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The European Strategy for Housing Construction: a more competitive and productive construction industry

1 Strengthening the competitiveness of the construction ecosystem

Europe is facing a structural challenge of housing affordability. The European Strategy for Housing Construction is an essential part – the industrial pillar – of the Commission's Affordable Housing Package, which aims to make housing more affordable for all Europeans. The Strategy focuses on strengthening the competitiveness, productivity and innovation in the construction industry. While harmonised rules for construction products and services in the Single Market contribute to an EU framework, housing remains primarily a competence and responsibility of Member States, regions and cities. A concerted effort by EU institutions, national, regional, and local governments, financial institutions, and industrial stakeholders is therefore key to address the housing issue.

The housing crisis is driven by several factors, including some in the construction industry. Shifts in demand, limited housing supply, rising construction costs and persistent productivity gaps have contributed to a housing shortage. In one third of the EU regions, construction did not manage to keep up with expanding demographic demand. Commission projections suggest that household numbers will increase further in those areas. To cater for this demographic pressure in the next decade, Europe will need to add 650,000 dwellings per year in addition to the 1,6 million built currently[1]. A doubling of the current rate of renovations and an overall improvement of the energy performance of the residential building stock, by 16% by 2030, is also needed to contribute to the supply of affordable, sustainable, resilient and quality housing.

The housing shortage is reflected in rising prices for both rental and owner-occupied dwellings. Since 2013, house prices in nominal terms have increased by more than 60% across the EU, growing faster than income, with direct implications for social inclusion and labour mobility. Many metropolitan areas and touristic destinations are stress areas, facing the strongest pressures.

To address this challenge of housing affordability, the European Union must address the gap between supply and demand of housing, next to other measures as included in the Affordable Housing Plan[2]. We need to create the framework conditions to ensure that the construction sector can play its role as enabler of affordable, sustainable, resilient and high-quality housing. Increasing the productivity, capacity and competitiveness of the whole construction ecosystem[3] will allow to boost housing supply and deliver on the Union's economic, social and environmental objectives.

In addition to its important role of supplying quality housing for European citizens, the construction ecosystem is an important contributor to the European economy and growth; it is among the three largest industrial ecosystems in the EU. It is dominated by SMEs, mainly micro-firms, which account for **99%** of the active companies. It spans a complex and interdependent value chain, from raw materials and construction products to design, engineering, construction, renovation and building maintenance. A significant part of the ecosystem operates within the public sphere, through public procurement of works and civil

[1] See Balouktsi et al. (2025) "Housing investment needs in the EU". JRC Science for Policy Brief
[2] Com(2025) 1025 - Homes for all – The European Affordable Housing Plan
[3] Definition and details on the ecosystem structure: swd-annual-single-market-report-2021_en.pdf

engineering and social housing investment. With 6.6 million companies, it provides jobs for more than 27 million people and adds 12% to the EU gross value added[4].

However, the ecosystem's current performance remains below potential. Of all industrial sectors, construction has experienced the greatest decline in productivity since 2019. Construction costs have risen faster than inflation, driven by high material and labour costs that have not been offset by efficiency improvements. Moreover, this industrial ecosystem remains the least digitalised in Europe, with only 55% of firms using advanced digital technologies, compared to a 76% average in the other ecosystems[5]. Fewer than 10% of companies plan long-term investments in digital transformation. Labour productivity per hour in construction has declined by 8% since 2019[6], while the EU economy as a whole has recorded modest gains. This productivity gap has undermined both housing affordability and industrial competitiveness.

At the same time, the construction sector has a huge **potential to reduce emissions**. It is responsible for **over 35%** of the EU's waste generation and **5-12%** of total national GHG emissions [7]. The use of low-carbon and bio-based construction materials can help reduce embodied carbon[8] in buildings by **about 40%** [9]. Stepping up the renovation of our existing building stock is essential to further reduce our dependence on fossil fuels, reduce our greenhouse gas emissions and improve our air quality.

The key challenge that needs to be addressed is reducing the costs for all stakeholders operating within the construction ecosystem. For this, we need a simplification measures, delivered by increasing digitalisation across the value chain, and reducing administrative burden for all actors involved. In addition, we need further harmonisation of rules to bring the compliance costs down, in particular through acceleration of standardisation. The Commission and national competition authorities will remain vigilant with respect to any anti-competitive practices in the sector.

There are many levers to increase the competitiveness of the construction ecosystem. Lowering administrative burden and speeding up permitting procedures can accelerate delivery of construction works in both private and public housing markets. The scaling up of innovation and the uptake of new technologies will pull micro-enterprises into the flow of digitalisation and increased productivity. Increased market penetration of innovative construction products and methods can boost productivity and allow scale. The development of markets for circular materials and construction waste will increase access to inputs and increase resilience. The demand for skilled workers in the value chain, including for skills related to digitalisation and automatisation, will likely lead to an improved image of the sector as a place to work, thus attracting more women and young people. Lastly, addressing the persisting regulatory divergences will support the creation of a true Single Market in construction and installation services.

We need to take action in four priority areas to unlock the full productivity potential of the construction ecosystem:

- **Simplifying and digitalising residential permitting and administrative procedures;**

[4] Industrial ecosystems indicators dashboard (based on Eurostat)
[5] Investment Survey 2024, European Union Overview (EIB 2024)
[6] European Central Bank
[7] Buildings and construction - Internal Market, Industry, Entrepreneurship and SMEs
[8] BIOBUILD Project - Thermal Solutions for Green Buildings
[9] Paving the way for lowering embodied carbon emissions in the building and construction sector | Clean Technologies and Environmental Policy

- **Supporting innovation and scaling up in construction** to deploy innovative products and new technologies at scale within the Single Market;
- **Securing access to raw and secondary materials** to ensure stable, affordable and sustainable material supply;
- **Ensuring access to services and skills** by tackling shortages, removing barriers to cross-border service provision and promoting mobility of professionals and workers.

This Strategy builds on the recent modernisation of the Construction Products Regulation (CPR)[10]. Standards adopted under the CPR, in line with CPR Working Plan for 2026-2029 published today[11], will be key to support harmonisation throughout the Single Market. It delivers on the objectives of the Single Market Strategy[12] and the Construction Transition Pathway[13] recommendations towards achieving a greener, more digital, resilient and competitive construction ecosystem.

