

Gathering21

Construction Innovations
for Future Generations

CitA

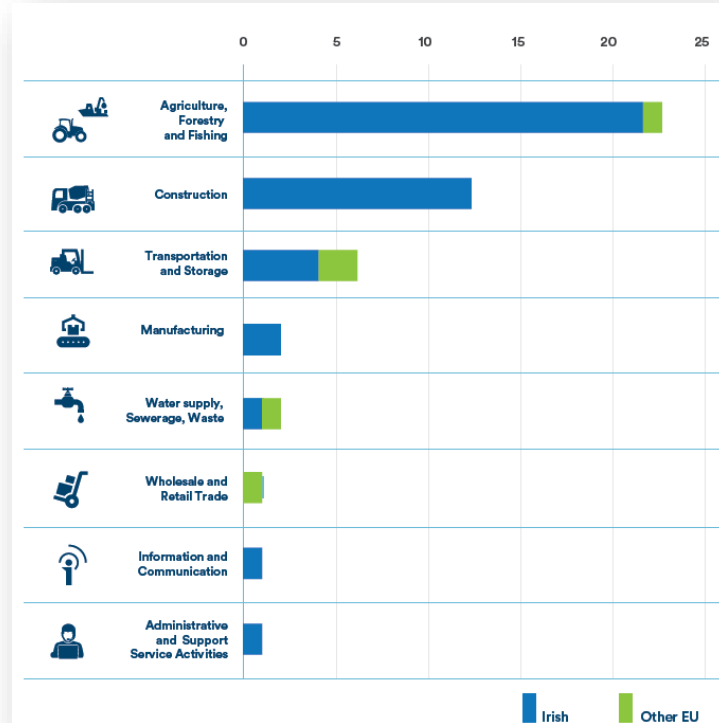
Can Ireland deliver the stable quantum to sustain a viable
volumetric off-site industry?



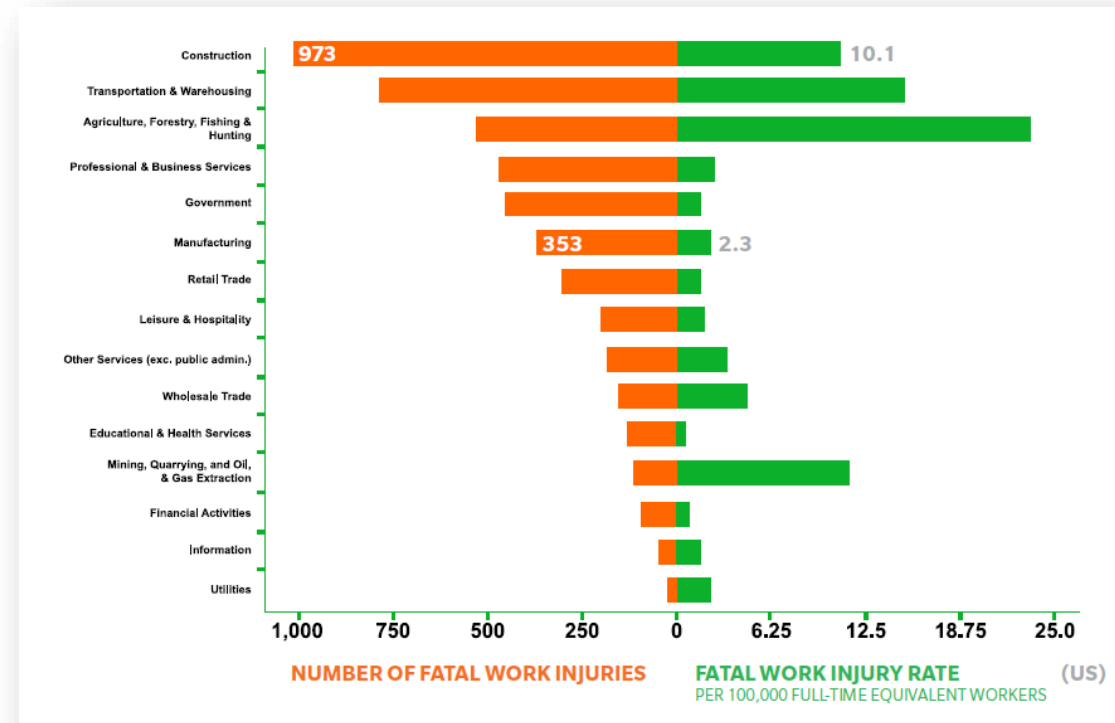
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21 - 23 September 2021



