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# Market potential of offsite construction for housing supply

Fields marked with \* are mandatory.

## Online survey on the market potential of offsite construction for housing supply

The survey is part of a research study for the European Commission which aims to understand the existing market for offsite construction and its potential to accelerate the supply of housing in a cost-effective way. The survey builds on research carried out by the Technical Secretariat of the High Level Construction Forum: Research Note on Offsite Construction

The survey is addressed to respondents familiar with offsite construction within the EU (i.e most components are manufactured in a factory and then assembled on-site).

The survey is structured into four main sections:

- 1. Barriers to offsite construction
- 2. Market dynamics and client acceptance
- 3. Policies and regulations
- 4. Available technology

Time to complete ~ 15 minutes.

The survey will close on 19th March 2025. We appreciate your participation.

Before completing this survey, please read our privacy statement below and provide your consent by ticking the box below. Please note we will not be able to accept your survey without your consent. Thank you for your understanding.

Privacy\_Statement\_for\_Offsite\_Construction\_Consultations\_\_DPR-EC-01011\_.pdf

- \* Do you agree and hereby give your consent to the processing of your personal data to the extent necessary for the analysis of the survey results?
  - I agree
  - I disagree

*Which is the main country of your operation (and for which you will primarily answer this questionnaire)?
Maximum 1 selection(s)
Austria
☐ Belgium
☐ Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
☐ Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
The Netherlands
Poland
Portugal
Romania
■ Slovakia
Slovenia
Sweden
Spain
▼ EU level representation
Other (non-EU country)
Do you also work in other EU countries? If yes, then please select which, and otherwise skip this question:
Austria
☐ Belgium
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
☐ France
Germany
☐ Greece
Hungary

☐ Ireland
Latvia
Lithuania
Luxembourg
■ Malta
The Netherlands
Poland
Portugal
Romania
■ Slovakia
■ Slovenia
Sweden
Spain
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* What is your primary role?
Maximum 1 selection(s)
Product Manufacturer or Supplier
Contractor
Designer, Architect or Engineer
Consultant or Project Manager
Developer, Real estate or Investor
Policymaker or Public Official
Researcher or Academic
✓ Industry Association
Installer or on-site subcontractor
Other
Section 1: Barriers to Offsite Construction
- Coulon 1. Barrioro to Cricke Conditaction
*What are the main barriers you encounter in advancing the adoption of offsite construction? (Select up to 3)
between 1 and 3 choices
Financial barriers
Regulatory and policy barriers
Market demand (lack of demand, or high volatility)
Low client or user acceptance (e.g. negative perceptions of limited design flexibility, quality, or durability).
Supply chain issues
Lack of skilled labour
Issues with on-site assembly or installation
None
Other
* What are the main financial barriers you encounter?
✓ What are the main infancial barriers you encounter:  ✓ High investment costs
Difficulties securing investment
inioulies securing investment

<ul> <li>✓ Low profit margins</li> <li>☐ Difficulties to get insurance</li> <li>☐ Other</li> </ul>
What are the main regulatory and policy barriers you encounter?  Limitations in regulations for on-site assembly and installation  Limitations in other building regulations  Limitations in permitting processes  Difficulties with procurement or tendering  Inadequate or inconsistent government policies  Other
Section 2: Market Dynamics and Client Acceptance
How do you perceive the demand for offsite construction in the EU?  High demand  Moderate demand  Low demand  No demand
I do not know  How do you expect the <b>EU offsite construction market</b> to develop in the next 5 years?  To grow  To remain the same
<ul><li>To decline</li><li>I do not know</li></ul>
What differences between countries do you observe in the market of offsite construction? What are the leading countries in Europe? Are some countries better suited to offsite than others?
In Europe, offsite construction is most advanced in the UK, Germany, Benelux and Nordic countries. This is mainly linked with weather conditions, availability and costs of construction workers, and traditions.
In which <b>types of housing projects</b> is there the highest demand for offsite construction in your country?  **between 1 and 5 choices**  Single-family residential housing  Multi-family residential housing (e.g., apartments, condominiums)  Mixed-use residential buildings (residential with integrated retail or office spaces)  Social housing  Student housing
<ul> <li>Senior or assisted living facilities</li> <li>Emergency or temporary housing (e.g., disaster relief, refugee housing)</li> <li>Non-residential construction (Commercial buildings, storages, infrastructure</li> <li>Other</li> </ul>

☐ I do not know
None
Which types of housing projects are most suitable for offsite construction?
between 1 and 5 choices
New single-family homes
New multifamily homes and apartment buildings
Renovations of single-family homes
Renovations of multifamily homes and apartment buildings
New non-residential buildings
Renovations of non-residential buildings
Mixed-use developments that include housing (either new or renovated)
Changes of use to housing (including empty buildings)
Other
☐ I do not know
None
- Notice
Other (please explain)
Social & affordable housing.
* Do you think offsite construction can reduce <b>costs</b> compared to conventional methods?
Yes, between 0-5%
Yes, between 5-10%
Yes, between 10-20%
Yes, between 20-30%
Yes, between 30-50%
Yes, between 50-50 %  Yes, by over 50%
No     No
I do not know
T do not know
. D
*Do you think offsite construction can reduce <b>project time</b> compared to conventional methods? (from design
to finished project).
Yes, between 0-5%
Yes, between 5-10%
Yes, between 10-20%
Yes, between 20-30%  Yes, between 20-500/
Yes, between 30-50%
Yes, by over 50%
O No
I do not know
What types of <b>financial incentives or other support mechanisms</b> would best encourage growth in offsite
construction?
Maximum 2 selection(s)
Public subsidies or grants