2 Simplifying and digitalising the ecosystem

To unlock the full potential of the construction ecosystem, we first need to look at how we make it easier and faster to operate for all actors involved. The complexity and restrictiveness of the legal framework and the low uptake of digitalisation need to be addressed with priority.

The development and construction of housing is subject to rules, which take many forms, including building codes, land use and zoning policies, and environmental standards. The majority of rules that influence housing supply are set by Member States, including at regional and local levels. These rules preserve our safety and quality of life, promote social and economic objectives, and protect our environment and cultural heritage. However, their accumulation, complexity and fragmentation often lead to important restrictions, expenses, delay and uncertainty, which increase the total cost of construction. The administrative complexity often results in unintended restrictions to the supply of housing.

Complex, restrictive, slow and uncertain permitting procedures further contribute to driving up housing construction costs and limiting the overall output of the construction, both for new buildings and renovations[14]. While building permits play an essential regulatory role by ensuring compliance with the multi-layered regulatory framework[15], their complexity, fragmentation and multiplication create inefficiencies, discourage investment and hinder the adoption of innovative construction methods such as offsite manufacturing and 3D printing[16].

[10] Regulation (EU) 2024/3110 of the European Parliament and of the Council of 27 November 2024 laying down harmonised rules for the marketing of construction products and repealing Regulation (EU) No 305/2011 OJ L, 2024/3110, 18.12.2024, ELI: http://data.europa.eu/eli/reg/2024/3110/oj
[11] COM(2025) 772
[12] The Single Market: our European home market in an uncertain world A Strategy for making the Single Market simple, seamless and strong – Communication from the European Commission, COM(2025)500
[13] Transition Pathway for Construction, SWD European Commission (2023) - DocsRoom - European Commission
[14] B-Ready in the EU
[15] Other permitting procedures may apply: a zoning permit to allow for a specific function to be developed, an allotment permit for dividing a piece of land into plots, an environmental permit for large developments, or an operating permit allowing a specific economic activity
[16] https://doi.org/10.1080/09613218.2024.2400467

The challenge therefore lies in striking the right balance between necessary oversight, conditions and restrictions, and procedural efficiency.

Project developers across the EU face multiple challenges during the permit application process for residential buildings[17]. National and local regulations are often fragmented and complex, with no clear deadlines for public authorities to respond. Applicants are frequently required to obtain multiple separate "sub-permits" and the interpretation of national and local rules is often inconsistent. The application phase can last anywhere from three to 24 months, with great variation both between and within Member States. An appeal phase may extend the process even longer. These delays significantly increase costs and uncertainty, especially for SMEs, making housing projects riskier and less attractive to investors. Despite a broad consensus on the need for reform, there is no comprehensive overview of permitting across the EU, nor a solid and comparable baseline to monitor progress and guide policy.

In terms of digitalisation and compared to other ecosystems, the European construction ecosystem is lagging behind in every part of the life cycle of buildings and construction works. This includes design, planning and permitting, construction, operation, renovation, and end of life possibilities. Digitalisation progress across the EU remains uneven, as Member States take different governance approaches and operate at varying levels of technological maturity[18]. In addition, the lack of integration and interoperability between systems makes it difficult to collect and analyse reliable data on buildings and materials, which is essential for achieving sustainable construction and circular economy goals, and for scaling up activities. There is untapped potential in creating a coherent framework bringing together digital permitting, the Digital Product Passport (under the new Construction Products Regulation), and Digital Building Logbooks.

Modernising administrative procedures, and reducing restrictions, especially those related to permitting for both construction and renovations, could act as a powerful catalyst for productivity improvements brought about by broader digitalisation in the sector, especially for SMEs. It would not only make permitting faster and more efficient but also contribute to better data sharing and transparency throughout the construction value chain.

2.1 Simplification of permitting procedures

Simplifying permitting requirements, and digitalising permitting processes could bring more certainty and therefore substantial economic benefits. A case study in Prague estimated that a lengthy residential permitting process adds approximately 16.5% to residential construction costs[19]. Digital tools such as Building Information Modelling (BIM)[20] have already demonstrated their potential to cut administrative burdens and shorten decision-making times in both public and private housing projects. In Member States that are already advanced in this area, the concrete benefits are already clear. BIM-based permitting systems implemented

[17] "Questionnaire on building permit process and digital building permits – summary report", European Commission, 2025 + Call for Evidence

[18] While some countries operate a decentralised system, where municipal authorities issue building permits (e.g. Austria), others developed centralised national platforms (e.g. Estonia). In addition, only some Member States (e.g. Estonia, Finland) rely on online permitting systems and are increasingly integrating BIM into their processes.

[19] Lukavec, M., Čáp, V., & Čermáková, K. (2024). How permitting process length influences development costs and real estate prices. *Economics and Environment*, *89*(2), 768-768.

[20] BIM-based permitting is the use of Building Information Modelling (BIM) in the building permit process. Applicants submit a 3D BIM model, which allows for automated checks against building codes and regulations, potentially linking the model to a digital twin of the surrounding buildings and infrastructure. This system allows to move the compliance verification process from a manual to a semi-automated one

in Finland[21] have contributed to reducing processing times, increasing transparency and improving data quality.

First steps towards simplification of permitting are being taken through the Simplification of administrative burdens in environmental legislation[22], including the legislative proposal on speeding up environmental assessments[23]. Member States are encouraged to make use of the provisions in this package to a maximum extent, in order to speed up planning, zoning and permitting processes of housing developments and related infrastructure.

To address challenges affecting housing projects specifically, **the Commission will carry out a study to provide a comprehensive assessment of building permitting procedures across the 27 Member States**. This exercise, running from December 2025 until October 2026, will evaluate the degree of digitalisation within national permitting procedures and examine how legislative and technical requirements affect the supply of housing, whether for new buildings, renovations, or repurposing. It will evaluate existing overlaps of applicable regulations and assess the main inefficiencies and bottlenecks in the procedures. It will also analyse how these requirements impact the competitiveness of the construction sector across the EU27 and identify relevant national initiatives aimed at simplifying, accelerating or digitalising permitting processes. Attention will be given to the hurdles encountered by small and micro enterprises.

