

Policy Briefing

The Scottish Government's Modern Methods of Construction (MMC) Policies and Strategies

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Summary: In recent years, the Scottish Government (SG) has sought to integrate offsite manufacturing (OSM) and modern methods of construction (MMC) into its housing strategies, affordable housing programme and some of its other funding mechanisms in relation to housebuilding. At present, OSM-specific policies are still being developed, but the SG's longer-term strategy recognises OSM's ability to provide more affordable homes, a modernised construction sector, and more energy efficient houses. To support the sector, the SG wants to produce a new procurement model based on collaboration; it will create dedicated strategies for OSM and for housing innovation; it will introduce new whole-life cost analyses; and it will create new standards and push for greater standardisation. Given that most affordable homes in Scotland are already built with timber frame kits, the SG want to see moves towards more advanced and more fully OSM processes in construction, but it is also reluctant to push for fully volumetric. There is, nevertheless, a recognition of the benefits of MMC/OSM in terms of meeting net zero and emissions reduction targets, which are ambitious; modular is therefore well-placed to benefit from the longer-term strategies and the specific policies which are expected to emerge soon.

Background

Since the 2010s, interest has grown in the role of MMC and OSM in the Scottish housing market. It has been driven especially by concerns over sustainability and the need to deliver greener housing, a mission made clear by the Scottish Government's *Sustainable Housing Strategy* (2013) but distilled in more detail in its [Greener Homes Prospectus](#) (2013), which focused on MMC's contribution. The prospectus wanted to see investment in greener technologies, MMC and modern materials to modernise the sector, reduce carbon emissions and cut user costs. Homes for Scotland, the developers' trade group, issued [a report](#) on 'mainstreaming' OSM and MMC in the sector in 2015. In the foreword, Margaret Burgess, the minister for housing, outlined the SG's desire to see 'Scottish companies ... maximise the potential of innovative design and construction techniques to deliver a greater number of greener homes'.

The SG has also made clear its intention to deliver more affordable homes and to this end produced its [More Homes](#) policy in 2016 (see [Policy Note SG3](#)). It has since sought to integrate MMC and OSM into its vision.¹ In 2018, the SG commissioned a research panel to

¹ Interestingly, the term 'offsite construction' is much more commonly used in current policy/strategy documents than MMC or OSM.

explore the benefits and barriers facing OSM housing delivery; this [reported](#) in 2020 and the SG [issued guidance in 2021](#) about how OSM can fit within the national Affordable Housing Supply Programme (AHSP), which is the main source of capital funding for new affordable and social housing in Scotland (see [Policy Note SG1](#) for the OSM guidance). Also in 2021, the SG launched its [Housing to 2040](#) strategy (see [Policy Note SG2](#)), which further outlined its policies towards MMC/OSM in relation to the SG's longer-term housing objectives, both in terms of affordability and in meeting its net zero commitments. At present, these represent guidance and proposals, rather than strict, granular policies; the SG is committed to providing a full OSM strategy soon and is continuing to research new business models and different forms of OSM/MMC.

Current Strategies and Policies

MMC and the Affordable Housing Supply Programme, 2021 to 2026

In October 2021, the SG released [its policy](#) regarding the use of OSM in the Affordable Housing Supply Programme. Much of this is in a formative stage, with more detail due to emerge later. At present, the SG envisages the use of OSM to 'deliver high-quality and energy efficient' homes, in line with the proposed zero-emissions new-build affordable homes strategy. It wants to 'focus on greater use' of OSM in the delivery of these homes and wants to develop a new business model towards this end. Alongside helping to deliver affordable housing and meeting the net zero targets, the SG see OSM as helping to meet challenges around decarbonisation, labour and material shortages, workforce diversification, efficiency and productivity, waste reduction, increasing costs, and concerns over quality in new housing.

