21%.



Gross value added in volume per hour worked. Source: Eurostat, October 2026 [10].

What this means for Italy

Of the four pillars, investment, support and protection already feature in the Italian debate and in the Piano Casa. The time has come to address the value chain as well, and building methods that can reduce costs and timescales. With low productivity, far below that of manufacturing, building the same homes takes more resources, time, materials and energy. Beyond providing funding, public demand can influence how homes are built: this is the lever proposed by the first European pillar.

SOME NATIONAL HOUSING POLICIES BASED ON OFFSITE CONSTRUCTION

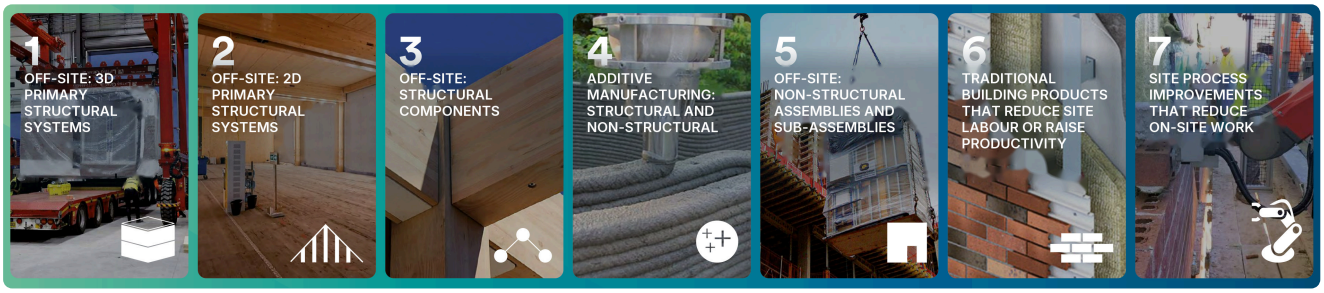
United Kingdom	as early as the Autumn Budget 2017, five government departments committed to a presumption in favour of offsite construction across suitable capital programmes from 2019 [11]; in the Affordable Homes Programme 2021–26, Homes England required its strategic partners to deliver at least 25% of homes using modern methods of construction [12].
Ireland	the 2025–2030 plan aims for at least a quarter of new social and affordable housing to be delivered with modern methods [13]; a single-stage approval process was announced from 1 July 2025 for all standardised social housing projects up to €200 million, which must use standardised house types and specifications [14].
Germany	the federal programme for efficient buildings adds a repayment bonus of 15 or 5 percentage points on subsidised loans for serial renovations with prefabricated façades, depending on the efficiency level [15]; between 2021 and 2023 the federal serial renovation scheme (BAFA) also supported companies' investment in production capacity [16].
Spain	the State Housing Plan 2026–2030 increases the subsidy for homes built with advanced industrialisation; a €1.3 billion ten-year programme supports the sector; in tenders run by the state housing company, industrialisation accounts for up to 10% of the score [17].
Netherlands	the national programme [18] aims for half of new homes to be built industrially by 2030, from a baseline of 21% in 2024 [19], and supports standardised renovations.

06 OFFSITE IN ITALY

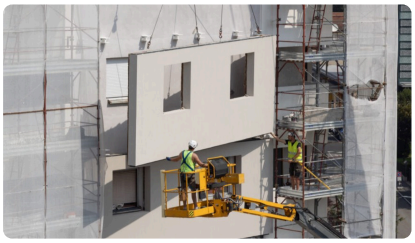
Offsite construction in the Italian context

Offsite refers to a way of building in which major parts of a building, flat panels or three-dimensional modules in timber, steel, concrete or hybrid systems, are manufactured in a factory and then assembled on site; applied to existing buildings, this approach is known as industrialised renovation, of which EnergieSprong is one of the models. The building site becomes mainly a place of assembly: there is less work at height, with fewer unforeseen events and greater safety, and some phases run in parallel.