The study will feed into the future work of the Commission, including the preparation of a **housing simplification package** in 2027 and Affordable Housing Act**.** In addition, based on the results of this assessment, **the Commission may also develop guidance and best practices to help Member States, respecting subsidiarity, introduce streamlined, fully digital permitting systems across the Single Market**. The Commission will work together with Member States for the further simplification and monitor progress in Member States, including where appropriate through the future European Housing Alliance.

Member States can benefit from the EU support in their efforts to streamline and digitalise permitting procedures. The Technical Support Instrument (TSI)[24] can provide technical and financial assistance to help Member States build the necessary administrative capacity and carry out the required reforms. The 2024 "Digital Building Permits Toolkit for Public Authorities" provides practical support and promotes the adoption of BIM-based permitting and offers concrete tools for local administrations.

[21] according to an estimation from city of Järvenpää, the average time to conduct automated checks can be reduced to 1-5 minutes for an average apartment building compared to 1-2 days to conduct manual checks from 2D pdf drawings. The use of automated checks and IFC models with required data content reduces the average time to handle the full building permit application from an estimated 40 working days to 10 working days.

[22] COM(2025)980 Simplifying for sustainable competitiveness

[23] COM(2025)984 - this includes amendments of legislation and a proposal to speed up and streamline environmental assessments, for example by avoiding multiple assessments in case of small changes or extensions, including for the planning and construction of new residential, affordable or social buildings as well as the related social infrastructure directly serving those residential buildings.

[24] The TSI is an EU programme that provides tailor-made technical expertise to EU Member States to design and implement reforms. The TSI was recently used to implement BIM in public procurement, including setting up pilot projects in Greece and Spain.

Action 1 - Simplifying and digitalising permitting procedures

- The Commission will work with Member States to **simplify national, regional and local permitting procedures** through a thorough mapping, possibly feeding into the housing simplification package (2027) and the Affordable Housing Act (Q4 2026).

- The Commission will continue to **support Member State reforms and leverage funding instruments** (Recovery and Resilience Plans, Cohesion policy funds and Digital Europe).

2.2 Boosting digitalisation in the construction ecosystem

Simplification in the construction ecosystem needs to happen through digitalisation, to increase predictability and speed for all actors involved. The European Commission is committed to further supporting the increased uptake of digital technologies in the construction ecosystem.

While many digital tools already exist and others are being developed, their interoperability is still suboptimal. Improving interoperability will unlock major efficiency gains. It will facilitate once-only data systems and the exchange of information along the construction project life cycle, from the design stage to the permitting procedures, the installation phase on-site, the use phase and the end-of life. This interoperability not only enhances permitting efficiency, but it also enables more consistent application of rules, supports energy-efficiency targets and circularity. The re-use of validated data across systems reduces the administrative burden for architects, engineers and developers. At the same time, authorities will be able to monitor more efficiently compliance with safety, accessibility, energy efficiency, water resilience and sustainability requirements.

The **new Construction Products Regulation (CPR)** is a cornerstone in the support towards more digital data flows in construction. CPR requires that all construction product information (including technical information, fire performance, safety information, environmental impacts and other relevant information) is provided in a digital interoperable declaration of performance and conformity.

The **Digital Product Passport** (DPP), becoming mandatory under the new CPR, as of 2028[25], will allow using this information for different applications such as building design, market surveillance or in digital building logbooks for later renovations. By replacing paper documents, national databases and scattered PDF documentation with a unified, EU-wide digital system, the DPP will make reliable and verified product data accessible to all stakeholders in a machine-readable form. As such, it will simplify procedures, reduce administrative costs and enhance transparency[26]. The DPP will enable designers, contractors and public authorities to find comparable information on technical and environmental performance of products. The DPP will enhance circularity in the construction sector as it will

[25] The horizontal DPP system is expected to be established at the beginning of 2027. A CPR delegated act on DPP implementation will follow and the DPP will be mandatory for construction products covered by harmonised standards and European Assessment Documents 18 months later, by 2028. The first products will be cement and structural metallic products followed by windows and doors.

[26] As part of the digitalisation efforts under the revised CPR, the introduction of an online information system is foreseen, which will store the Declaration of Performance, Declaration of Conformity and instructions for use of all harmonised products. This system will facilitate access to the declarations reducing the time needed by the users of construction products to find information. This is expected to reduce the administrative burden by 310 million EUR.

be easier to share information on re-usability and recyclability of materials in pre-demolition audits. Improved information sharing of the carbon footprint of building materials will support the development of lead markets for low-carbon construction products, including bio-based products.

Complementing the DPP, and based on best practices and materials gathered, the Commission will promote a harmonised rollout of **Digital Building Logbooks**[27] (DBLs) across the EU. DBLs have the potential to become a single source for information about buildings from design and construction to renovation and demolition leading to improved decision making at every stage of their life cycle. To make an interconnected digital ecosystem come to fruition, the Commission will work on a **standardisation request** for a **DBL standard**. In addition, the Commission will **promote a mechanism for data exchange and aggregation** across DBLs to further facilitate Energy and water efficiency, circular construction and renovation.

The ultimate objective is to fully connect digital tools such as the DPP for construction products, DBLs, digital permitting systems, and pre-demolition audits to ensure full interoperability and unlock all potential benefits of digitalisation in the construction ecosystem. In the future, the companies operating in the construction ecosystem would also benefit from the functionalities offered by the Business Wallet to further facilitate and speed up their operations, for instance by using it – in synergy with the Digital Product Passport – for forms and authorisations to enable seamless interoperable procedures in the Single Market. This has to be achieved in full compliance with rules on data protection and taking into account high standards of cybersecurity.

To accelerate the sector's digital transition, the Commission is promoting an "*AI-first*" approach under the **Apply AI Strategy**[28]. This approach encourages the adoption of AI technologies across manufacturing, engineering and construction to improve design, planning construction and end-of-life processes. Key priority applications include AI-generated BIM-models for existing buildings, automated compliance checking for building permits and AI-assisted site planning and design optimisation.

