

## CITA TECHLIVE 2022 Challenge, Change, Learn

Built To Innovate – Enterprise Ireland's action under Housing for All

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#### **Enterprise Ireland High Tech Construction Activity**

Portfolio of 450 export orientated companies classified as construction products, services or timber.

Exports of €2.9bn, up 12% in 2020. Major markets are the UK and Northern Europe

Clients in these sectors employ over 40,000

Export focus is high tech construction into UK, and Eurozone markets. Highly successful in international data centre contracts.

Industry challenges that Enterprise Ireland is supporting the sector on include: Digitalisation, Sustainability, Industry 4.0 adoption.





### **Housing For All – Enterprise Ireland**

In Pathway Five, under the heading 'Achieve Economic Sustainability', there are two clear actions for Enterprise Ireland:

- **Expand Agency Mandate:** Expand the role of enterprise agencies to include funding and supports for innovation and productivity related projects in the domestic residential construction sector, with funding for research, innovation and productivity to be provided, commensurate with the scale of construction in the domestic economy and in compliance with State Aid rules.
- Construction Technology Centre: Ensure that the construction sector is supported to innovate, in terms of construction methodology and technology Enterprise Ireland through the establishment of the Construction Technology Centre by Enterprise Ireland with a priority focus on residential construction.





### **Housing for All -Objective**

"Everyone in the State should have access to a home to purchase or rent at an affordable price, built to a high standard and in the right place, offering a high quality of life."

Projected Housing Output (New Build) 2022 – 2030												
Tenure	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Social homes	9,000	9,100	9,300	10,000	10,200	10,200	10,200	10,200	10,200			
Affordable & Cost Rental homes	4,100	5,500	6,400	6,400	6,100	6,300	6,400	6,300	6,300			
Private Rental and Private Ownership homes	11,500	14,400	17,750	18,200	19,800	20,400	21,500	23,000	24,000			
Total Homes	24,600	29,000	33,450	34,600	36,100	36,900	38,100	39,500	40,500			







### **Labour and Sectoral Capacity**



Additional labour requirements by occupation

The analysis also quantified the additional labour requirements at an occupational level. Occupations were classified according to whether they were 'Core' or 'Niche' skills. Core skills account for 50% of the total labour demand, and include Carpenters, Electricians, Plumbers and Construction workers. 'Niche' skills represent smaller, more specialised occupations and account for a further 7% of total labour demand, including Floorers / Wall Tilers, Construction supervisors, roofers and window fitters. The top 10 occupations in terms of growth are:

Carpenters & Joiners (+2,500)

Electricians (+1,900)

Elementary Construction Occupations (+1,800)

Plumbers (+1,300)

Painters & Decorators (+1,100)

Bricklayers & masons (+700)

Production Managers (+690)

Plasterers (+680)

Architects & Planners (+670)

Construction Operatives (+650)





### **Costs – The Opportunity**

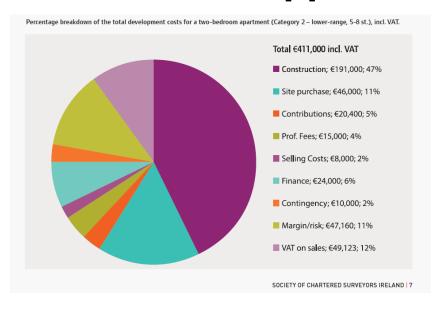
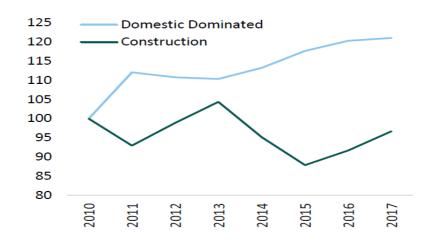


Figure 10: Labour Productivity Index



Source: CSO

Table 4: Key economic indicators across reference countries ranked from lowest to highest GVA/hour 30

2018	AUSTRALIA	BELGIUM	DENMARK	IRELAND	NETHERLANDS	NEW ZEALAND	UK
GVA per hour	n/a	€45.51	€37.60	€22.30	€33.16	€25.90	€27.03







One to one conversations with 20+ companies responsible for more than 6,000 units per annum.

Labour #1 constraint for growth.

Funding for:
Productivity training
New technology tools
Innovation in offsite manufacturing

### Built to Innovate.

Get the support you need to introduce Modern Methods of Construction.





### Productivity - Lean project by Homebuilder

Time in Motion – 2hrs 40 mins of a 10hr day.

Staff training, process examination.

Induction processes, location of tools, availability of food.

Added 40 minutes.

Issues – Culture change requirement, cost on homebuilder impact on sub contractors.



## Research & Innovation: Offsite housing manufacturer

Availability of wet trades is seen as a major issue.

Looking to increase PMV of panels.

Interested in developing an aesthetically pleasing cladding solution.

Approached one of the Institutes of Technology to conduct research.



# Productivity – Digitalisation by a General Contractor.

Multi-faceted efficiency drive.

Migrate paper to digital, increase BIM usage, expanded use of project management software.

To date has seen large yield from PM software – increased efficiency and quality.







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