Offsite construction is part of what are known as Modern Methods of Construction, a broader innovation ranging from digitalisation to greater use of factory production and automation, which moves a sector that has long remained craft-based towards an industrial approach and raises its productivity. The paradigm shift concerns the whole process as well as the technology, including organised demand, design for manufacture, and a new value chain and services. In Italy its feasibility has been demonstrated by the opening of the market in renovation and new construction, as the work of EnergieSprong and Offsite Hub shows, but the move to large-scale replication is needed to realise its benefits. A more recent field of application, which can be addressed with the same strategy but different technological approaches, is the refurbishment of dwelling interiors (categories 6 and 7).



The seven categories of Modern Methods of Construction. Source: Offsite Hub Italia, based on the MMC Definition Framework.



Installation of an offsite façade panel for the retrofit of the ALER towers in Via Russoli, Milan.* Photo: Beatrice Arenella.



A prefabricated three-dimensional module, complete with windows, placed on site by Wood Beton. Photo: WB Factory.

How it differs from the old prefabrication

The heavy prefabrication that arrived in Italy in the 1960s relied on a few closed, rigid systems, which tended to repeat the same buildings without adequate variety or architectural and technical quality [20]. Today digital production and the availability of open, flexible systems deliver speed, durability and less waste and fewer errors, without losing architectural quality and variety, in renovation too. The work of EnergieSprong shows this: for the same type of public housing building, it received industrialised designs that differ widely in performance, materials, technology and architectural result, adapted to different urban and social contexts.



Tower, today



Slab block, today

Via Bagarotti, Milan: tower and slab block today and in the designs of four supply chains in the EnergieSprong Milano Call for Solutions. Images owned by the supply chains.

* Project carried out by A2A Calore e Servizi with Wood Beton, Ricehouse, Arpostudio and ING.

07 HOW IT WORKS IN ITALY

Industrialised new construction and renovation in Italy

Offsite new construction

Industrialised processes and technologies make it possible to build new sustainable, high-quality and high-performance buildings, thanks to a level of production control that a traditional, more craft-based approach cannot guarantee. Factories produce complex building elements, where needed already finished and complete with the items set out in the design (windows, building services, finishes): two-dimensional elements such as walls and floors, but also modular and volumetric units such as bathrooms or entire sections of a building. All that remains to be done on site is the foundations, preparatory works, installation of the offsite elements and completion works, coordinated with and in parallel to factory production.

Similar building systems can be used for temporary, demountable and reusable buildings, which are also strategically important in complex urban regeneration settings.

Industrialised deep renovation

Today's digital technologies also allow an industrialised approach to renovating existing buildings. This is the EnergieSprong model, born in the Netherlands, established in several European countries with more than 40 000 homes renovated, and represented in Italy by EDERA since 2021. The process has four phases: (1) laser scanning of the building to create a digital model, used for (2) integrated BIM design of architecture, structure and services and for (3) factory production of prefinished façades and roofs, complete with windows and services; (4) logistics, safety and installation on site, often without scaffolding. The digital model is then used to monitor performance and manage maintenance.

In Italy this approach has already renovated 1533 equivalent dwelling units, including care homes and schools, with high performance guaranteed over the long term, shorter works and little disruption for residents, who stay at home. Design-level feasibility studies by EDERA have confirmed that it can be applied to the 28 000 homes of Milan's public housing, with significant results for replicability, time and cost on groups of similar buildings [21].



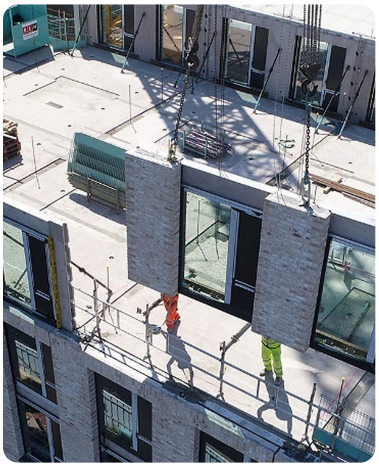
Tuna Palace, Udine (2015): eight-storey housing with a prefabricated timber structure. Photo: Wolf Haus.