Moreover, the Commission continues to work closely with the **EU BIM Task Group** and the "BIM and Public Procurement" community within the Public Buyers Initiative[29]. These collaborations focus on increasing the use of BIM by public authorities, as they play a key role in setting digital standards through procurement and permitting practices.

[27] A digital building logbook is a centralised digital repository that stores all relevant information about a building, from its design and construction through its entire lifecycle, including operations, maintenance and potential renovation. By creating a single source of truth for building data, DBLs aim to improve information management, enhance transparency and facilitate informed decision-making for stakeholders such as owners, occupants, financial institutions and public authorities

[28] "Apply AI Strategy", COM/2025/723 final

[29] https://public-buyers-community.ec.europa.eu/communities/bim-and-public-procurement

The Commission calls on Member States and stakeholders to make optimal use of the multiple funding instruments[30] available supporting digital reforms in the construction sector, such as creating digital building-permit systems, modernising public-sector data infrastructures, the deployment of data spaces and AI tools that can underpin automated compliance checking and digital twins for buildings – all contributing to a more efficient, data-driven and sustainable construction ecosystem.

Action 2 – Moving towards full digitalisation of the Single Market for Construction

- Mandatory application of the Digital Product Passport as of 2028, will **make the data related to construction products easily accessible** for all stakeholders and applications.

- The further step in digitalisation will be the **roll out of a harmonised system for Digital Building Logbooks, with a standardisation request** as a first step (in Q1 2026 with the objective to have a harmonised DBL standard by the end of 2028).

3 Accelerating innovation and modernising the construction market

According to the 2024 European Investment Bank (EIB) Investment Survey[31], only 24% of construction firms reported introducing new products, processes or services in 2023, well below the 32% EU average for other sectors. The sector also **ranks last among all 14 EU industrial ecosystems** in both recent and long-term expected investments in digital transformation[32]. The high share of SMEs in the EU construction ecosystem is a factor, as SMEs typically face more constraints in terms of financial and human capital to drive the digital transformation forward[33].

This **innovation deficit** holds back productivity and limits the sector's ability to respond to growing housing needs as well as climate and energy objectives. Without a stronger innovation ecosystem, the EU risks losing ground to global competitors in areas such as modular construction, low-carbon materials (including bio-based, reused and recycled material) and smart building technologies.

Unlocking the supply side: the need to scale up industrial and digital innovation

Boosting the uptake of advanced technologies across construction can dramatically improve speed, cost efficiency and sustainability. Key innovations include automated and robotic construction, 3D printing, offsite and modular building, low-carbon materials (including bio-based materials) and AI applications for design, project management and facility operation, many of which emerge from digital scale-ups and SMEs.

[30] The Recovery and Resilience Facility, Digital Europe, the European Regional Development Fund and Horizon Europe

[31] Investment Survey 2024, European Union Overview (EIB 2024)

[32] Annual Single Market Report 2022, European Commission

[33] https://ec.europa.eu/eurostat/web/interactive-publications/digitalisation-2025

Among these, **offsite and modular construction and renovation solutions** offer the clearest potential for ramping up housing supply rapidly[34][35]. By shifting large parts of the building process into controlled factory environments[36], errors are reduced, production is streamlined, and construction timelines are shortened. This makes offsite solutions particularly attractive for social and affordable housing, where speed, quality and cost-efficiency are critical[37]. Moreover, modular components can often be disassembled and reused, contributing to circularity and resource efficiency. Under the New European Bauhaus, the Commission will develop a blueprint catalogue that will support exchange of best practices and aim to facilitate permitting.

Beyond domestic housing, modular and prefabricated systems are increasingly in demand for reconstruction efforts in **crisis regions**, such as Ukraine and Gaza as well as areas affected by extreme weather and climate events or other **natural disasters**. EU companies already possess strong technological capabilities and could become global leaders in this expanding market, if barriers are reduced and standards harmonised[38].

However, scaling up these innovations remains difficult. The coexistence of 27 national building codes and varying regional regulations fragments the market and limits scalability. The lack of harmonised standards undermines reliability, increases risk and raises financing costs for producers and project owners. The **high upfront investment** needed for offsite facilities, combined with uncertain demand and limited insurance coverage, further constrains growth[39]. To reach its full potential, estimated at an annual growth of 4.5% for residential buildings[40], barriers to offsite construction must be reduced.

Driving the demand side: creating a market for sustainable and resilient construction

To complement innovation on the supply side, the EU must also **strengthen market demand for sustainable, resilient and innovative products**. The transition to climate neutrality is increasing the need for low-carbon materials such as low-carbon cement, low-carbon concrete, low-emission steel, recycled content in products, bio-based, and reused products.

The Commission will reinforce this shift by introducing sustainability and resilience requirements for public procurement of EU-made low-carbon products in the Industrial Accelerator Act. These measures will reward innovation while upholding EU environmental and social standards. The criteria, definitions and labels for construction products will be defined by the CPR.

In parallel, the upcoming **revision of the Public Procurement Directive, by facilitating sustainability in tendering,** will help creating stable demand for low-carbon (including bio-based) construction products and innovative methods such as novel modular building solutions, often produced by SMEs. The review process will also consider among other elements the issue

[34] Particularly in countries such as Ireland and the UK, which are facing severe housing shortages, offsite methods are developing into a viable option to build houses at a fast and affordable rate.
[35] European Commission: DG for Internal Market, Industry, Entrepreneurship and SMEs, *Market potential of offsite construction for housing supply – Report*, Publications Office of the European Union, 2025
[36] Shifting to factory production will open construction to new job profiles and increase the attractivity of the sector, helping to tackle the labour shortage including greater the participation of women.
[37] Market potential of offsite construction for housing supply – Ecorys – Commissioned by DG GROW, 2025
[38] The on-going reconstruction of Ukraine offers useful lessons: the construction practice of new homes often includes innovations in terms of treating and reusing demolition waste, re-use of building materials, and modular construction. In many cases these could be replicated for the reconstruction of other war-torn areas, such as Gaza. Many innovations could prove useful within the EU construction practice too and bring support in bridging the EU housing supply gap.
[39] Call for Evidence
[40] Monitoring industrial ecosystems – Construction Analytical Report 2024 (European Commission)

of subcontracting, including the responsibilities and qualifications of contractors and transparency in supply chains which can help to combat abuses and support good faith employers in the construction sector. Leveraging the EU's vast public procurement market can de-risk private investments, accelerate production capacity and drive down costs through economies of scale[41]. Finally, initiatives under the Bioeconomy Strategy[42] will support construction as one of the lead markets for bio-based products.

