



# Cast

REAL ESTATE & CONSTRUCTION CONSULTANCY

## **Manufacturing & Technology Session:**

# **Using MMC As A Change Agent for UK's National & Regional Industrial Strategy**

**Mark Farmer**

CEO, Cast Consultancy, CE Co-Chair & Government MMC Champion

Constructing Excellence Annual Conference

15<sup>th</sup> January 2020

# We Have Growing Discontent from Within The Industry & Those That Fund It....

The screenshot shows the North West Place website. At the top, there are navigation links for HOME, WORLD, UK, and COMP. The main header features the 'NORTH WEST Place' logo and a date of '15 December 2019'. Below the header, there are several advertisements, including one for 'Deetu' and another for 'S.I. SEAL myFT'. The main content area displays a news article titled 'Clugston collapse 'will not impact' Deeside scheme'. The article includes an aerial rendering of a large industrial building complex. To the left of the article, there is a 'Reader's comments' section with several comments. On the right side of the page, there is a vertical sidebar with various elements, including a 'Subscribe' button and a 'Trading and' link. At the bottom right, there is a photograph of a yellow 'CAUTION WET FLOOR' sign on a grey floor.

Multiple

HOME WORLD UK COMP

NORTH WEST  
**Place**

15 December 2019

Deetu Visualise and promote your city, development or portfolio

S.I. SEAL myFT

Subscribe

Trading and

Home Special Reports Events Jobs Insight Subscribe Advertising & Sponsorship Contact PlaceTech

Latest on Kier Group PLC

Kier profit war  
tumbling 40%

Opini  
Kie  
fee

Contr

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Reader's comments

Who cares whether it goes to the so-called "knowledge quarter" or Pall Mall. Ultimately...

HE'S MY DAD YAY

The very idea of rural "land grabbing" along rail routes to transform relatively small...

Why do THEY always build too close to the viaduct? We won't be...

Don't underestimate Liverpool. We are an Atlantic port. Like it or not the country...

Looks great I hope Man United take notice as Old Trafford is a bit...

Clugston collapse 'will not impact' Deeside scheme


CAUTION WET FLOOR

her Thomond/The Guardian

administration after its  
rebellion against



my's renders.

# And Resulting Media & Public Discontent with Construction Performance is Now Increasingly Visible



**LONDON ASSEMBLY**

**Derailed:**  
Getting Crossrail back on track



**BBC** Sign in News Sport Weather iPlayer Sounds

**NEWS**

Home UK World Business Politics Tech Science Health Family & Education

Business Your Money Market Data Companies Economy

**Hinkley Point C nuclear plant to run £2.9bn over budget**

Transport Committee  
April 2019



**BBC** News Sport Weather More Search

**NEWS** Find local news

Home UK World Business Politics Tech Science Health Education More

Scotland Scotland Politics Scotland Business Edinburgh, Fife & East More

**Edinburgh school wall collapse report highlights 'lack of scrutiny'**

© 9 February 2017 Edinburgh, Fife & East Scotland Share



HS2 + Add to myFT

**Why HS2 rail line is way over budget and badly delayed**

Unexpected mix of soil conditions, miscalculated land values and poor governance are all to blame





# Discontent from the Public at Large - Mainstream & Social Media Attention is Creating Unprecedented Reputational & Brand Risks for Housing Developers & HA's

The image shows a composite of a Twitter profile on the left and a screenshot of the Homeviews website on the right. The Twitter profile is for 'New Homes Expert' (@NewHomesExpert1), a house building professional with 1,608 followers. The Homeviews website features a large background image of a modern apartment building. The website header includes the Homeviews logo and navigation links: 'Area Guides', 'Write a Review', 'Blog', and 'About Us'. A search bar is prominently displayed with the text 'Search developments, locations, developers and more...'. The main content area highlights a 'FEATURED PROPERTY' at 'No.16 Sutton Court Road, SM1', identified as 'Greystar / South London' with a 5-star rating and 26 reviews. A 'FEATURED REVIEWS' section includes a quote: 'Perfect, stylish, modern London living' with a 5-star rating, dated 'Reviewed Aug 2019' by 'JAMES W'.