To promote OSM/MMC, the SG is working to **develop a new business model based on collaborative procurement**, clear development pipelines, **more standardisation** of house types and components capable of customisation, **whole-life cost evaluation**, and the adoption of long-term, **performance-based contracts** with benefits sharing. The SG perceive there to be too much variation between what planners and providers want, which prohibits economies of scale from being realised. It wants to address this by working towards a kit of standardised core components which can be customised; the SG expect this to be especially beneficial for smaller projects.

It also wants providers, designers, developers and builders to collaborate from the outset to avoid designers asking for products which require unnecessary customisation. They also worry that disconnects in the traditional, sequential process can create delays and problems; this can be overcome, they believe, with collaboration throughout.

This model is being tested in the Edinburgh Home Demonstrator Project (launched in 2020). The SG recognises it has a role to play in providing pipeline certainty for manufacturers. They also note that **RSLs often want long-term relationships with builders** to help finely tune designs over time.

A full strategy for OSM is being developed by the SG's More Homes Division and the Scottish Futures Trust; it is expected to be published soon.

The report notes that 85% of new Scottish homes are built with timber kit systems, but most are open panel and construction is mostly on-site. The new strategy is **expected to shift the emphasis towards more advanced timber systems and closed panel systems.**

The SG is looking to adopt PMV in its performance measures in the net zero and OSM strategies when they emerge. It will **impose a baseline PMV** and **work towards a future target.**

The SG outlines several 'key features' which are 'likely' to be included in the upcoming strategy:

- Increasing the **use of Scottish timber**
- **Re-shoring supply chains**
- 'Contributing to the wider green economic recovery'
- 'Strengthening the adoption of **Fair Work principles**'
- Advancing the '**circular economy**' principles
- Forming partnerships to 'embed place principles' in design to 'create successful and vibrant communities'
- Collaborating with partners to encourage a more diverse workforce

Finally, it is concerned that there are very few advanced OSMs in Scotland, making for a limited marketplace. The SG recognises the need to support the development pipeline to encourage greater investment, and in turn to give providers assurances about the industry.

All of this represents the SG's latest thinking. It is important to consider now how these OSM-specific policies fit in with its longer-term ambitions about the housing sector, which are discussed next.

MMC and the Housing to 2040 strategy

The SG's *Housing to 2040* strategy wants to 'put housing firmly at the centre of our objectives for people in Scotland', which include tackling poverty, creating jobs, meeting energy efficiency and fuel poverty targets, tackling the climate emergency, and producing 'connected' and 'cohesive' communities. To this end, it will provide £16bn of funding for affordable housing, and will aim to support 12,000 to 14,000 jobs a year by 2031; it will have provided 100,000 new affordable homes by 2031/32, with 70% or more being for social rent; 50,000 will be delivered by 2026/27.

Substantial further investment will be needed to decarbonise existing homes. The SG wants new homes to be energy efficient, use zero emissions heating and be prepared for future climate change. **From 2026, all new homes delivered by RSLs or LHAs will need to be zero-emissions.** As the strategy notes:

This will be supported by a new zero emissions new-build affordable homes strategy to be developed in 2021 which will focus on **greater use of offsite construction** and the introduction of a new business model for the delivery of affordable homes...

This provides much scope for MMC and OSM to have a substantial role in meeting these objectives. Indeed, the SG states in the strategy document:

This will involve fitting **zero emissions heating systems ahead of the 2024** regulations coming into force, making **greater use of offsite construction** and introducing a new business model for affordable home delivery.

The SG see **modernising construction** (especially through OSM) as '**one of the most important tools** we have to achieve the quality of home build and the **exacting energy efficiency standards** needed to meet our **net zero targets**'. This will also diversify the workforce, digitise work, speed up development, benefit communities and improve health and safety.

Alongside these aims, they want to see the construction industry modernise and will develop a **Housing Sectoral Plan and a Housing Innovation Programme** to support this. They also want to create a **Supply Chain Development Action Plan**.

Improving quality will also be important; they want to create a **new Housing Standard** for every house (to be introduced in 2023, with legislation from 2024/25 and implementation from 2025 to 2030) and will introduce new building standards in 2025/26 (as part of the **Scottish Accessible Homes Standard**).