In line with the objectives of the Bioeconomy Strategy, the Carbon Removal and Carbon Farming Certification Framework will develop a certification of long-lasting biogenic carbon storage in buildings. This will provide more visibility to the environmental benefits of bio-based solutions in the sector, increasing their market demand.

3.1 Modernising the regulatory framework to increase innovation uptake

The new Construction Products Regulation marks **a major step towards a more modern and innovation-friendly regulatory framework**. The new legal framework can address all technical and regulatory needs including environmental issues and digitalisation.

With the CPR Acquis process[43] the Commission aims to update, by 2033, all harmonised standards developed over the last 25 years and extend coverage to all relevant product families. The process provides a comprehensive basis to guarantee an efficient and fast standardisation development. Standards for key materials such as cement are being developed as a priority to allow for timely delivery. It will accelerate the harmonisation of product standards across the Single Market, thereby reducing administrative burdens and facilitating market access for more sustainable products, which is crucial especially for the SMEs in the construction ecosystem.

The new standards will contribute to the construction of safe, accessible and environmentally friendly buildings, will enhance the Single Market and reduce costs by economy of scale. Crucially, the CPR will support the shift from prescriptive national building codes towards performance-based standards, therefore allowing greater flexibility for innovative construction methods. To enable the cross-border deployment of offsite and modular systems, the Commission will give priority to the development of specific standards for prefabricated products, building kits and modular units, creating a single market for these products. SMEs are duly represented in the standardisation development and the Commission will ensure that the harmonised standards and applicable delegated acts will not overburden SMEs.

To **translate regulation into practice**, the Commission will issue **guidance** on modular and offsite construction. This will include best practices and successful demonstrations of proof of concept in terms of increasing safety, accessibility, sustainability, rapid deconstruction and affordability with modular concepts and will support broader uptake for both new builds

[41] For example, the Advanced Materials Act, planned for Q4 2026, will support research and innovation, expand production capacities within the EU and streamline regulatory processes for advanced materials. It will specifically focus on materials that are essential for the green and digital transition across sectors, including construction. The Bioeconomy Strategy sets out measures to reduce technical barriers and thereby increase the commercial adoption of innovative bio-based construction solutions.

[41] A Green Deal Industrial Plan for the Net-Zero Age, COM(2023) 62

[42] A Strategic Framework for a Competitive and Sustainable EU Bioeconomy - SWD(2025) 895

[43] The CPR acquis process is a collaborative effort of the Commission, Member States, stakeholders and standardisation organisations to support the development of standardisation requests and legal acts necessary for the efficient implementation of the CPR.

and renovations[44]. This guidance will build on the successful projects developed under LIFE Clean Energy Transition on modular and off-site construction[45]. These efforts will also come within the scope of the NEB's international pillar, which includes projects dedicated to the reconstruction of Ukraine and the dissemination of best practices for sustainable, resilient post-war recovery.

Furthermore, the Commission will ensure that the **second-generation Eurocodes[46]** support innovation, for instance by including instruments for the assessment and re-use of existing structures, and for the use of innovative materials such as fibre-polymer composite structures and tensioned membrane structures.

Together, these actions will create a **virtuous cycle between innovation and demand**: a harmonised Single Market for sustainable construction products will give innovators the confidence to invest, while green procurement and industrial policies will generate the market pull needed to scale up production. By modernising both the regulatory and technological foundations of construction, Europe can deliver more affordable, sustainable and high-quality housing, much faster than before.

Action 3 - Boosting innovation uptake by development of standards

- The Commission will **accelerate the development of standards for construction products** under the new CPR. The first new product standards will cover cement, structural metallic products, glass, doors and windows. The Commission has adopted a first Working Plan for 2026 to 2029 for the implementation of the CPR including priorities and timeframes.

- The Commission is launching, as a priority under the CPR Acquis process, the request for **development of standards for offsite construction products and modular systems** (launch early 2026, with the aim to adopt the first standardisation request in 2027).

3.2 Increasing the deployment of innovative construction materials and products

In order to meet the growing demand for faster, greener and more affordable building, Europe's construction sector urgently needs to **accelerate investment** in innovative materials, products and technologies. This will support resource-efficient, cost-effective, and innovative growth while ensuring a sustainable use of limited natural resources.

Progress remains slow, constrained by high development costs, fragmented regulations and cautious financing. As a result, the gap between current market needs and what the industry can deliver today is widening. This affects SMEs in the first place, due to their reduced investment capacity compared to major companies.

To bridge this gap, the European Investment Bank has announced a EUR 400 million "**Lending Envelope**" dedicated to companies, including SMEs, across the housing value chain, from material producers to construction firms and equipment manufacturers. This initiative will be deployed with backing of InvestEU and will finance new technologies that have potential to tackle the high construction and development costs and speed up the supply of new housing stocks. It will support innovations in digitalisation, automation and AI applications to enhance

[44] For more on-going projects, see: https://joint-research-centre.ec.europa.eu/projects-and-activities/iresist-home/ongoing-projects_en

[45] For example: LIFE Giga Regio Factory - https://www.energiesprong.org/projects/giga-regio-factory

[46] The Eurocodes are a series of 10 voluntary European standards, EN 1990 - EN 1999, providing a common approach for the design of buildings and other civil engineering works and construction products.

quality during planning and construction. The scope will include innovative construction techniques, innovative solutions for energy efficiency and renewable energy, innovations in materials (glass, cement, concrete, construction steel, ceramics, wood products, etc.), and research, development and innovation investments of equipment manufacturers, including robotics and smart construction machinery.

Beyond the EIB lending envelope, the new **Pan European Investment Platform for affordable and sustainable housing**, comprising the EIB Group, National Promotional Banks, the CEB, the EBRD, and other financial institutions, will include a value chain approach from innovation in construction to the broader scope of real-estate development, maximising public investment to leverage additional private investment. The platform will increase visibility of investment opportunities in social, affordable, and sustainable housing to better attract investors and project promoters.