# The Homebuilding Sector Is In The Eye Of A Storm

Opinion **The FT View**

+ Add to myFT

## Persimmon report shows capitalism at its worst

The housebuilding industry needs to rediscover its sense of purpose

THE EDITORIAL BOARD

+ Add to myFT



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# NEWS

Home

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Your Money

Market Data

Companies

Economy

## Builder Persimmon lacks minimum house standards, report finds

© 17 December 2019



Share



# Cast



# The Grenfell Tower Tragedy Has Rightly Taken This Debate To A New Level



Ministry of Housing,  
Communities &  
Local Government

## Building a Safer Future

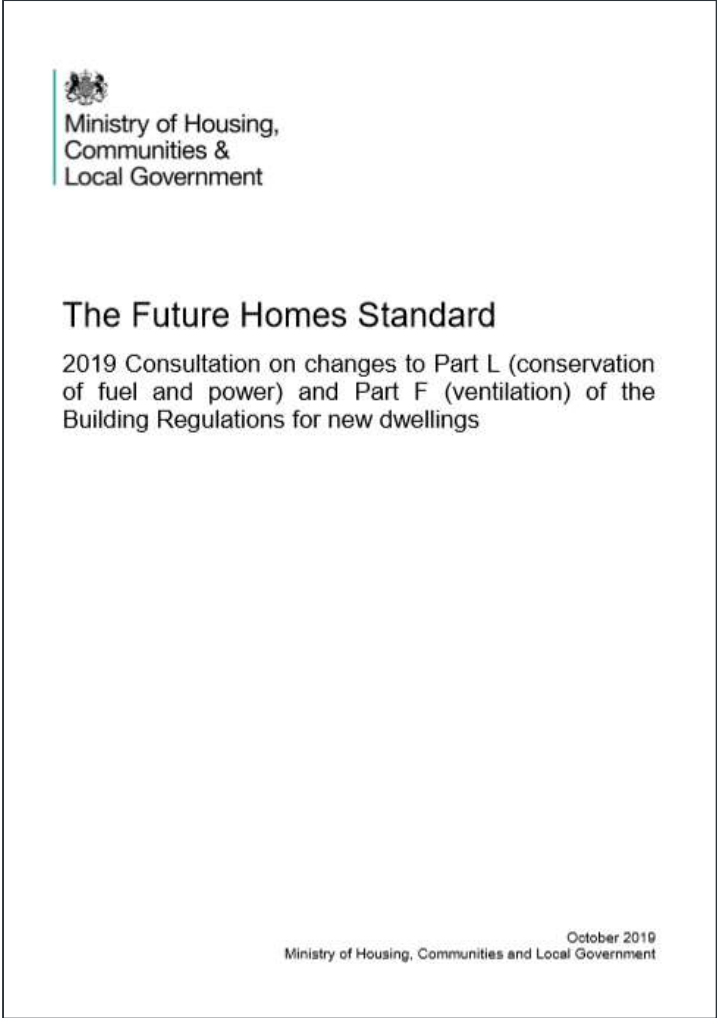
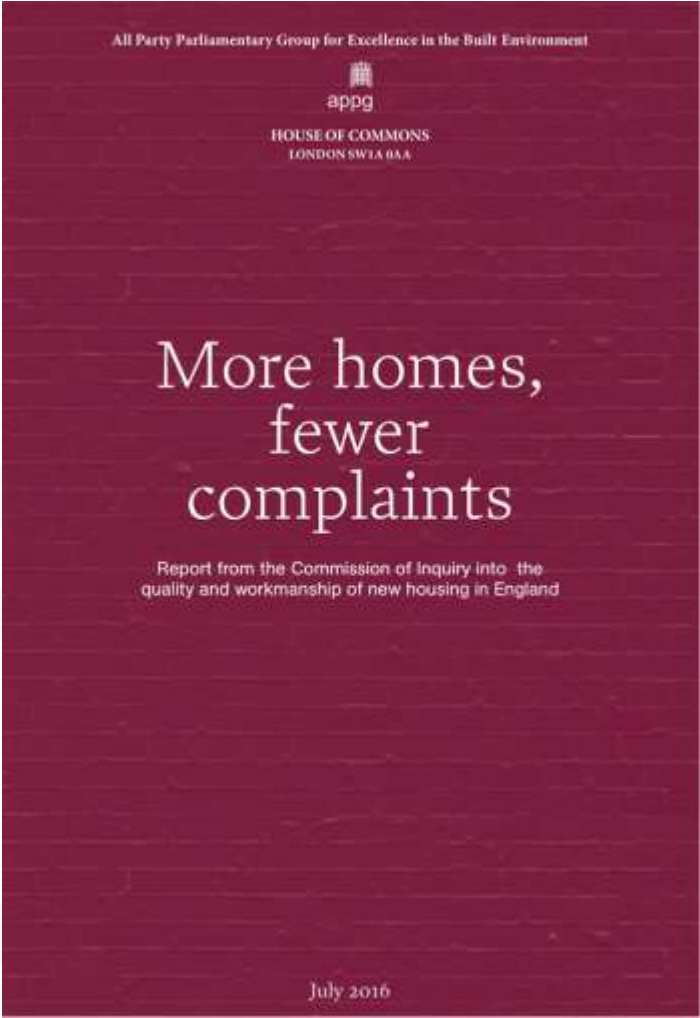
Proposals for reform of the building safety  
regulatory system

A consultation

June 2019  
Ministry of Housing, Communities and Local Government



# Quantity and Quality Have Rarely Coincided in Homebuilding – Societally Led Change Is Now Forcing Politicians To Force Us To Do Things Differently



# Structural Changes In Other Sectors Could Further Accelerate External Disruption In Construction As Manufacturing Supply Chain & Tech IP Diversifies Into The Sector

## Car sales fall in UK with industry's worst September since financial crisis

Consumer uncertain  
lead to 20% fall, says



▲ New Land Rovers on a transporter lorry. Photograph: Alamy

## Toyota to build prototype city of the future in Japan

Jane Lanhee Lee, David Shepardson

3 MIN READ



LAS VEGAS (Reuters) - Toyota Motor Corp (7203.T) said on Monday it planned to build a prototype “city of the future” at the base of Japan’s Mt. Fuji, powered by hydrogen fuel cells and functioning as a laboratory for autonomous cars, “smart homes,” artificial intelligence and other technologies.

