

Summary of Demand from Industry for Skills / Training – February 2023

The SERSF has compiled the following information from feedback from industry, industry clusters/associations and data available from the Skills and Labour Market Research Unit (SLMRU) of SOLAS.

Nationally employment is at a record level (2.55 million in Q3 2022) and there is now 217,000 employed in the South East (CSO Q3 2022). The unemployment rate for January 2023 stood at 4.4% (10.4% for 15-24 year olds). The rate of staff turnover / churn has been accelerated by the pandemic. Given the tight labour market, in addition to skills and training needs some sectors are now experiencing significant labour shortages.

Construction – (15,700 employed)

This sector includes a diverse range of companies collectively employing over 15,700 staff (CSO QLF Q3 2022).

This sector includes a variety of companies in the following disciplines:

- Construction of buildings & infrastructure – housing / commercial / industrial / roads / bridges
- Professional Services eg architects, consulting engineers and quantity surveyors
- Specialist Construction Services eg Mechanical & Electrical Contractors, Heating, Ventilation, Air Conditioning (HVAC)
- Trades persons – many sole traders and micro enterprises – carpentry, plumbing, block laying, plastering, tiling, etc.
- Construction materials & components manufacture & supply

It is estimated that Ireland's construction industry grew by 8% in 2022, following a 4.7% annual decrease in 2021. Construction output levels in 2023 will likely surpass 2019 levels. Key drivers of growth include the National Development Plan (Project Ireland 2040) and the need to transition to a low carbon economy and steady industrial growth. In particular house construction and building retrofitting activity are driving growth in demand for construction skills. Furthermore, many of Ireland's large construction companies are growing internationally.

However, output growth will likely be reduced by the impact of high materials and energy prices, along with supply chain disruptions that have been exacerbated by the Russia-Ukraine conflict. Labour shortages are also a factor in driving up overall construction costs, with the construction industry having to compete with other industries for workers.

Many of the larger construction companies based in the South East are active in other regions particularly in Dublin and Cork. These include Suir Engineering, STS (Dussman Technical Solutions), Gaeltect Utilities, Mythen Construction and Clancy Construction. Additionally, many of the specialist subcontractors (eg electrical, mechanical, carpentry, plumbing) are travelling to Dublin for work.

Availability of Graduates

The Higher Education Authority statistics reveal a modest but growing pipeline of graduates in **Construction related disciplines** graduating in the South East in recent years.

Graduates from SETU

	2017	2018	2019	2020	2021
(0730) Architecture and construction not further defined	5	8	28	36	35
(0731) Architecture and town planning	20	62	43	33	44
(0732) Building and civil engineering	61	54	142	140	128
	86	124	213	209	207

Note. All awards awarded in All HEA-Funded Institutions in the Calendar Year by field of study (ISCED): full-time & part-time (including distance and e-learning). It is noted that the SE has a high proportion of certificates in these figures reflecting strong participation levels by part time learners.

A significant proportion of construction skills are supplied via the apprenticeship route. The number of apprenticeship registrations relevant to construction have been growing steadily in the South East as can be seen from the following figures.

APPRENTICESHIP REGISTRATIONS in SE	Annual Average (2019/2020/2021)	2021 South East
Construction Plant Fitting	7	7
Electrical	307	342
Electrical Instrumentation	20	18
Engineering Services Management	2	1
Industrial Electrical Engineer	3	1
Instrumentation	1	0
Construction Trades		
Brick and Stonelaying	15	23
Carpentry and Joinery	86	102
Geo Driller	1	1
Industrial Insulation	1	0
Plastering	8	10
Plumbing	60	89
Scaffolding	2	5
Stonecutting and Stonemasonry	1	1
Wood Manufacturing and Finishing	19	26
	192	257

Source: SOLAS 2022.

Roles in demand within the region include:

- Civil & Structural Engineer
- Building Services Engineer
- Sustainable Energy Engineer
- Quantity Surveyor
- Estimator
- Construction Site Foreman / Project Managers
- All Construction Trades: including blocklayer, plasterer, carpenter, plumber, electrician
- High Voltage Technicians and Engineers

Identified skills shortages and a need to upskill staff in the following disciplines has been identified:

- Construction Trades, particularly 'Wet' Trades for house construction and plumbing and carpentry.
- Electrical Trades – Electricians, Electrical Instrumentation, High Voltage Electrical
- Site Management, Project Management
- Sustainable Construction Methods
- LEAN Construction
- Estimating
- CAD, BIM skills
- Sustainable Energy Engineering
- Fire Engineering
- Occupational Health & Safety
- High Purity Welding