Why off-site
Safety



Number of fatal accidents by NACE economic sector and nationality, 2019 (HSA)

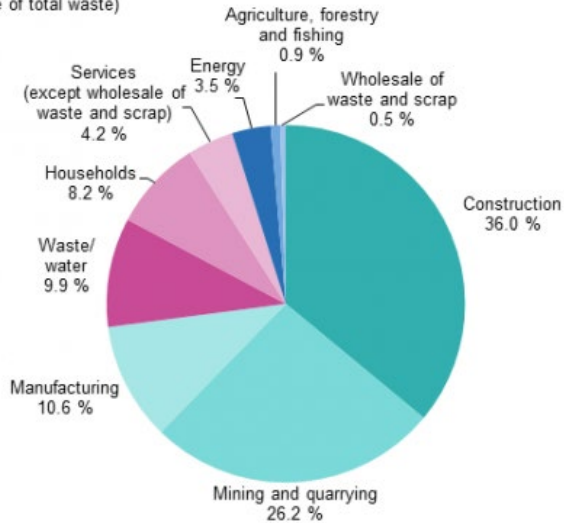




Why off-site

The Environment, The Labour Shortage & Speed

Waste generation by economic activities and households, EU-27, 2018
(% share of total waste)



Source: Eurostat (online data code: env_wasgen)

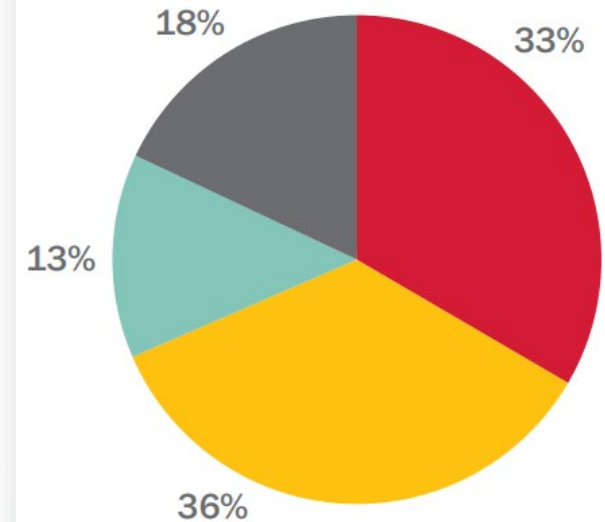
eurostat

Eurostat information on waste generation by industry



UK statistics – Irelands are very similar

Performance of
high-rise buildings



High-rise building projects
as a whole

- Completed on time or early
- 0-3 months late
- 3-6 months late
- More than 6 months late

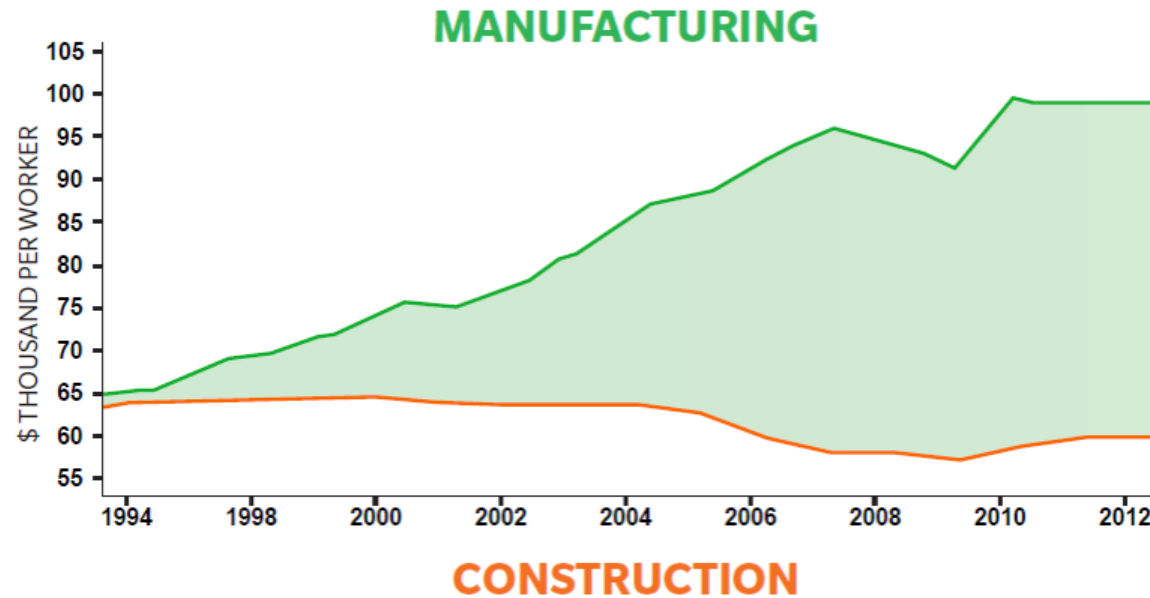
Mark Farmer



Why off-site
Efficiency

EFFICIENCY

Over the past 2 decades the efficiency of Manufacturing per worker has **improved** by over **53%**
The efficiency of Construction has actually **declined** by **10%**