## Amazon build prefab smart homes with integrated Alexa to

SHARE THE LOVE





But It's Not All Plain Sailing.....

# KATERRA PROBLEMS

## CAN YOU COUNT ON KATERRA?

**Crunch time for Katterra?**  
 The SoftBank-backed construction tech company has seen C-suite turnover, layoffs and other problems, but some sources say it's a 'different animal' than WeWork

November 2019 Issue / By Kathryn Breuzel November 01, 2019 12:00 PM



Katterra CEO Michael Marks in Taipei in June

**SO WHAT IS UK GOVERNMENT  
DOING & WHY IS CENTRAL &  
REGIONAL GOVERNMENT  
POLICY SO IMPORTANT?**



# UK Government Has Finally Recognised The Importance of Construction In Achieving Its Political Ambitions & A Move Towards MMC Is Central To That



The screenshot shows the GOV.UK website interface. At the top, there is a search bar and navigation links for Departments, Worldwide, How government works, Consultations, Statistics, and News and communications. The breadcrumb trail reads: Home > Environment > Climate change and energy > Climate change adaptation. The main heading of the news story is "Government announcement to end UK's contribution to climate change". Below the heading, the text reads: "Commenting on the Prime Minister's announcement to set a target of net zero greenhouse gas emissions by 2050, Emma Howard Boyd Chair of the Environment Agency said:"

**GOV.UK**

Search

Departments Worldwide How government works  
Consultations Statistics News and communications

Home > Environment > Climate change and energy > Climate change adaptation

News story

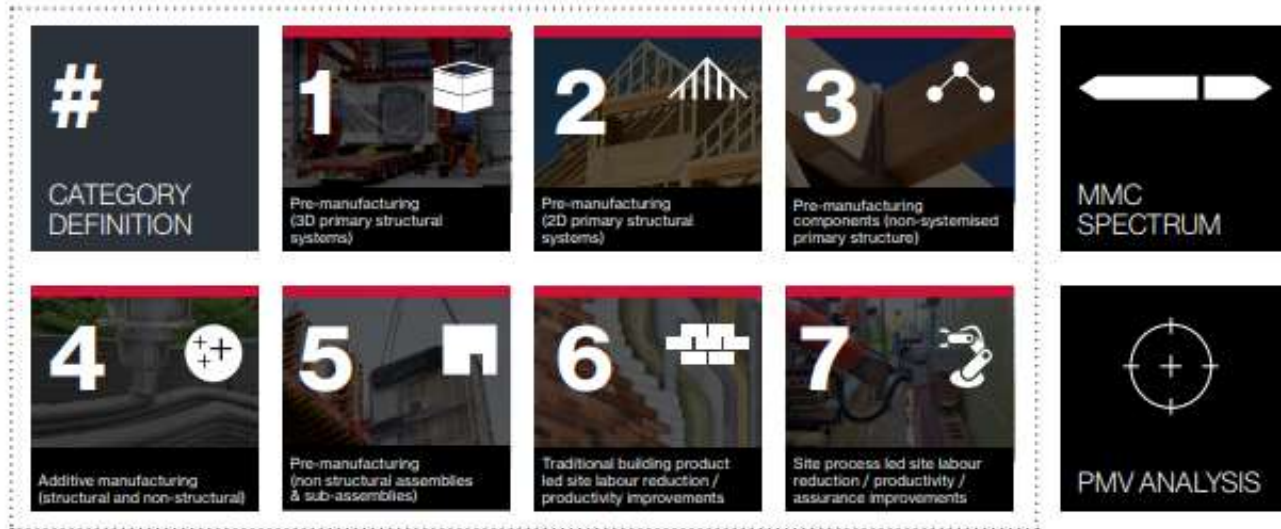
## Government announcement to end UK's contribution to climate change

Commenting on the Prime Minister's announcement to set a target of net zero greenhouse gas emissions by 2050, Emma Howard Boyd Chair of the Environment Agency said:

# We Need To Get Our Definitions & Terminology Consistent – ‘MMC’ & Show The World What This Looks Like In Practice

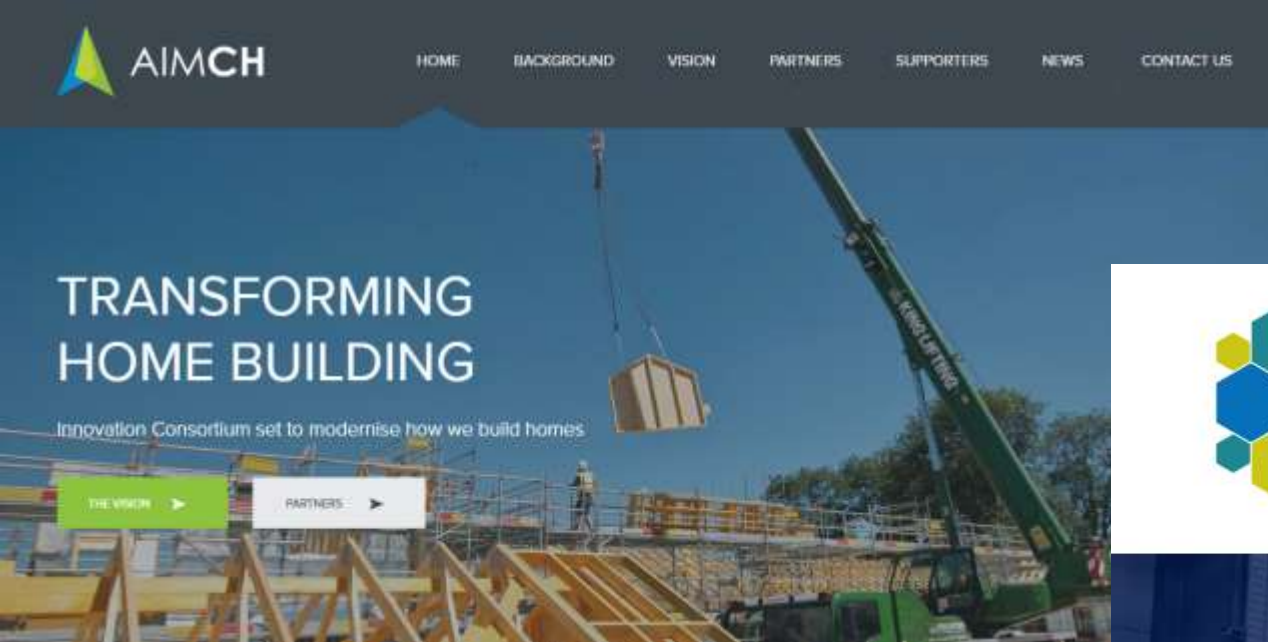
## Category **DEFINITIONS**

The term 'pre-manufacturing' encompasses processes executed away from final workplace, including in remote factories, near site or on-site 'pop up' factories. The pass test is the application of a manufactured led fabrication or consolidation process in controlled conditions prior to final assembly / install. On-site 'workplace factories' are included in Category 7).





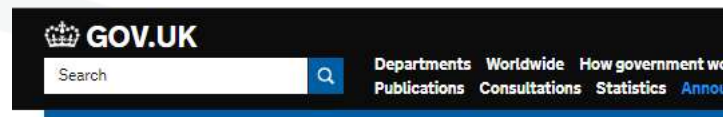
# Transforming Construction Has Manufacturing As One Of It's Three Key Themes & Activity is Flowing in Government Programmes & Housing Despite What You Might Read



Three of the five government departments that o  
any contracts with an offsite component in the fi  
November 2017 the government announced a 'pr



# Government Support To Stimulate Has Been Recognised by Homes England



[Home](#) > [Housing, local and community](#) > [Housing](#)

Press release

## Homes England supports local authority deliver pilot MMC scheme

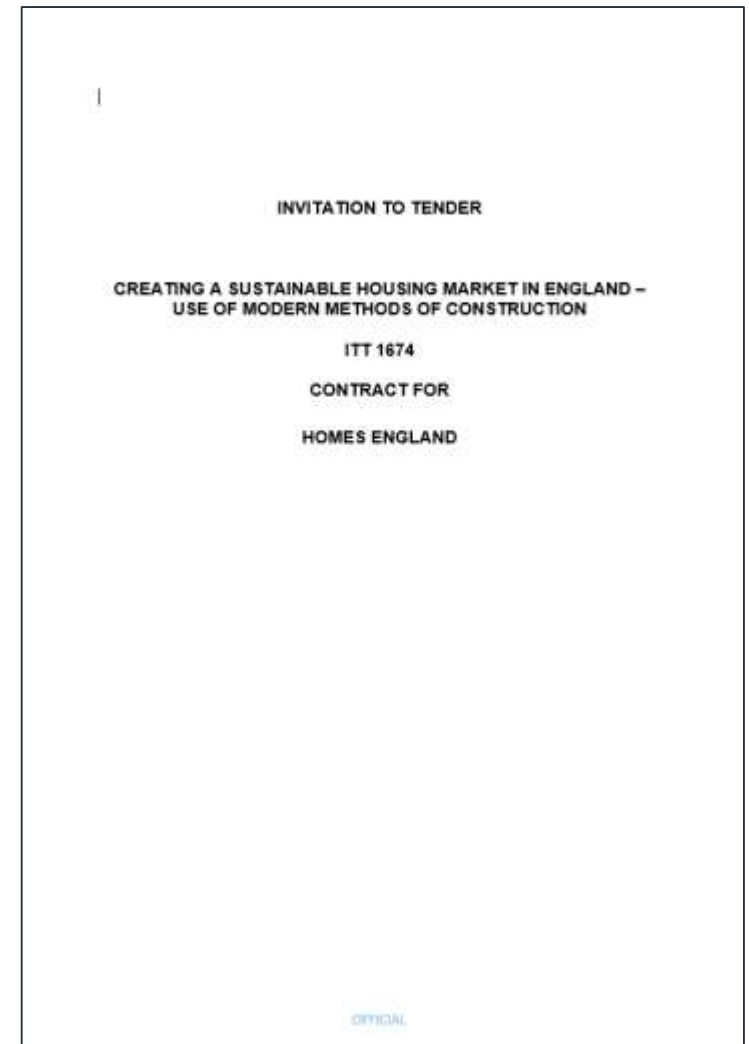
Homes England recognises the important role that modern methods of construction (MMC) have to play in delivering the homes that England needs.