Unlocking private investment also requires **removing the regulatory barriers** that currently prevent new technologies from scaling up across borders. To address this, the Commission will launch, under the **Competitiveness Coordination Tool** (CCT), a pilot project focused on offsite and modular construction. This pilot will aim at promoting cross-border multi-country projects and tackling regulatory fragmentation that impedes offsite and modular gain sufficient scale.

This pilot will help participating Member States align their regulatory frameworks, thereby facilitating the free flow of offsite construction products and components across the Single Market. At the same time, the CCT will provide targeted financial support to strengthen supply chains and boost industrial capacity. On the demand side, it will introduce complementary measures to make innovative construction solutions more attractive and competitive in public and private markets, also contributing to deliver affordable houses across the EU at pace and competitive cost.

Existing EU programmes will continue to play a key role in accelerating innovation in the construction sector. The **NEB**[47] will continue to support through policy, knowledge and funding the delivery of high-quality affordable and sustainable housing, enabling innovation and providing targeted support to the construction ecosystem to deploy integrated and inclusive solutions. In parallel, **Horizon Europe** (through the NEB Facility and Built4People Partnership) will continue to fund research, development and demonstration projects focused on advanced materials, circular construction and digital transformation. These instruments will help bring innovations from the laboratory to large-scale deployment, reinforcing Europe's leadership in sustainable construction.

[47] https://new-european-bauhaus.europa.eu/index_en

Finally, Cohesion policy can also play role in accelerating the deployment of innovative construction materials and products by supporting targeted investments into regional innovation ecosystems and facilitating the uptake of cutting-edge solutions. Together, these measures will boost both supply and demand for innovative construction solutions, enabling Europe to build faster, smarter and more sustainably while creating new opportunities for businesses and workers across the construction value chain.

Action 4 - Leveraging financial instruments to increase deployment of innovative construction materials, products and technologies

- The **EIB has recently set up a new lending envelope** of EUR 400 million, with involvement of InvestEU, dedicated to investing in new technologies that have the potential to tackle the high construction and development costs and speed up the supply of new housing stocks.

- The Commission will launch **a pilot project on offsite construction under the Competitiveness Coordination Tool** with the aim to remove regulatory obstacles and create a real pan-European market for the sector, to help it reach the scale needed to provide a faster response to the pressing construction targets. In the course of 2026, the Commission will lead the efforts to develop this CCT project with Member States.

- The Commission will continue **funding research and roll-out of quality innovative solutions** and disseminate good practices under the New European Bauhaus

4 Ensuring stable access to construction materials

Rising material costs and barriers to secondary material use

Europe's construction sector faces mounting pressure from **volatile raw material supplies, rising costs and fragmented access to secondary materials**. Prices for key construction products have surged dramatically between 2020 and 2024, e.g., by 28% for concrete and 45% for ceramics, such as bricks and roof tiles[48]. Since material costs account for 30-40% of total residential construction costs, these trends are directly pushing up housing prices and making construction planning unpredictable. Supply chain disruptions, scarcity of critical inputs and a lack of comprehensive information on material availability further amplify the problem, making it difficult for developers to anticipate shortages or price spikes. [49]

The **challenge extends to secondary materials**: several pieces of legislation such as the new CPR, the Energy Performance of Buildings Directive[50] (EPBD) and other climate-focused legislation[51] encourage the production and use of recycled or low-carbon products. In particular, the life-cycle Global Warming Potential of new buildings will be calculated based on an EU framework[52], building on CPR data, which will strengthen demand for sustainable construction products. Despite increasing economic incentives, uptake remains limited: only 0.7% of construction and demolition waste is prepared for reuse and recycling rates remain low

[48] Source: Eurostat
[49] Call for evidence
[50] Directive (EU) 2024/1275 of the European Parliament and of the Council of 24 April 2024 on the energy performance of buildings (recast) OJ L, 2024/1275, 8.5.2024, ELI: http://data.europa.eu/eli/dir/2024/1275/oj
[51] such as the European emission trading system for big emitters (ETS1), the Energy Efficiency Directive (EED), and the EU Taxonomy and national legislation linked to carbon reduction roadmaps.
[52] Commission delegated regulation amending Annex III to Directive 2024/1275/EU and setting out a Union framework for the national calculation of life-cycle global warming potential.

for key materials, e.g., 10% for plaster and 6% for glass[53]. Two of the main barriers are **insufficient information** on materials released at demolition sites in European markets, preventing the development of robust secondary markets; and fragmented or missing **End-of-Waste (EoW) criteria[54],** creating administrative hurdles that block cross-border circulation of secondary materials.

Measures to strengthen primary and secondary material availability

Ensuring stable access to primary construction materials is critical to meet growing housing demand and EU climate ambitions. The Commission is responding with a multi-layered approach. Existing initiatives, including the Critical Raw Materials Act[55], the Affordable Energy Action Plan[56], the European Steel and Metals Action Plan[57] and the ReSourceEU Action Plan[58], aim to reduce input costs and improve predictability for construction materials.

Over the last 15 years, the mapping and tracking of critical raw materials for EU's strategic sectors has allowed to anticipate shortages and take measures to mitigate risks of supply disruptions[59]. Several of these materials, including feldspar, boron, aggregates, gypsum, silica sand, limestone and perlite are particularly relevant for construction. Via the European Construction Observatory[60], the Commission will track these and other relevant materials and products - such as steel - with more granularity, and **report on their availability and** price**[61]**.

Regarding secondary materials, the Commission is working **to create a functioning Single Market for reused and recycled products**. Harmonised end-of-waste criteria will transform materials from waste into valuable products, facilitating cross-border trade and enabling their use in both new construction and renovations. The Joint Research Centre is developing EoW criteria for aggregates from construction and demolition waste. Furthermore, the Circular Economy Act will address fragmentation of end-of-waste criteria, facilitating the uptake of secondary materials also in construction products.