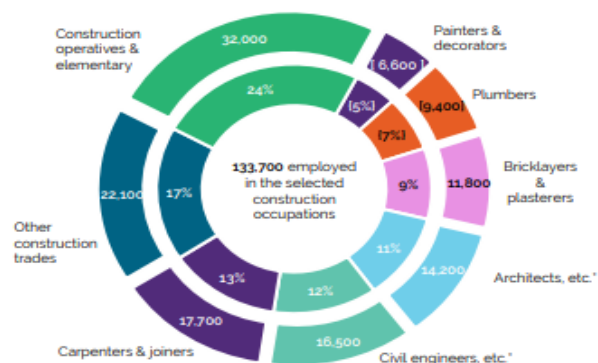
Extracts from the National Skills Bulletin 2022 – See [here](#)

10.8 Construction Occupations

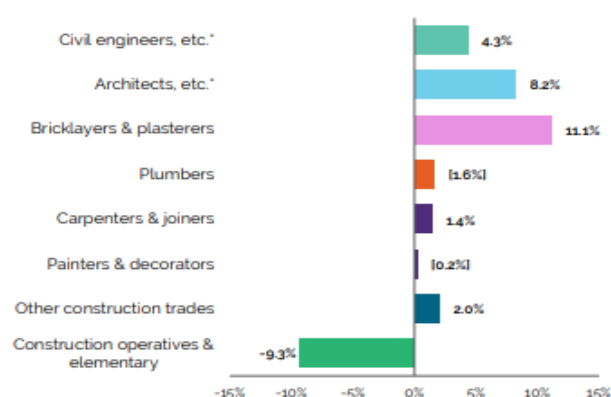
Overall employment: approximately 133,700 persons (95% male) were employed in the selected construction occupations, representing 5.6% of the national workforce.

- **Sector:** 73% of overall employment was concentrated in the construction sector; a further 18% were employed in industry and professional activities combined
- **Employment growth (5-year):** between 2016 and 2021, overall employment decreased by 3,600 (-0.5% on average annually compared to 2.3% nationally). The strongest rate of employment growth was observed for bricklayers and plasterers (11.1%) during the period
- **Age:** the 25-54 age group accounted for the majority of persons employed, at 70%. The share aged 55 and over (21%) was slightly above the national average of 19%
- **Education:** over half of those employed in the selected construction occupations had attained higher secondary/FET qualifications, above the national average share of 35%. The share who had attained third level qualifications (28%) was well below the national average (53%)
- **Full-time/part-time:** full-time employment accounted for 91% of employment
- **Nationality:** the share of Irish nationals was 82%, slightly below the national average of 83%.

Numbers employed, 2021 (annual average)



Average growth rates (%) 2016-2021



Between 2016 and 2021, overall employment declined by 3,600 (-0.5% on average annually compared to a 2.3% increase nationally).

Source: SLMRU (SOLAS) analysis of CSO data

Numbers in square brackets are small and should be treated with caution.

*See detailed occupation description in table below.

Construction related technicians are included in overall total but numbers are too small to report.

Overall Outlook for these Occupations

Although overall employment grew in 2021, it remained below pre-COVID-19 levels. The EWSS accounted for 13% of total earnings in the construction sector in the first quarter of 2021, although this had fallen to 4% by the last quarter. At the end of 2021, over 14,000 persons in the construction sector were availing of income support payments (a combination of both PUP and EWSS). Government targets in relation to housing⁵² and climate action⁵³ will continue to drive demand for construction-related skills across a variety of occupations (operatives, skilled trades/supervisors, engineers) with future skills and labour shortages potentially emerging. The transition to a zero carbon economy has significant implications for construction-related skills, from green buildings to renewable energy generation; while a small number of relatively new occupations (e.g. wind turbine technician, retrofit coordinator) are likely to grow in size, the most significant impact will be changes in the skills mix of a range of existing occupations (e.g. civil engineers, plumbers, roofers, glaziers, etc) as well as an increased demand for some.

The increased construction activity observed since the last financial crisis has resulted in growing numbers of apprentices in construction related trades. In 2021, there were over 2,000 new apprentice registrations for construction-related trades (excluding electrical), an increase on the 1,445 in 2019 and the almost 300 observed in 2011. Further increases in apprenticeship registration is likely to be required to meet the additional demands arising from Government ambitions. Issues with the supply and increased cost of construction-related materials could dampen demand in the short-term, although Government targets are likely to see continued demand for construction skills in the short-medium term.