Prefabricated three-dimensional modules being assembled on site. Photo: WB Factory.



1 energy module with heat pump · **2** insulated roof with integrated photovoltaics · **3** highly insulated prefabricated façades, windows included



Prefabricated three-dimensional modules placed on site for a new residential building. Manufacturer and photo: FP McCann, fpmccann.co.uk.

Bringing vacant homes back into use

This is the first objective of the extraordinary programme: existing homes that cannot be let because they are unfit for habitation, with interior works on services, kitchens, bathrooms and finishes, repeated across many often similar dwellings to restore the necessary standards of hygiene, safety and comfort.

Innovation here is less mature than in offsite new construction and EnergieSprong, but several companies, including members of Offsite Hub Italia, are already working on fast, repeatable solutions that reduce stripping-out and demolition, and on lean site organisation. Thin, high-performance finishes can already be dry-laid over existing surfaces, and technical wall linings and ceilings come with the necessary services built in: they avoid demolition that generates costs, waste and long timescales. Other innovations help on traditional sites, where offsite is harder: exoskeletons, robots for surveys and works, and drones for inspections make work safer and more efficient.

08 INTERNATIONAL EVIDENCE

Benefits recognised in international studies

In recent years many reports have listed and estimated the results that industrialised solutions can achieve. This page summarises two of the most frequently cited international studies: one by McKinsey and one by BPIE (Buildings Performance Institute Europe), a European research centre on building performance, in a report produced with Etex [22,23]. The figures are ranges of benefits drawn from literature reviews and case studies, mostly of new construction in Europe and North America, compared with traditional construction for the same building: they depend on the type of project and the level of industrialisation. The benefits also include the quality of work: factory jobs call for higher skills and working conditions are more stable than on site, which makes the sector more attractive.

COST

up to –20%

on construction cost when the process is well organised and volumes grow; on the first projects it may even rise by up to 10% if logistics and factory costs absorb the labour savings [23]

TIME

up to –50%

the greatest benefit of industrialisation, achieved by reducing work carried out on site [22,23]

SUSTAINABILITY AND ENERGY

up to –50%

in life-cycle greenhouse gas emissions (15% to 50% in LCA studies of equivalent buildings); components designed for reuse help exceed Italy's minimum environmental criteria (CAM), mandatory in public procurement, at no extra cost [22]

QUALITY

from 5% to 3%

of the price set aside for claims and repairs after handover: systematic checks in the factory reduce defects and rework [22]

SAFETY

fewer accidents

factory work is done at ground level and under cover: in the EU, manufacturing has about 40% fewer accidents per worker than construction; in Italy construction is the sector with the most fatal accidents at work, 175 in 2025 [24]

RESOURCES AND WASTE

up to 90%

less waste depending on the type of project [22,25]; on average, the Commission estimates a 10–15% reduction in construction waste

IMPACT ON THE CITY

shorter works

with less noise, dust and traffic: sites take up less space for less time and need fewer deliveries

LESS DISRUPTION

residents stay

in industrialised renovation, work goes ahead with tenants in their homes, often without scaffolding, and with less time, noise and dust

DURABILITY AND MAINTENANCE

less upkeep

components made under quality control and designed to need little maintenance, an important issue for social housing

09 COSTS AND TIMESCALES: INTERNATIONAL STUDIES

Cost and time savings: international evidence

In new construction and renovation alike, industrialisation reduces costs through:

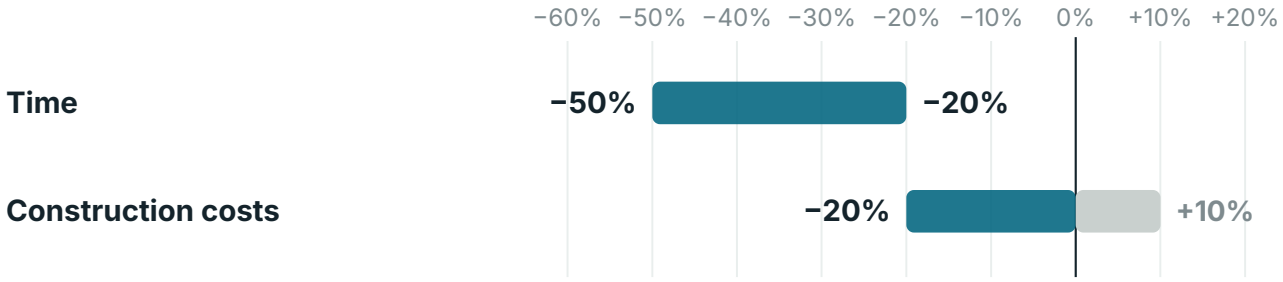
- several functions integrated in one component (structure, services, finishes);
- economies of scale in factory production;
- lower financing costs, as timescales are much shorter;
- fewer errors and variations, thanks to industrial processes;
- less work on site, partly done by machines in the factory, partly simplified and safer for workers;
- learning economies, from repeating and improving set processes;
- less waste, through reuse in production and lean materials management on site.

Costs fall as volumes grow

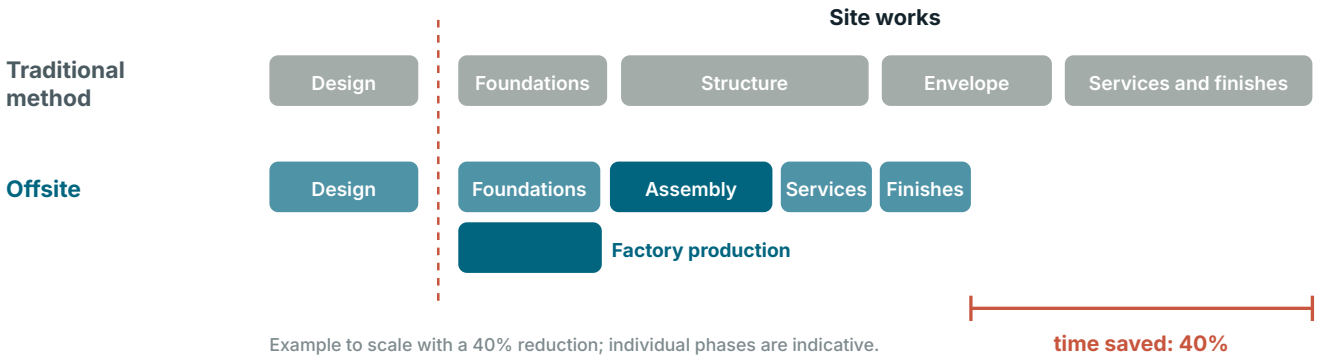
Savings depend on volumes, through economies of scale and learning: minimal on the first projects, they become clear in programmes of hundreds or thousands of homes. In Germany, the latest industrialised renovations cost about a third less than the first ones and halve time on site, from 14 to 7 weeks [26]. A study by the Università Iuav di Venezia of 22 French social housing projects estimates that the unit cost falls by 7–12% each time production doubles: after three doublings the saving reaches 20–30% [27]. In the Netherlands, the cost of a net-zero energy renovation fell by 25% between 2013 and 2019 [28].

New construction: time and cost according to international reviews

Time and cost of traditional and offsite construction compared for the same performance. The cost advantage is not a fixed figure: it depends on volumes and grows along the learning curve.