Member States have an obligation under the Waste Framework Directive[62] (WFD) to promote re-use of construction and demolition waste. To this end, many Member States already

[53] JRC Publications Repository - Techno-economic and environmental assessment of construction and demolition waste management in the European Union

[54] In order for materials from construction demolition sites with the legal status of 'waste' to become available again for further use, so called End-of-Waste (EoW) criteria have to be fulfilled. The Waste Framework Directive establishes certain elements to be included in such criteria (quality criteria, input materials, treatment processes...) that Member States can establish. When EoW criteria do not exist or if they differentiate across Member States or regions, it hinders re-use and circulation of secondary materials.

[55] The **Critical Raw Materials Act** (2024) aims to ensure the access to a secure and sustainable supply of critical raw materials for EU's strategic sectors, such as clean energy and digital technologies.

[56] As energy prices are a main factor driving up material prices, the **Affordable Energy Action Plan[56]** (2025) aims to make energy costs more predictable and affordable, reducing material costs and boosting competitiveness.

[57] The **European Steel and Metals Action Plan**[57] (2025) focuses on creating a lead market for low-carbon steel, increasing circularity, levelling the international playing field and leveraging investments in these sectors

[58] COM(2025) 945 RESourceEU Action Plan Accelerating our critical raw materials strategy to adapt to a new reality

[59] Regulation (EU_ 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials

[60] https://single-market-economy.ec.europa.eu/sectors/construction/european-construction-observatory-eco_en

[61] Special focus will be on imports, production, exports and prices for each of the materials selected. It will identify the product families using those raw materials and identify the industries most exposed to fluctuations in these materials

[62] Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste

implemented mandatory pre-demolition and pre-renovation audits, **gathering data on available materials**. Pre-demolition audits enhance transparency and facilitate the emergence of marketplaces for secondary materials, connecting the material supply from the demolition sites with demand from the manufacturers. However, the full potential of this information is only unlocked when delivered digitally and made public, allowing industry to collect, acquire and predict availability of the secondary materials.

Subject to the results of an on-going impact assessment, through the Circular Economy Act, the Commission will develop a **Digital European Construction Resource Assessment (DECRA) platform**, connecting national databases providing information on pre-demolition audits. This will provide relevant data in a searchable and machine-readable format. Increased **transparency** will allow manufacturers to quickly identify secondary material sources, reducing reliance on virgin resources and lowering production costs. For Member States that do not yet have a system in place for providing pre-demolition audits, this will represent an investment that will be largely offset by the benefits of increased use of secondary materials in construction. The Commission will also, by the third quarter of 2026, look into the merits of making such audits mandatory, by introducing a minimum set of mandatory and voluntary data points to be digitally available, while keeping the administrative burden to a minimum.

Finally, the new CPR will close remaining gaps by integrating recycled content and circularity considerations (repairability, reusability, recyclability and lifespan extension) into product standards, therefore ensuring reused and recycled products can compete on equal footing with new materials across the EU. Together, these measures will stabilise material supply, unlock the potential of secondary resources, reduce costs and support a more sustainable, resilient, and circular construction sector.

Fully integrating circularity considerations will unlock savings for companies, limit dependency on third countries for the raw materials the sector needs and contribute to its decarbonisation, by reducing the extraction and processing of primary ones.

Action 5 – Enabling access to and circulation of the secondary construction materials and products

- The Commission will set the legal steps and timeline to **address fragmentation end-of-waste criteria** and remove other obstacles to the free movement of secondary construction materials within the Single Market (by the third quarter of 2026, as part of the Circular Economy Act).

- Subject to an on-going impact assessment demonstrating sufficient benefits, the Commission may propose mandatory **digitalised pre-demolition audits** (by the third quarter of 2026, as part of the Circular Economy Act) and subsequently set up a **Digital European Construction Resource Assessment platform,** which will help to connect the national systems.

5 Ensuring access to services and improving skills

EU Single Market integration in construction and installation services remains low. Construction remains predominantly a domestic activity, with 90% of firms, typically SMEs, providing construction services only locally. While the construction ecosystem represents approximately 12% of the EU's gross value added, there are only limited cross-border operations in construction services: it is estimated that trade integration for construction sector services amounts to 1% only. Reasons for low-level integration of construction services include restrictive national regulation on business authorisations, the high number of regulated professions in the sector and complex mutual recognition of professional qualifications,

certificates and proof of competence. These barriers limit business opportunities and choice for customers and hamper the cross-border flow of construction services to the place where they are most in demand. A reduction of barriers in construction services will significantly increase EU gross value added[63].

Regarding the workforce, labour and skill shortages have been a longstanding structural problem for construction, hampering the output of the sector. The share of companies indicating a shortage of labour as a factor limiting their total output has been consistently high over recent years, between 25% and 30% since the beginning of 2023[64]. Moreover, the construction ecosystem suffers from an **overall poor public perception** connected to low job security and stability, tough working conditions and health and safety risks, and construction is still seen as a stereotypical "man's job"[65]. This results in uncertainty and high labour costs for construction companies, which is reflected in rising costs for residential construction.

Both the increased demand for housing and the green and digital transition are substantially **increasing demand for specialised and highly skilled service jobs**[66]. At the same time, this transition in terms of required skills, with an increased need for skills related to the use of AI, robots and modular design, has potential to attract young people and to improve the gender balance. Continued efforts to support apprenticeships are essential in this regard, including targeted outreach to women. Upskilling and reskilling construction workers with the specific skills that are most in demand, and completing the Single Market for construction services, will **contribute to support labour supply and ensure capacity for housing construction**.

Moreover, complementing efforts to harnessing talents from within the Union, targeted legal mobility from third countries also has an important role to play. The recently adopted EU Talent Pool aims to facilitate the recruitment of jobseekers from non-EU countries in EU-wide shortage occupations at all skills levels, with construction one of the sectors with the highest shortages[67]. Other ways to enhance legal pathways to the EU are the **Talent Partnerships**[68], the revised **EU Single Permit Directive** and the first **EU Visa Policy Strategy**[69]. As part of the Fair Labour Mobility Package (3Q2026), the Commission will further propose common rules for simpler procedures for handling the recognition of qualifications and validation of skills of third country nationals with the aim to enhance coherence and transparency and thus enhancing clarity for workers as well as for employers and authorities.