Published 27 December 2018  
From: [Homes England](#)



Homes England is encouraging partners to develop and use MMC through a range of initiatives and the provision of development finance.

One local authority is exploring the use of MMC to deliver homes for affordable rent through an innovative pilot scheme. Nuneaton and Bedworth Council (NBBC) has just completed its first modular build having securing £120,000 worth of funding from Homes England.





# Start To Build Evidence & Data – Traditional v MMC



**Phil Collings** @HomesPhilC · Jan 7

An excellent start to 2020 for @HomesEngland on the #MMC front

Bids closed yesterday aimed at selecting a Research Team to help us analyse MMC data sourced from MMC pilot schemes we're developing nationally

We've been absolutely bowled over by the quality of the responses

1/2



1



12



38



**Phil Collings**

@HomesPhilC

Follow

Subject to approvals, we'll make an appointment next week.

This will be the UK's single largest MMC research commission, covering an initial wave of 1,500 MMC homes

This is going to be groundbreaking stuff, and will really advance understanding of MMC

[#MakingMMCHappen](#)



# The North West Has Established A Strong Framework In Response To The Wider Economic & Political Backdrop



### Industrial Strategy Greater Manchester Local Industrial Strategy

Mission-orientated projects will be defined during implementation and are expected to include the following:

▶ **Carbon neutral retrofit and new-build:**

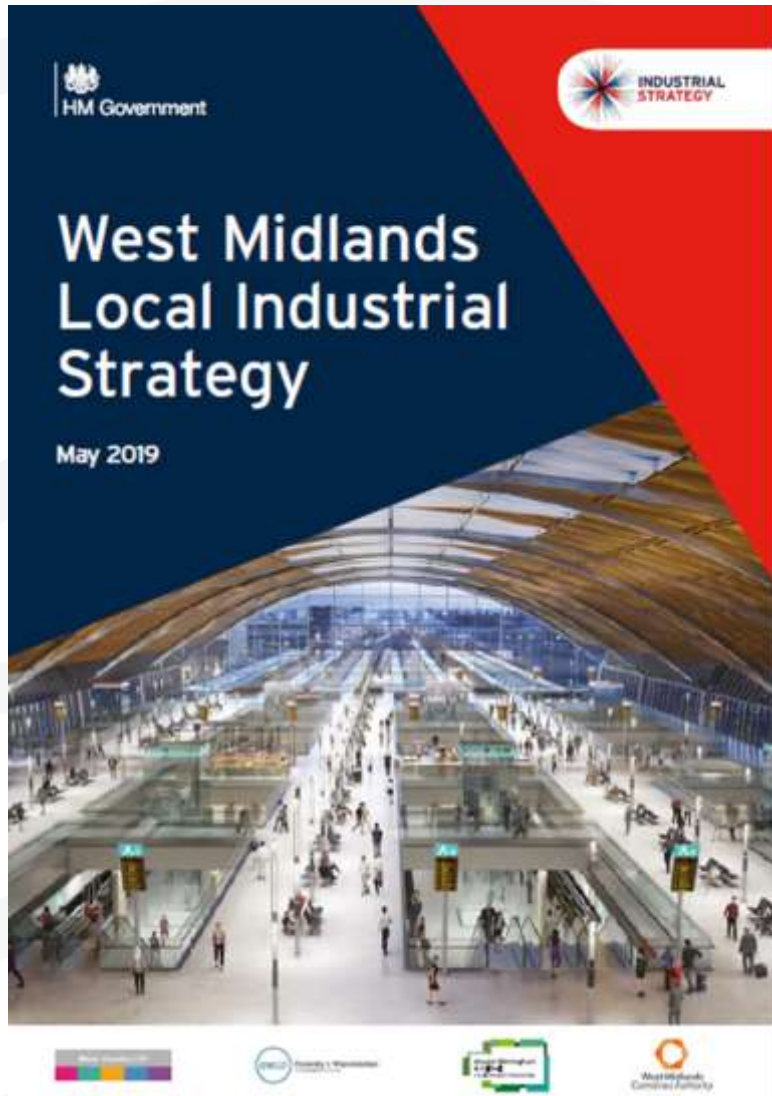
- Greater Manchester will work with the UK Green Building Council and other building environment professionals in the city-region to test Greater Manchester's ambition that all new homes and commercial / industrial buildings should be net zero carbon by 2028 - and see whether it can be achieved sooner (and the intervening steps required such as the balance between building efficiency, on-site energy generation and off-setting measures for remaining carbon emissions).
- Designing innovative finance and delivery mechanisms to retrofit homes and buildings with energy efficiency and carbon reduction technologies (and thereby reducing fuel bills of local authorities, businesses and residents). This is a key challenge with a potential global market as existing technologies are not currently commercially viable at scale.
- Developing large-scale modular construction facilities capable of building new homes at the quantity, pace, and to the environmental standards needed to deliver carbon neutral living and meet Greater Manchester's demanding new homes pipeline. This will be

the key component of a wider Modern Methods of Construction and Design for Manufacture and Assembly centre of excellence in the city-region, feeding local employment, skills development and training and supporting a new manufactured homes industry. The centre of excellence will coordinate its activities with the UK Construction Innovation Hub.