Shorter timescales reduce financing costs



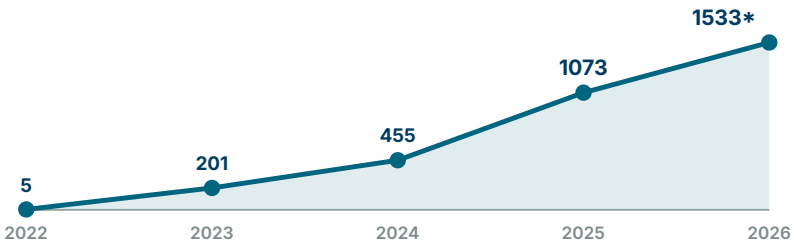
Example to scale with a 40% reduction; individual phases are indicative.

Shorter works reduce financing costs, indirect costs and tied-up capital, and the homes can be used sooner. Costs should therefore be compared on the total project cost, rather than on construction cost alone [22,23].

10 EVIDENCE FROM ITALY

Results in Italy: EDERA studies and EnergieSprong projects

Dwellings renovated with EnergieSprong in Italy, cumulative





* Equivalent dwelling units, including care homes and schools, as of October 2026. Source: EnergieSprong Italia, data updated to October 2026.

In Italy, industrialised solutions are growing in quantity and quality, in new construction and also in industrialised renovation, a more complex field limited to buildings without heritage protection. As the international evidence suggests, time and cost performance improves; EDERA has collected the results and summarises them here. The table is a first confirmation, from Italian experience, analyses and cases, of the advantages of offsite construction and of the benefits within reach of the Piano Casa.

RESULTS OF EDERA STUDIES IN ITALY

ADVANTAGE	NEW CONSTRUCTION	RENOVATION
Applicability	**Wide scope for use.** Replicable housing models, with different finishes and types, from the open market to price-controlled housing.	**Targeted but broad**: 81% of Milan's public housing stock is suitable and 53% has a high potential for offsite renovation **[21]**.
Time	**20% to 50% less**, in line with international reviews (detailed data confidential).	**up to 40% less** for energy renovation alone, **up to 60%** with seismic upgrading; works completed in under a year, with tenants staying at home.
Cost	**up to 15% less**, with savings that grow with volumes, also thanks to shorter timescales and lower financing costs.	with the best solutions, **in line** with traditional methods for energy renovation alone; **up to 30% less** with seismic upgrading.
Operation	Under assessment.	**20% to 30% less** over thirty years.
Economies of scale	They grow with volumes and with the repetition of elements; not yet quantified.	**a further 5–15% less** with works on lots of 10–50 similar buildings.



Public housing towers in Via Russoli, Milan, renovated with prefabricated façades. Photo: EnergieSprong Italia.

Method

For new construction, the results come from technical and economic studies by multidisciplinary teams coordinated by EDERA, comparing developments built traditionally with offsite designs and technologies of equal performance and quality. For renovation, they come from five technical and economic feasibility studies of the EnergieSprong Milano project, funded by Fondazione Cariplo: each compared a traditional and an industrialised design for the same building, representative of a common building type, with equal energy, seismic and quality performance. The values aggregate and simplify data protected by confidentiality agreements.

11 OFFSITE AND THE PIANO CASA

What offsite construction can do for the Piano Casa

The Plan aims to deliver many homes in a few years, with limited resources, rising costs and scarce labour. These are the conditions in which industrialisation performs best, provided that demand is properly organised.

Critical condition	In the Piano Casa	What offsite makes possible
Tight timescales	The Commissioner is in office until the end of 2027, funding runs to 2030 and the Fondo Housing Coesione aims to deliver by 2030. Recovered homes must be pre-allocated before works end.	**Production and site work in parallel, shorter works, earlier and more predictable handover.**
Rising and uncertain costs	Construction costs in Italy rose by 21% from 2020 to 2025, and by 4% in the last year. The Fund's modest target return leaves little room for cost increases [6].	**Predictable costs, with detailed design at tender stage and few variations during works; less exposure to rising material prices.**
Labour shortages	Italian companies struggle to find skilled construction workers [2].	**More factory work and fewer hours on site, with new skills, higher productivity and safety.**
Many scattered projects	Different buildings, similar in age and construction, managed by different bodies.	**Standardised but customisable solutions, repeatable on many similar homes without making them identical: industrialised systems for interiors and façades, services modules for envelope and systems.**
Occupied, seismically vulnerable, energy-hungry buildings	Much of the public stock is occupied and predates current seismic and energy standards.	**Fast works with residents at home; energy and seismic upgrading in one intervention; guaranteed performance.**
Under-resourced contracting authorities	Many housing bodies must launch many projects at once, often with small technical teams.	**Standard specifications, framework agreements, tenders covering design, production and assembly.**