5.1 Removing Single Market barriers for construction services

The Commission is committed to reducing the barriers for cross-border provision of construction services. The objective is to maximise the potential of the Single Market for construction and installation services and contribute to increasing the productivity of the sector.

[63] IFO Institute: Building a Stronger Single Market: Potential for Deeper Integration of the Services Sector within the EU; Econpol Policy Report 52/2024
[64] Eurostat
[65] The share of women working in the construction sector (NACE F) is 10,6% in 2024 (Eurostat)
[66] The greening of the EU construction sector | CEDEFOP
[67] Once established, this will be the first EU-wide online platform open to any third-country national wishing to work legally in the Union, where participating Member States will register job vacancies of employers established in their territories.
[68] So far, talent partnerships have been established with Morocco, Tunisia, Egypt, Pakistan, and Bangladesh. These partnerships provide a policy and funding framework to strengthen cooperation between the European Union, Member States and key partner countries on mobility and skill development.
[69] Planned for January 2026, this will include measures to support the arrival of trained workers from third countries.

This is particularly true for border regions, where SMEs in the construction sector are hampered from exploiting their proximity market across the border. Furthermore, the **Union of Skills** Communication[70] announced the Skills Portability Initiative to open up more opportunities for workers and businesses to fully capture the potential of the Single Market. One of its key actions – to be presented as part of the **Fair Labour Mobility Package** - will be to expand automatic recognition for additional regulated professions via common training frameworks, and to modernise and streamline recognition processes for regulated professions, in particular by leveraging digital tools, including to facilitate and shorten procedures.

A second action will be examining options to enhance transparency and comparability of qualifications for unregulated professions and to advance a coordinated, interoperable EU framework for secure, cross-border recognition.

The Construction Services Act aims to foster the free movement of construction and installation services in the Single Market, through ensuring that companies, entrepreneurs and professionals which are authorised in their home Member State can provide services in other Member States more easily, while respecting social rights. The initiative aims at fostering a predictable and stable business environment for companies and entrepreneurs and will also support the cross-border operation of SMEs.

Action 6 – Increasing the flow of cross-border construction services

- The Commission will ensure that companies and professionals can **provide construction services more easily across borders**, without lowering social standards, through a **Construction Services Act** (Q4 2026).

- The **Skills Portability Initiative** aims to enable both workers and employers to navigate recognition systems more efficiently, and to modernise recognition processes (Q3 2026)

5.2 Addressing skills shortages in the construction ecosystem

The Commission is committed to supporting the construction ecosystem in developing the appropriate skills to meet the growing demand for labour and skills in housing and other construction works**.** For instance, the **Large Scale Skills Partnership (LSP) for construction**[71] has set up a shared engagement model: major players in industrial ecosystems, including associations and relevant public authorities, commit to cooperate and invest in upskilling and reskilling. In particular, synergies are being established to allow a high participation of SME employees to such trainings. Through its activities, the LSP will **promote upskilling and reskilling** of 30% of the workforce each year by 2030 across the industry, with a target of 3 million people trained annually within the EU construction workforce by 2030.

The **Blueprint Alliance** "Modernising professional training in the construction sector"[72] will develop training actions to address urgent skills needs in 2026 and long-term skills needs in 2028, including initiatives to improve the image of the ecosystem and to attract better young talent and women, including by strengthening apprenticeship provision. Together with this Communication, **the Commission published an analytical report mapping the current and**

[70] https://commission.europa.eu/topics/eu-competitiveness/union-skills_en
[71] As part of the Pact for Skills partnership - https://pact-for-skills.ec.europa.eu/about/industrial-ecosystems-and-partnerships_en
[72] Blueprint for sectoral cooperation on skills - Employment, Social Affairs and Inclusion

future skills and workforce needs in the construction sector[73], with an outlook towards 2030. This report will improve the fragmented skills intelligence and will provide evidence for future skills-related policies in the construction ecosystem.

These actions will be supported by other Commission activities for pilot skills development, deployment and good practice sharing in deep renovation, BIM modelling and circular construction. These are implemented via various Commission initiatives such as BUILD UP Skills, the Centres of Vocational Excellence in the construction sector and the European Alliance for Apprenticeships. The Commission encourages Member States to make optimal use of the European Social Fund+ and national public funding to deploy future-ready training for reskilling and upskilling.

The **NEB Academy** will accelerate up-skilling and re-skilling in the construction ecosystem to support the transition towards a more regenerative and circular system of material use. The expansion and consolidation of the NEB Academy will further support the development of knowledge, skills, and innovation, including support for start-ups and sandboxes for innovative products.

Action 7 - Increasing the availability of skilled workforce in construction

- The future European Competitiveness Fund will be able **to support upskilling and reskilling actions** in the areas covered by the Fund, such as construction, and **foster public-private partnerships** between universities, Vocational Education and Training (VET) providers, businesses (in particular SMEs), social partners and applied research institutes.

- The **NEB Academy** will be scaled up to support innovation and research, **build capacity and skills for innovative construction methods and materials** across the EU, and support SMEs and professionals.

6 Working together on implementation

Reinvigorating the construction ecosystem to drive Europe's competitiveness requires transforming it from a fragmented and resource-intensive sector into a modern, competitive, digital and sustainable industrial ecosystem. More productive construction ecosystem translates into increased intensity of construction, including more affordable housing supply.

The Commission will continuously **monitor** the situation in the sector, its resilience, productivity and ongoing decarbonisation, in close cooperation with all the relevant actors. The **High-Level Construction Forum (HLCF)**[74] will provide the main platform for further communication about the actions set out in the Strategy as well as for monitoring the economic performance of the sector and its contribution to the lessening of the housing supply gap. The HLCF will ensure synergies with the European Housing Alliance (EHA) announced in the European Affordable Housing Plan. The Alliance will provide a platform for monitoring implementation of national measures related to permitting and administrative procedures.

This is a collective endeavour. Member States, regional and local authorities, industry, social partners and financial institutions all have a role to play. By working together, Europe can

[73] An analytical report on skills in the European construction sector - European Construction Observatory
[74] https://single-market-economy.ec.europa.eu/sectors/construction/construction-transition-pathway_en

transform its construction ecosystem into a true engine of competitiveness, one that builds not only homes, but also resilience, opportunities and confidence in Europe’s future.