- ▶ **21st century energy supply:** A particular challenge is the generation of renewable energy in Greater Manchester given its established infrastructure and geography, which limit opportunities for centralised power generation. Government and Greater Manchester will continue to work together to provide the policy, legal and financial arrangements to establish the city-region as an energy transition region to accelerate innovative local renewable energy generation, storage, and efficiency. This will include a place-based whole system approach to energy supply and demand to create a local energy market and setting for integrating existing technologies with trials of new ones. This will build on learning from the Greater Manchester Local Energy Market research, funded by UKRI, which is testing the feasibility of city-region wide local energy markets that respond to 'place-based' constraints and market needs.



# This Has Been Replicated In More & More City & Combined Authorities



West Midlands  
Combined Authority

Wh

[Home](#) > [News](#) > [WMCA to introduce new framework for £610m investment to accelerate delivery](#)

## WMCA to introduce new framework for £610m investment to accelerate delivery of land for housing and jobs

Friday 22 March, 2019

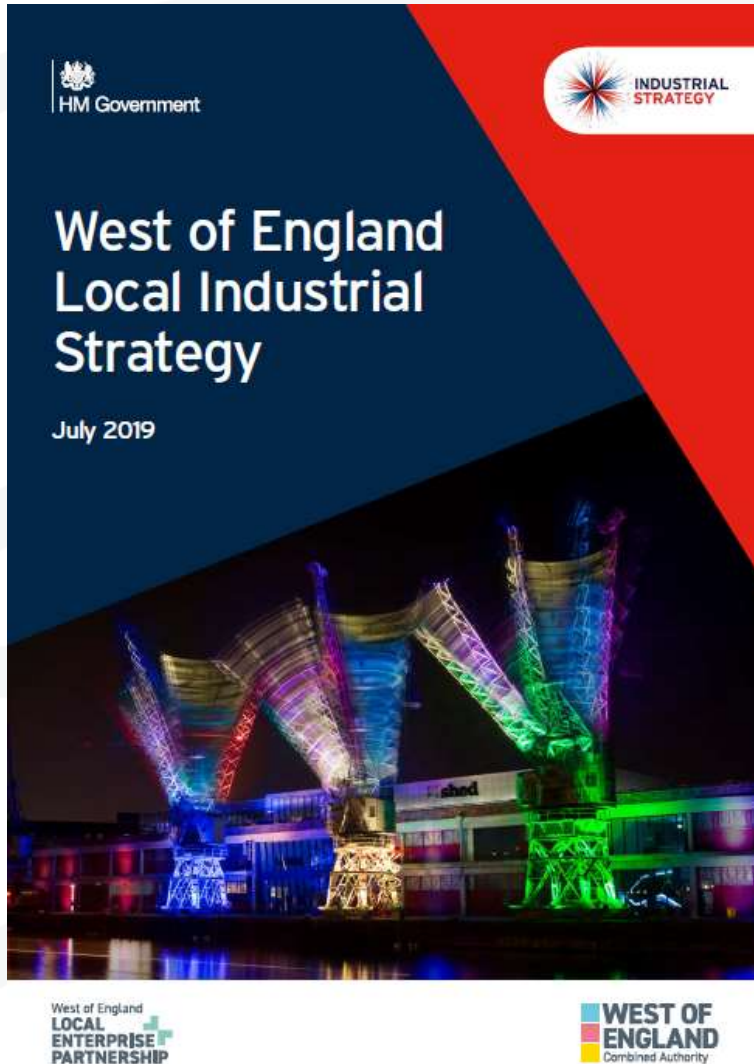


Over half a billion pounds of funding to help unlock land and accelerate the creation of new homes and jobs will be delivered through a single framework by the West Midlands Combined Authority (WMCA).

The WMCA Board has today (March 22) approved a Single Commissioning Framework (SCF) to efficiently deliver £610m of funding to kickstart developments across the region.

The authority says it will release funds linked to developments that meet its key goals, including tackling youth and long-term unemployment, securing affordable housing, maximising public transport connectivity and supporting advanced methods of construction.

# This Is Likely To Be Accelerated With Fresh Political Certainty & a PM Who Understands Devolution From Mayoral Experience



## Investing in modern methods of construction

[< Previous](#) [Next >](#)

The West of England Combined Authority (WECA) is funding a pilot programme to trial modern methods of construction, as part of its commitment to innovation in housing.

WECA is investing £150,000 for pilot trials to be conducted and provide case studies for the wider region, based on the learning gained.