The advantages of scale

The Plan runs for ten years, long enough for economies of scale and learning to take effect. The public stock lends itself to this: in Milan about 30% of municipal public housing belongs to just three building types. Companies invest in factories and skills when they see predictable volumes [29], and costs fall as volumes grow. Factories have high fixed costs and cannot withstand stop-start programmes: in the Netherlands, cancelled projects put several manufacturers in difficulty. A programme that starts with lots of similar buildings and grows over time extends the benefits from single sites to the whole Plan.

A Piano Casa without deaths on site

Accidents are much more frequent in construction than in manufacturing, and deaths on site remain a serious problem. Offsite construction reduces risk because much of the work moves to the factory, at ground level and sheltered from the cold, instead of at height on scaffolding. The site changes too: finished elements are assembled by smaller teams of specialised installers, a new profession that by its nature uses safer procedures and equipment.



POSSIBLE USES OF OFFSITE CONSTRUCTION IN THE DIFFERENT MEASURES

Extraordinary programme

industrialised solutions for vacant homes, to be tested in monitored pilot projects; on the same buildings, industrialised deep renovation with the Social Climate Fund. The Centro Einaudi report sees the recovery of run-down public housing as one of the Plan's most solid components [30].

Fondo Housing Coesione

offsite new construction and rebuilding, where predictable costs and short timescales support the fund's return; temporary, demountable and reusable homes for residents who must move out during works.

Integrated housing

lower, more predictable costs to sustain the 70% share of price-controlled housing.

12 STARTING POINTS

Getting started under the Piano Casa

The first Piano Casa calls can be an opportunity to steer public demand. Two examples.

Surveying the housing stock

Surveys of the housing stock can also look at building types, so that similar buildings can be grouped into lots that generate economies of scale. The Invimit–Federcasa agreement, which calls for an inventory of member bodies' buildings, homes and sites suitable for recovery, regeneration, densification or new construction, can be a first concrete signal, guiding both Commissioner Squitieri's survey of the public sector under the first pillar and Invimit's open call for prospects under the second.

Calls for tenders, calls for proposals and agreements

Invitalia's forthcoming call for the renovation and recovery of ERP and ERS homes could include criteria that reward integrated major maintenance works which, like those based on offsite construction, guarantee lasting performance, shorter time on site, lower costs on replicable projects and over the life cycle, greater worker safety, circularity, and less waste and fewer impacts.

EDERA's recent work on offsite procurement has shown the importance of public award procedures that set technical requirements for proposals and minimum qualification requirements for operators consistent with the environmental and Piano Casa objectives and with the maturity and capacity of the market. It therefore appears essential to set up and maintain an Italian observatory on the offsite construction market, and to prepare dedicated specifications and price lists, with sections for renovation and new construction and prices linked to the volumes ordered, on the model of the Italian DEI price list. Offsite Hub Italia has already launched the observatory and the work on price lists.



Via Russoli, Milan: factory finishing of the prefabricated panels. Photo: Beatrice Arenella.

Offsite principles to guide calls for tenders

- lots of similar buildings, for cost reductions of 5–15%;
- award criteria rewarding delivery time, life-cycle cost, guaranteed performance, worker safety, impacts, circularity and demountability (dry connections), as well as price (up to 10% of the score in Spain);
- specifications and price lists with items for integrated and offsite systems and prices that vary with volumes;
- payments that recognise progress in factory production, as well as progress on site.