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Why off-site Quality



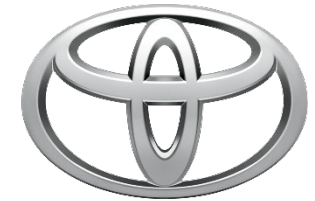


World Leaders

JAPAN

**THREE MAIN
HOUSING
COMPANIES
IN JAPAN...**

**ARE NOT
TRADITIONAL
CONSTRUCTION
COMPANIES**



TOYOTA

SEKISUI

Panasonic

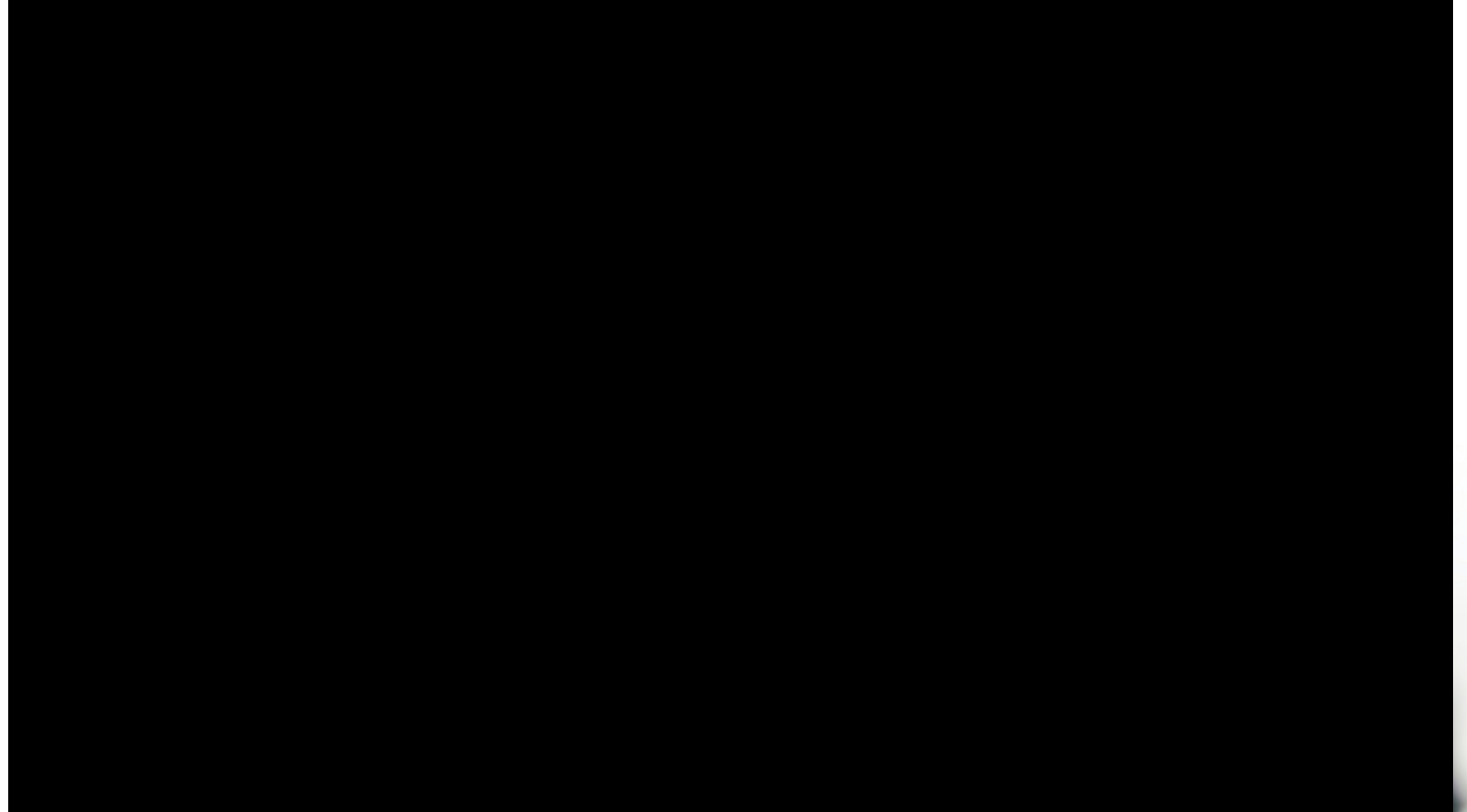


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What is volumetric off-site construction





