



# CIL'S GLOBAL MODULAR INDEX

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CIL has created the 'Global Modular Index', a proprietary tool which creates a rating for each country based on their successes, or lack thereof, with modular adoption.

For this publication, we have chosen five sample locations from our extensive Index to assess in more detail:

- Sweden - the global leader
- Singapore
- Germany
- UK
- USA

# WELCOME TO CIL'S GLOBAL MODULAR INDEX

## The industry

We have long tracked the changing pressures on our built environment and its supply chain. Today, we see huge variations in adoption between sectors and across geographies. However, across the board there are now critical areas of alignment between structural problems and modular as a solution, including:

- The societal need for more public sector infrastructure, including healthcare, and the increasing need for flexible capacity in critical parts of the private and public sector.
- Emergence of leasing demand and capacity to serve a share of this.
- Off site solutions' ability to minimise wasted materials, reduce the pressure on skilled labour, and shorten lead times.
- Growing green credentials of modern methods of construction in a sector that is yet to engage fully with the carbon cost of concrete.
- General failure of new build markets to deliver sufficient supply given the combined challenges of both a growing and ageing population.

In this piece, we explore modular adoption across the globe, including the successes and false dawns each region faces, and the lessons to be learnt by taking an international perspective.

## Our methodology





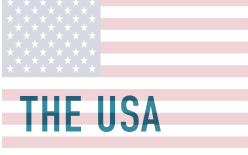
CIL has considered two factors in the design of the Global Modular Index.

- The first is the proportion of buildings built using VMC (Volumetric Modular Construction). This uses local statistics from 2022 and reflects the adoption of VMC.
- The second is the number of modular construction companies per capita. This number derives a metric for the prevalence of VMC businesses and relative level of capacity.

These two metrics have been combined into our proprietary tool to compare the prevalence of VMC around the world.



# A MODULAR SNAPSHOT ACROSS FIVE COUNTRIES

	CIL'S GLOBAL MODULAR INDEX RESULTS		ENABLERS OF MODULAR ADOPTION					
	RATING	RATING OUTLOOK	DIRECT GOVERNMENT BUILD PROGRAMMES	GOVERNMENT SUPPORT FOR MODULAR	BUILDING STANDARDS	FINANCIAL / LEGAL	ATTITUDE / PERCEPTION	SUPPLY CHAIN DYNAMICS & INDUSTRY COLLABORATION
 SWEDEN	70	➡	Municipalities often build, own and operate public housing	Government grants in place to fund VMC projects	VMC governed by conventional building codes	Banking system backed by government	Positive public view of VMC	Vertically integrated operations & culture of collaboration
 SINGAPORE	47	⬆	High government spending on public infrastructure	Government fund promoting VMC introduced	Code of practice that promotes use of VMC	Banking system backed by government	Positive public view of VMC	Lack of cooperation between stakeholders
 GERMANY	23	↗	No direct government build programmes but affordable housing targets stipulated	EU and government support measures in place	Standardised VMC building types but no code of practice	VMC accepted by insurers and lenders	Slowly improving negative stigma	Limited number of suppliers
 THE UK	13	⬆	Affordable housing targets stipulated but at low levels	Frameworks for public build programmes established	Formal standards not applicable for VMC	Need for forward funding project structures	Positive impacts of VMC not recognised industry-wide	Misaligned stakeholders, but significant modular hire market
 THE USA	9	↗	No direct government build programmes	Modular project execution plan to be incorporated in the bidding process	Formal standards not applicable for VMC	New government funds for VMC introduced but banks tentative to invest	Persistent negative stigma	Lack of cooperation between stakeholders & limited number of suppliers

● Hindering / underdeveloped    ● Needs further development    ● Facilitating / well developed

# WHICH MARKETS SHOW THE GREATEST OPPORTUNITIES FOR INVESTORS?

## Country highlights

- **Sweden:** The Nordics have led adoption and the use of VMC in the built environment. The country is well supported by government policies, building codes, investment/funding streams, an integrated supply chain and a cultural acceptance of VMC.
- **Singapore:** The government is enthusiastic in driving the use of modular construction. Higher adoption could be driven through greater cooperation between stakeholders in the supply chain.
- **Germany:** Adoption of VMC is becoming more developed with backing by the European Union and national construction measures.
- **UK:** Legislative foundations are in place and the government could unlock further growth, but adoption lags behind European counterparts due to a lack of forward-funding project structures, formal modular construction standards and industry-wide understanding of VMC benefits.
- **USA:** The government has recently introduced new measures and schemes to promote the adoption of VMC. However, more significant support will likely be needed to seed growth.

## Key takeaways

- 1 Regardless of adoption levels, a range of mature economies are turning to VMC to solve supply-side challenges.
- 2 Governments can be market makers for VMC, with build programmes and direct funding driving adoption.
- 3 Collaboration across the supply chain is an input to and output of VMC adoption, presenting opportunities for a range of market participants.

# GET IN TOUCH

CIL brings clarity to complexity. We have extensive experience advising investors and management teams throughout the investment process, identifying opportunities for growth and providing value creation support.



**James de La Salle**  
Partner, Europe  
jdelasalle@cil.com



**Axel Leichum**  
Partner, North America  
aleichum@cil.com



**Florian Wohlfart**  
Principal, DACH  
fwohlfart@cil.com



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