Conditions for a sound uptake of offsite construction

- procurement processes geared to industrialisation;
- economies of scale, by aggregating lots of similar projects, including across several bodies through aggregation agreements or through CONSIP, Italy's central purchasing body;
- qualified contracting authorities, supported on their first projects;
- collection of the results of the first projects, to extend the model to other bodies.

13 POLICY RECOMMENDATIONS

A three-phase proposal for implementing the Piano Casa

As described in the previous chapters, international and national experience has already shown that some measures can be taken from the very first steps of the Piano Casa. Other initiatives to promote industrialised construction require industrial policies, investment and time. We therefore propose action in three phases, coordinated with the milestones of the Plan.

SHORT TERM · 2026–2027

First targeted projects

- fast track and accelerated administrative procedures for authorities launching industrialised projects;
- award criteria and payment rules suited to offsite technologies;
- an interministerial working group on offsite construction with the Ministries of Infrastructure (MIT), Enterprise (MIMIT) and Environment and Energy Security (MASE).

Already under way. The Institutional Affairs working group of Offsite Hub Italia is in dialogue with the ministries, and the Technical Standards working group is working on a definition of offsite and on price lists. See page 15.

MEDIUM TERM · TO 2030

A pilot programme and an uptake target

- a pilot programme for lots of similar buildings, with a national model call for tenders;
- 20% of the Piano Casa's new construction and deep renovation delivered with offsite methods;
- tax support for investment in digitalisation and industrialisation, with instruments designed for construction companies and manufacturers of offsite elements, in addition to manufacturing.

Already under way. The three open innovation programmes on EnergieSprong renovation, new construction and temporary housing; the Finance and Incentives working group works with the EIB and the banks. See page 15.

LONG TERM · THE WHOLE PLAN

An industrial policy for construction

- a more productive construction sector, with stable industrial value chains, geared to social housing for students, older people and workers and to school buildings;
- guaranteed-performance contracts, which link payment to energy results over time, to reduce maintenance costs, energy bills and emissions.

Already under way. Offsite Hub Italia represents the value chain before the EU institutions (High Level Construction Forum and DG GROW) and works on construction products (CPR) and digitalisation. See page 15.



Installation of prefabricated façades on an EnergieSprong renovation site. Photo: EnergieSprong Italia, "Interventi" (2025).

A target in line with other European countries

A target of 20% of the new construction and deep renovation funded by the Piano Casa is consistent with the choices of other European countries, inside and outside the Union: the United Kingdom required at least 25% of modern methods of construction in the Affordable Homes Programme 2021–26, Ireland aims for at least a quarter of new social housing, and the Netherlands for half of new homes by 2030, from 21% in 2024 [11,12,13,14,18,19].

In the European Union, the Commission Recommendation of 9 September 2026 [31] and BPIE's recommendations [32] point in one direction, without setting quotas: supporting the procurement of homes built using modern methods of construction, removing regulatory barriers, aggregating demand and putting dedicated financial instruments in place.

14 NOTES AND REFERENCES

Notes and references

Methodological note on costs and timescales

Costs and timescales are compared with the traditional method for the same building and performance, on the total project cost: works, financing and indirect costs. Values are ranges or maximums from public documents or public presentations; where sources differ, the most conservative value is used. The international reviews mainly concern new construction; the Italian data come from feasibility studies by EDERA and its partners in Offsite Hub Italia and EnergieSprong Milano [35]; completed projects are identified as such. On page 8 the values come from the two reviews, except the Commission's figure on waste and the Eurostat and INAIL figures on safety; for sustainability, quality, city and disruption: BPIE, pp. 15–16 [22].

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15 OFFSITE HUB ITALIA

Italy's national platform for industrialised construction

Offsite Hub Italia is the national network of companies, manufacturers, designers, housing managers, owners and developers interested in industrialised construction, and supports its development for a just social and environmental transition.