Attracting more private investment will be driven through partnerships with the **Scottish National Investment Bank**, which will be working towards supporting net zero and place-making. It will publish a report setting out its investment plans, but the SG anticipate it will invest in small housing projects by SME builders, regeneration, housing supply chains, energy efficiency, decarbonisation and circular economy features, and MMC.

The SG have released £325m of funding in the Place Based Investment Programme (2021 to 2026) which will pay for **community-led regeneration schemes, town centre revitalisation, and '20 minute neighbourhoods'** (where people live well and meet daily needs locally). A Regeneration Capital Grant Fund (worth £25m) will also be released over five years.

Planning will take 'infrastructure-first' and 'brownfield-first' approaches through the proposed National Planning Framework 4, with £50m also being invested in the Vacant and Derelict Land Investment Programme. This will also encourage town-centre redevelopment.

The SG's strategy envisages '**extending the use' of MMC to 'overcome some of the delivery challenges in rural areas'**, as promoting affordable housing delivery in remote, rural and island locations is a priority (to be funded by £30m through the Rural Housing Fund and the Island Housing Fund, the latter receiving £5m of the total).

The SG believes that offsite construction can play into their **Fair Work Nation** ambition by creating a more diverse workforce than traditional construction and also spreading jobs more evenly in geographical terms. It will also demand new skills, as outlined in the [Smith report into construction skills](#) (2019). The SG want to support this by creating pipelines of offsite projects. In 2021, Skills Development Scotland **will research the future skills needed** to help the construction sector move to zero emissions. The government will then support the provision of those skills, including through apprenticeships or, from 2022, an offsite construction training route through the National Construction Skills Academy. They also want to promote the sector as an ethical career prospect in schools through the Construction

Scotland Innovation Centre. They want to use a Fair Work First approach to assessing grants for the zero-emissions new-build affordable homes.

The SG has said that it wants to **understand more about the technological requirements and investment needs** of the OSM sector. This is partly being achieved through the Edinburgh Home Demonstrator Project (ongoing, which is researching MMC in connection with 1,000 new homes in the city).² They want there to be a **'more visible pipeline** of future offsite development' which can lead industry to **develop the confidence necessary to invest in more advanced plant systems**. Developing a housing sectoral plan by 2022 will make delivering green housing investments a priority, while a **Housing Innovation Programme** (developed with Construction Scotland Innovation Centre and the Scottish Futures Trust) will 'reshape demand towards design for manufacture and assembly and ... raise public awareness of the environmental, social and economic reasons for this'.

Ultimately, the SG foresees that **'greater use will be made of standard components** (without compromising design quality)', while **'the cost of a project will be assessed over its whole lifetime'**.

Commentary

The SG is clearly working to integrate OSM and MMC into its housing strategies, affordable housing programme and some of its other funding mechanisms, but these are early days and direct support for the sector and specific policies have not yet emerged. They are, however, being developed and the SG's longer-term strategy makes clear that OSM will be central to providing more affordable homes, a modernised construction sector, and much more energy efficient houses. To support the sector, the SG wants to produce a new procurement model based on collaboration; it will create dedicated strategies for OSM and for housing innovation; it will introduce new whole-life cost analyses; and it will create new standards and push for greater standardisation.

Given that most affordable homes are already built with timber frame kits, the SG wants to see moves towards more advanced and more fully OSM processes in construction, but it is also reluctant to push for fully volumetric. At present, much research is underway into the sector and its benefits, which will likely inform future policy.

There is, nevertheless, a recognition of the benefits of MMC/OSM in terms of meeting net zero and emissions reduction targets, which are ambitious; modular is therefore well-placed to benefit from the longer-term strategies and the specific policies which are expected to emerge soon, though developers will want to see more direct support for category 1 and are likely to be met with expectations around standardisation and utilising Scottish supplies and labour.

² It will also look at **'Community Carbon'** projects wherein local people offset the carbon impact of their homes.