Occupation	Economic summary
<p>Civil engineers & construction project managers</p> <p>Potential shortage: Civil engineers & construction project managers</p>	<p>Although employment growth was above the five-year national average growth, employment in 2021 remained below pre-COVID-19 levels. Over 200 employment permits were issued for this occupation in 2021, primarily for civil engineers but also construction project managers. The Recruitment Agency Survey and the Skills for Growth data identified issues in sourcing civil/site engineers (particularly with modelling skills in BIM and Revit) and construction project managers.</p> <p>With demand for skills for construction projects likely to grow in future years, shortages in these occupations are likely particularly in the area of new technology/green processes. The number of persons graduating from building/civil engineering level 7 or level 8 degree programmes rose to nearly 1,000 in 2020, a 28% increase on 2016 and the highest in seven years.</p>
<p>Architects & town planners, architectural technologists, & surveyors</p> <p>Shortage: Quantity surveyors</p>	<p>Employment growth was strong for this occupation, particularly between 2020 and 2021. Both the Recruitment Agency Survey and the Skills for Growth data pointed to issues in sourcing quantity surveyors. Employment permits related primarily to architects and architectural technologists but also to quantity surveyors, albeit to a lesser extent. The number of vacancies advertised for these roles were relatively small in number. Demand for quantity surveyors is expected to continue, particularly for experienced professionals; supply is unlikely to be sufficient in the short-term, resulting in shortages. A shortage of architects and architectural technologists may also emerge although this is not evident in the data as yet.</p>
<p>Bricklayers & plasterers</p>	<p>The high five-year employment growth in this occupation appears to relate to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels have remained relatively unchanged in recent years. Employment permits issued in 2021 primarily related to plasterers. A relatively high volume of vacancies were notified through the DSP for both bricklayers and plasterers and the Skills for Growth data indicated demand in some regions in Ireland. Demand for these occupations is expected to grow due to cosmetic and repair work associated with retrofit activities. This will help to offset the reduced demand for these roles onsite due to the introduction of new technologies and offsite construction methods. Although no shortages appear to exist at present, increased demand for skills may see future shortages emerging.</p>

<p>Plumbers</p> <p>Potential shortage: Plumbers</p>	<p>Employment growth was below the national average for this occupation and by 2021, employment had not returned to pre-COVID-19 levels. Future demand for plumbers will be driven in part by Ireland's targets for a low carbon economy, for both retrofit and new build activities. This is likely to require re/up-skilling for those already trained as plumbers in order to carry out the work linked to alternative renewable energy sources (e.g. the installation of heat pumps). The number of apprenticeship awards are significantly down which will impact on supply of skills in the short-term, although apprenticeship registration numbers were up in 2021. This lack of qualifying apprentices may lead to potential shortages for this occupation if construction activity increases significantly in the short-term.</p>
<p>Carpenters & joiners</p> <p>Potential shortage: Carpenters</p>	<p>Employment numbers for this occupation have yet to return to pre-COVID-19 levels with average growth below the national average. Employment permits issued in 2021 related mostly to shuttering carpenters as did the majority of the DSP vacancies advertised for this occupation. Mentions of issues sourcing carpenters occurred in both the Recruitment Agency Survey and the Skills for Growth data. The increase in apprenticeship registrations in recent years has yet to be reflected in those qualifying, which could lead to potential shortages for this occupation, particularly in the short-term. The demand for carpenters will likely be accentuated by the need for these roles to fulfil ambitions set out in the Programme for Government and the Climate Action Plan 2021.⁵⁴</p>
<p>Painters & decorators</p>	<p>Employment for painters and decorators declined annually since 2019. Although increasing, new apprenticeship registration numbers remained small for this occupation (43 in 2021). Painters/decorators are likely to be in future demand due to the cosmetic work resulting from retrofit activities.</p>
<p>Other construction trades</p>	<p>Overall employment numbers were unchanged between 2020 and 2021 and remained below pre-COVID-19 levels. The Recruitment Agency Survey identified issues with sourcing curtain wallers, steel fixers/erectors and fitters/glaziers. The older age profile for this occupation (with 38% aged 55 years and older) may also create additional replacement demand in future years. Any increase in commercial construction activity will also see demand for these occupations, while renewable energy targets may create additional demand for roofers in relation to the installation of solar panels, although this may require re/up-skilling for some. Although there are signs of demand for these roles, albeit potentially small in number, no shortages are evident to date.</p>
<p>Construction operatives & elementary</p>	<p>The negative employment growth over the five-year period for this occupation relates to changes that occurred on the introduction of the new Labour Force Survey in 2017; employment levels have remained relatively unchanged in recent years. The relatively high volume of recent job hires in 2021, with no increase in employment numbers, indicates that turnover was occurring. Difficulty in filling vacancies, reported in the Recruitment Agency Survey, refers to scaffolders, ground workers and pipe layers. Future demand for these roles will depend on the level of construction activity in the coming years.</p>

Other References

Report on the Analysis of Skills for Residential Construction & Retrofitting, 2023 to 2030 by Department of Further and Higher Education, Research, Innovation and Science. December 2022. See [here](#).

Skills for Zero Carbon – The Demand for Renewable energy, Residential Retrofit and electric Vehicle Deployment Skills to 2030. By the Expert Group on Future Skills Needs November 2021. See [here](#).

Labour Demand Estimates for Ireland's National Housing Targets, 2021-2030. By the Expert Group on Future Skills Needs. September 2021. See [here](#).

Building Future Skills – The Demand for Skills in Ireland's Built Environment Sector to 2030. By the Expert Group on Future Skills Needs. September 2020. See [here](#) and appendices [here](#).