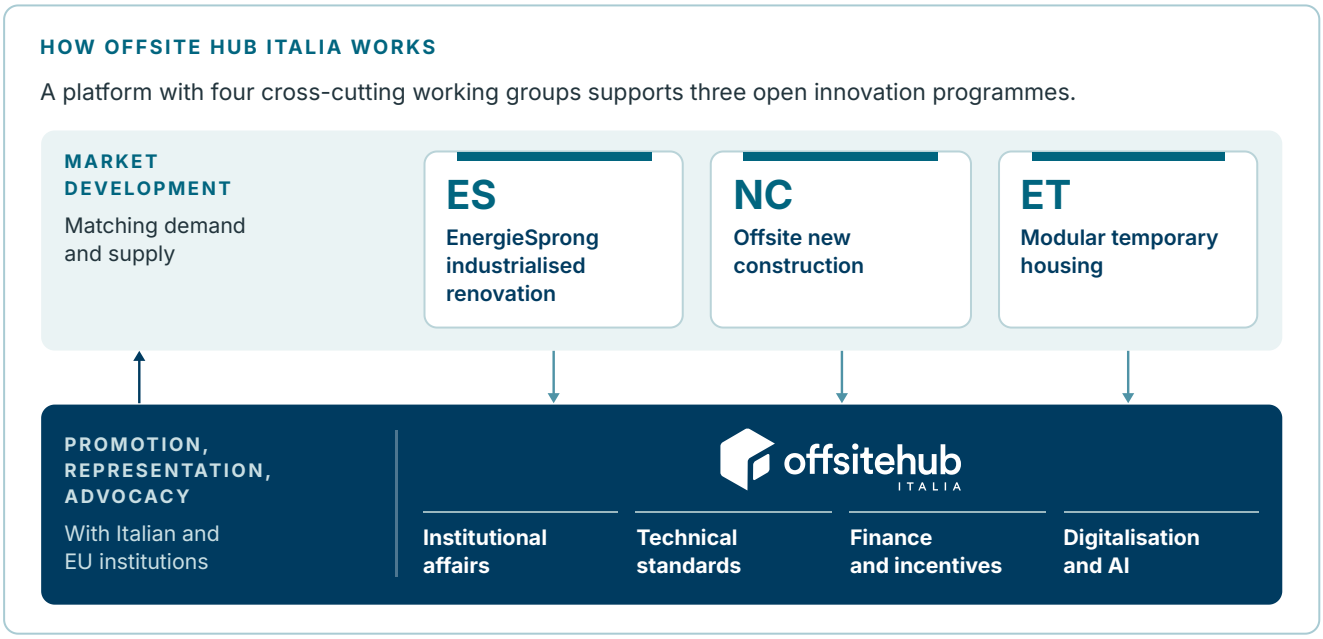
90
members in October 2026, and growing

over €4 billion
combined turnover*

over 10 000
employees of these companies*

* Aggregated data of the member companies of Offsite Hub Italia. Source: ufficiocamerale.it, latest available financial statements (2024 and 2025).

Italy has recognised expertise in machinery for building production: it is the world's third largest exporter of woodworking machinery [33] and exports about two thirds of the sector's output [34].



The operating model of Offsite Hub Italia. Source: Offsite Hub Italia.

Four working groups

Institutional affairs	Dialogue with the ministries and the EU institutions: High Level Construction Forum (HLCF) and DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW).
Technical standards	Definition of offsite in Italian and EU standards (Construction Products Regulation, CPR, and its Kits, Assemblies and Systems sub-group, KAS, on product marking), tenders and price lists.
Finance and incentives	Dialogue with the EIB and the banks on financing the sector.
Digitalisation and AI	Development and analysis of the sector's digitalisation.

16 THE COMMUNITY

The Italian offsite community

offsitehub ITALIA

Companies, designers, associations, public bodies and universities that are members of Offsite Hub Italia and take part in its open innovation programmes.

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NOTE ON THIS TRANSLATION

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