West of England Mayor, Tim Bowles, said: “As part of this, we are supporting the Bristol Housing Festival, through Bristol City Council, to explore innovative ways of building new homes. There are many opportunities that modular homes or other types of off-site construction bring, to speed up building new homes across our region, and reduce costs. Innovation in housing is a key theme coming out of our West of England Local Industrial Strategy, which we launched with government in the summer. The work being carried out by the Housing Festival will be used to inform how we as a region develop this work.”

The Housing Festival is organising an industry conference on 22 October, at We The Curious in Bristol. It will look at people-centred development as well taking a practical approach to learning with case studies on new modular housing solutions.

# London Has Yet To Publish Its Local Industrial Strategy But The Precursors Are Clear

MAYOR OF LONDON

MAYOR OF LONDON

- Half of all homes built in London by 2021 should have a pre-manufactured value of over 50 per cent and the associated need to ensure the construction workforce has the required skills to deliver this should be reflected in London's training and skills provision.

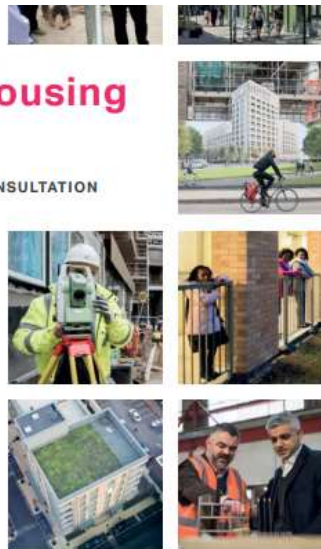


Planning Committee  
August 2017

## London Housing Strategy

DRAFT FOR PUBLIC CONSULTATION

September 2017



THE SPATIAL DEVELOPMENT STRATEGY FOR GREATER LONDON  
DRAFT FOR PUBLIC CONSULTATION

DECEMBER 2017



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**THE LAST 12 MONTHS HAS ALSO SEEN AN  
UNPRECEDENTED SHIFT IN UK ACTIVITY IN  
INDUSTRIALISED CONSTRUCTION**

# New International Players, New Capital, New Partnerships in MMC



## Goldman puts its faith (and £75m) in prefabs



David Byers, Assistant Property Editor  
 April 11 2019, 12:01am, The Times  
 Real Estate Banking  
 Investment

## Homes England awards councils £38m for 2,000 MMC homes

NEWS 24/10/19 1:00 PM BY MARK SMULIAN

Homes England has awarded £38.2m to six councils to help build 2,072 homes using modern methods of construction (MMC).



## Japanese developer enters UK housing market

Sekisui House enters joint venture with British government to build modular housing



## Places for People bets £100m on modular housing

Investment represents a 'huge vote of confidence' in modern prefab, says Homes England



## Government backs Ilke Homes with £30m loan



True 21<sup>st</sup> Century Disruption Is Already Finally At The Door of The Mainstream UK Housebuilding & Contractor Sector – Strategic Shifts to Integrated Manufacturing

## Countryside to open two more modular homes factories

Weston Logistics' new distribution & build-off-site centre is one of the most advanced in the UK construction industry

**Barratt sets new MMC target after beating 2020 aims**

**Kier predicts contractors will employ 'offsite managers'**



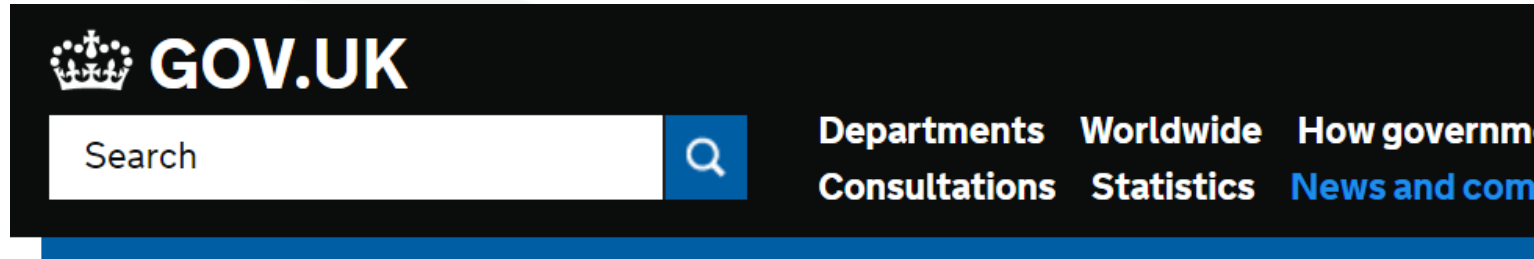
Mace unveils 'next generation' construction method

December 5, 2019





# There is Now An Unprecedented Recognition From Government That In Homebuilding They Need To Drive MMC With Stronger Industry Connectivity



[Home](#) > [Housing, local and community](#) > [Planning and building](#) > [House building](#)

Press release

## Housing Minister announces new champion for modern housebuilding

Mark Farmer to be the new Champion for Modern Methods of Construction.