<ul> <li>Premium for early completion in construction contracts</li> <li>Other</li> </ul>	
None	
in Notice	
In your opinion, what are the most effective ways to grow the market for offsite construction for housing?	,
To grow the market for offsite construction in housing, it is essential to raise awareness of its benefits, such as full life-cycle cost reductions and time savings, while encouraging government support through incentive preferential procurement policies and premium for early completion. Standardising components and fosteric collaboration across the supply chain can improve efficiency, while investing in technology and automation will enhance scalability and affordability, making offsite solutions more accessible.	es,
* How would you describe the level of <b>client acceptance</b> of using offsite methods for construction?  © Clients are strongly supportive of using offsite methods	
Clients are strongly supportive or using offsite methods     Clients can be supportive as long as there are clear benefits for them	
Clients generally oppose using offsite methods	
Clients have no strong opinion	
I do not know	
Which features of offsite construction are most important to your clients?	
Maximum 3 selection(s)	
Familiarity with offsite construction	
Costs	
Speed of project delivery	
Sustainability (Lower construction Carbon footprint)	
Energy efficiency of finished building	
Design flexibility	
Customisability and flexibility	
Quality assurance and durability	
Adaptability for future renovations	
Safety of finished building	
Construction site safety improvements	
Project Scalability	
Prior positive experience with offsite construction	
Minimal on-site disruption	
My clients are not specifically interested in offsite construction and its features.	
Other	
None	

### Section 3: Policies and Regulations

- \* Do building codes or local regulations facilitate the use of offsite construction in the main country of your activity?
  - Yes, they work the same as for conventional methods

☑ Preference for offsite construction in public procurement

0	Partially, but gaps are observed and updates are needed
0	No, they act as a barrier to offsite construction
	I do not know

Would you like to elaborate on how building codes or local regulations act as a barrier for you?

Additional requirements and lack of level-playing field with on-site solutions.

Which areas of national or regional policies should be modified to support the uptake of offsite construction in your country?

between 1 and 5 choices

1	Update building codes to address gaps and inconsistencies
	Align relevant building codes with those of other countries/regions
	Make it easier to access services and skilled labour across borders
1	Streamline planning or building permit processes
1	Financial incentives or subsidies
	Update public procurement policies and requirements
	Update requirements on environmental sustainability
	Update requirements on health & safety
	Investing in education and training
	None
	Other

Do you know of any national policies or incentives encouraging offsite construction? If so, please provide them below:

Yes, several European countries offer incentives for offsite construction. The UK provides financial support through the "Offsite Construction Programme," Germany promotes sustainable methods via tax benefits under the "Building Energy Act," and countries like the Netherlands and Sweden offer subsidies for sustainable building projects, including offsite techniques. These policies aim to reduce whole-life costs, construction times, and environmental impacts.

Do you have any policy recommendations or regulatory best practices you can share? If so, please provide them below:

Policy recommendations include updating building codes to address offsite construction needs (whole life-cycle assessment), streamlining planning and permit processes, and providing financial incentives to support the higher initial costs and reward early completion. Aligning regulations across Europe and investing in training for a skilled workforce would also support growth in offsite construction.

#### Section 4: Available Technology and skills

\* Which of the following emerging technologies do you believe will have the greatest impact on offsite construction in the next 5–10 years?

Maximum 3 selection(s)

<b>V</b>	Advanced robotics for automated assembly
	3D printing and additive manufacturing
1	Advanced materials
	Artificial intelligence
	Digital twins and real-time monitoring (IoT)
	Improved transport and logistics solutions
	Other
	None
Has yo	our organisation encountered problems with the availability of skilled labour for construction?
	No
	Yes, for conventional construction
	Yes, for offsite construction
0	Yes, both for conventional and offsite construction
If yes,	please specify the type of labour
What a	areas of research and innovation, if any, do you believe need more focus to advance offsite
constr	uction?
R	esearch should focus on advancing materials, improving automation and robotics, and optimising design

#### Closing questions

Do you have any other suggestions regarding offsite construction as a solution to increase the supply of housing?

tools like BIM for better integration and efficiency in offsite construction.

Offsite construction can help increase housing supply by speeding up construction and improving efficiency. Whilst initial costs might be higher, the benefits in terms of quality, reduced work on site, adaptability and flexibility make the offsite solutions competitive (less expensive) on the whole life-cycle of the construction work. Greater standardisation and industry collaboration would further enhance its effectiveness.

If you have any relevant documents related to offsite construction, please upload them here. Only files of the type pdf,doc,docx,odt,txt,rtf are allowed

#### Contact

**Contact Form**