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Why off-site
Efficiency

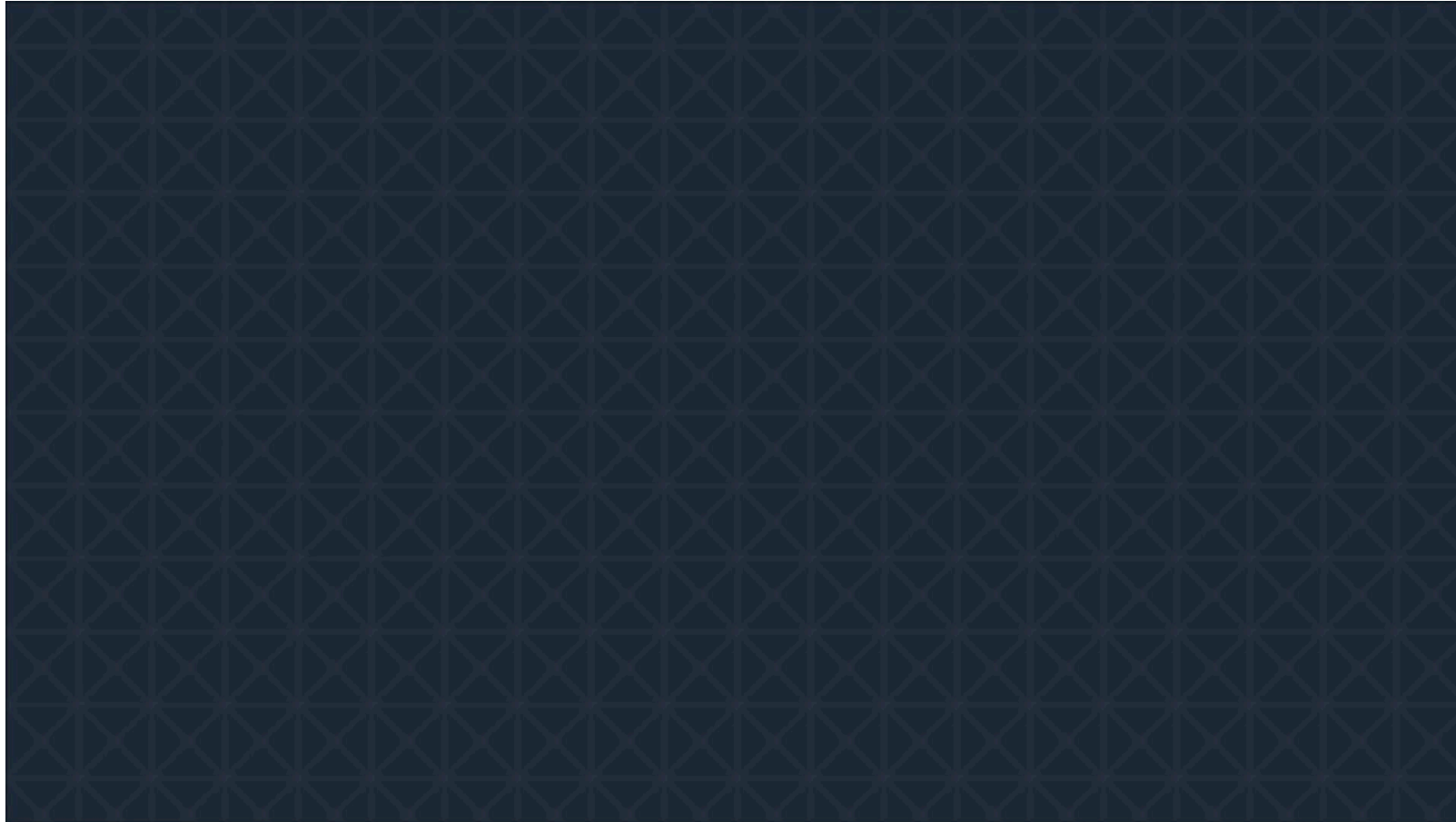


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The How
Design



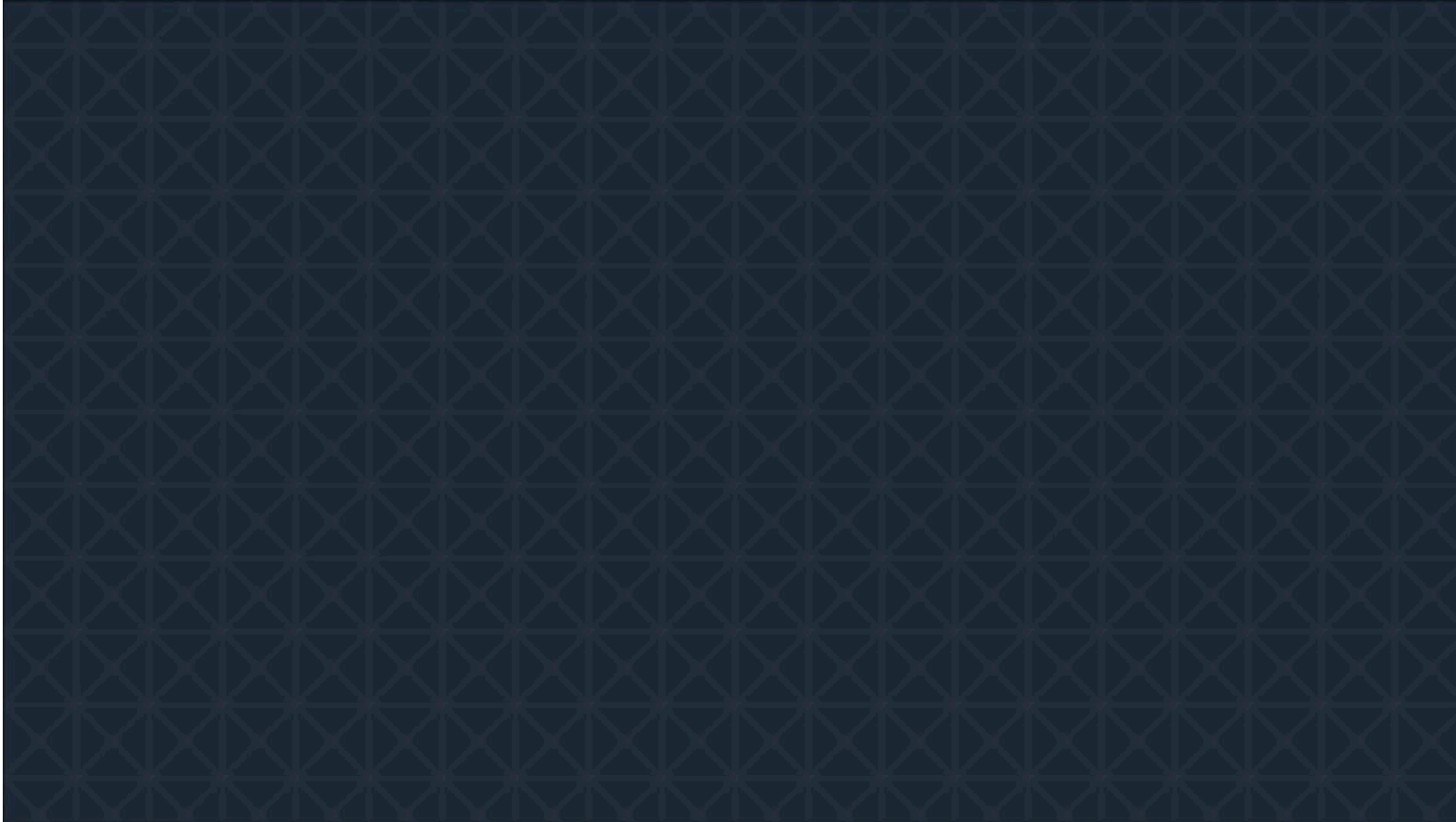


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The How
Design





The target?



HOW TO GET THERE

- Learn from the UK – Government commitment
- Committed to; 75,000 new home via modular construction by 2030
- = 25% - 30% of the overall demand in the UK
- Mirrored in Ireland = 8,750 and 10,500 modular homes by 2030
- LDA (are pushing this), AHB's (have delivered modular Clúid, Tuath), Private Developers (Glenveagh)



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ANCILLARY BENEFITS

- Each factory delivering 2,000 homes / annum = 600 jobs
- Ireland needs 5 – 7 new factories which would create a minimum of 3,000 jobs
- Typically in rural and remote locations
- Generates 3,750 jobs in the related supply chains, including in manufacturing equipment supply so
- A total of 7,000 jobs in rural locations





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THANK YOU
ANY QUESTIONS

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