# Initiatives Align To Post Election Priorities & Industrial Strategy – ‘Levelling Up’

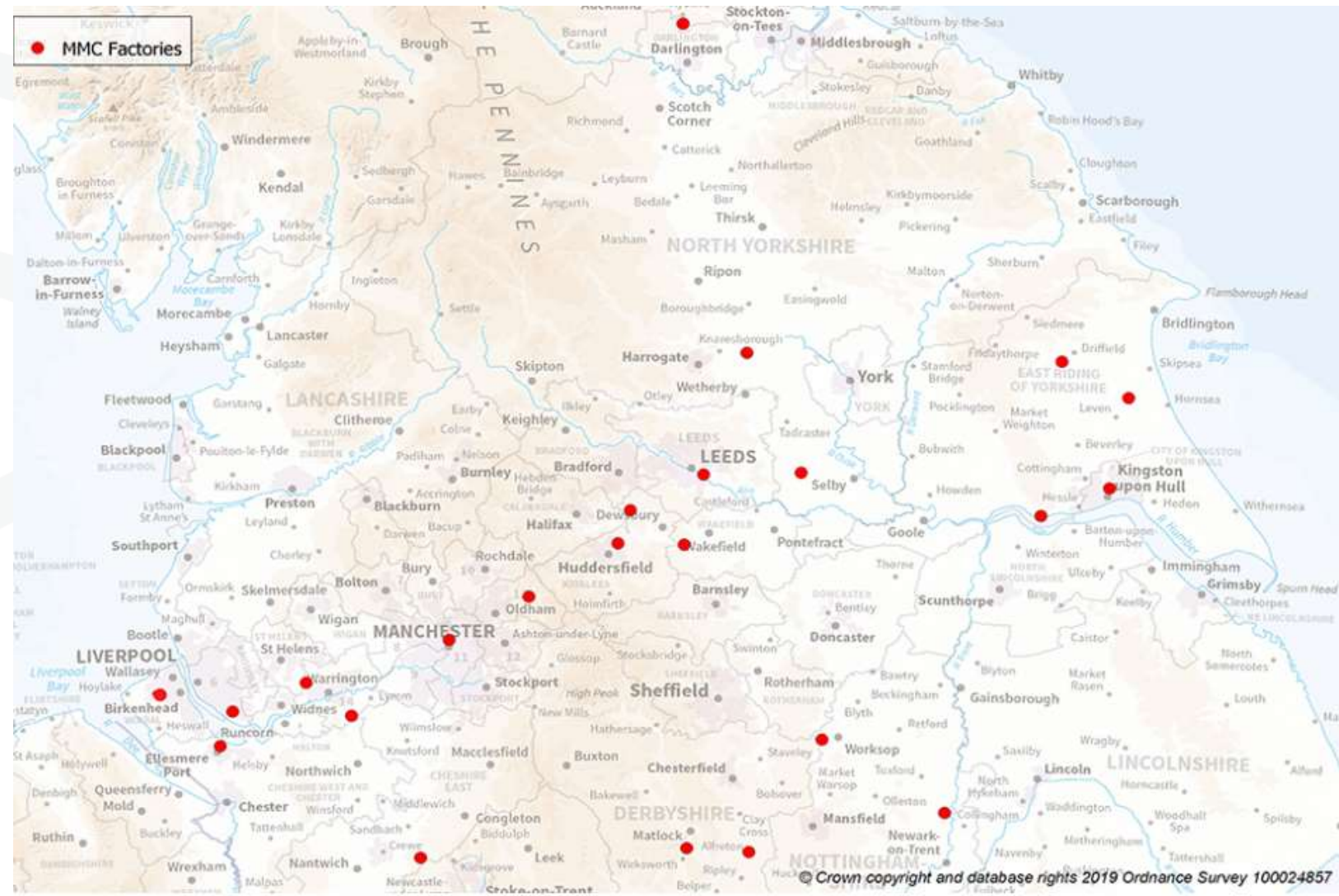
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Press release  
**Housing Minister unveils £30m boost for ‘Construction Corridor’**

Government developing a construction industry which will deliver zero carbon homes, an industry worth £40 billion a year and create 80,000 new jobs.

Published 3 November 2019  
From: [Ministry of Housing, Communities & Local Government](#) and [The Rt Hon Esther McVey MP](#)



# A New 'Northern Construction Corridor' or 'Centre of Excellence' is Not 'A Thing' – It Is A Connected Eco-System of Thematic Innovation That Should Have National Impact At Industrial Strategy Level

Demonstrators / Expo's

Carbon Reduction Agenda

Generic Skills & Training Standards

Procurement & Organisational Reforms

Testing & Assurance

Generative Design & AI

Materials Science & Innovation

Demand Planning & Aggregation

Digital Manufacturing Process Improvement

Digital Assembly & Integration

Design Standardisation

Adaptable & 'Circular' Buildings



# So What Is The Opportunity For CE Members?

## Programme description



### ADOPT!

- Commission, advise or deliver differently using CIH insights & access
- Build like minded teams within CE network & beyond leveraging local industrial strategies
- Share problems & solutions
- Capture data & evidence of better outcomes
- Role model being the new mainstream & marginalise business as usual!

