Zeus, King of the Greek Gods, punished Sisyphus to spend eternity rolling a boulder up a steep hill, only to see it tumble down before it ever reached the top: a seemingly simple task endlessly proving to be hopeless. In the UK, great hopes to transform housing construction is appearing to perhaps be somewhat of a Sisyphean task.

The government had set a target to build at least 300,000 new homes annually, but it seems increasingly unattainable. Construction productivity is low and productivity growth has been flatlining for decades. In addition, new homes standards are higher than ever before; a vital transition to Net Zero emissions is critical to deliver in housing stock; and skilled labour shortages have posed additional challenges. In turn, all of these have been compounded by inflation, Brexit impacts, rising interest rates, business failures and unrelenting market uncertainty. Research undertaken by The Productivity Institute has revealed significant issues that hinder new housing construction and particularly with respect to the adoption of the most advanced form of Modern Methods of Construction (MMC). This is Category 1, which represents 3D (volumetric) factory-manufactured modular homes and is widely believed to be the most sustainable and efficient approach to new homes construction. The method has its struggles, however, and is plagued by issues and failures despite significant and unprecedented investments.

The research identified five primary issues that limit the use of MMC, and particularly Category 1 methods, as a way to improve productivity in housing construction.

Key Issues

- 1. Labour market requires new skills. To deliver at pace and meet quality standards, both offsite and onsite aspects of MMC require skills and understanding that differ from traditional methods.
- 2. Projects must better accommodate the unique aspects of combining onsite and offsite methods. A cohesive link between offsite and onsite work is critical to the success of projects and this has been a major challenge.
- **3.** Land use approvals are a massive challenge for the industry regardless of the construction method. Seeking regulatory approvals from local authorities is consistently the most unpredictable and timeintensive part of the building process.
- **4.** The desire for flexibility limits productivity growth. Flexibility in home design and materials is desired by homeowners and regional authorities, which can limit the productivity gains of factory methods to the construction of social housing.
- 5. The industry is not incentivised to change. The construction industry is notoriously slow to change and cautious of risking delivery by trying new methods and materials.

These challenges hinder new homes construction and productivity growth but are not insurmountable.

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To read more about the research synthesised in this Executive Summary, please read *Productivity Insights Paper 016 Driving change in UK housing construction: a Sisyphean task?* by Suzanne Peters, Jonatan Pinkse and Graham Winch.





Driving change in UK housing construction: a Sisyphean task?

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The way forward

Government is uniquely positioned to advance the industry by applying three levers that can simultaneously improve conditions:

- 1. Drive demand creation for Modern Methods of Construction (MMC). Government can go further to incentivise builders to use MMC and as a significant owner of housing and construction projects government-funded bodies can drive change in the sector.
- 2. Deliver an MMC-oriented skills agenda. More skilled and semi-skilled labour and construction management teams need to better understand the unique requirements of MMC. Further education, coordination and communication can alleviate issues that arise when offsite components arrive on a build site.
- **3. Ensure efficient and pragmatic government approvals.** It is critical that the current systems for regional planning and land-use approvals are transformed to simplify the process and speed up decision making. The current system is onerous, inflexible, and unpredictable.

These three actions – ensuring demand, training for different skills, and improved regulatory processes – could pave the way for dramatic improvements in the pace of new homes construction and enable much-needed productivity growth in the housing construction sector.

These moves will not only support Category 1, but all types of MMC and the housing sector more broadly. Government can and must do more to benefit the industry as a whole if the country is ever to reach its housing and sustainability targets.





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