



Industry Overview & Construction Skills Gap

CECA Scotland/Transport Scotland Liaison Meeting
August 2022

CECA Q1 '22 WORKLOAD TREND SURVEY

- 83% OF FIRMS REPORTING HIGHER WORKLOAD
- 38% OF FIRMS REPORTING ORDER INCREASES

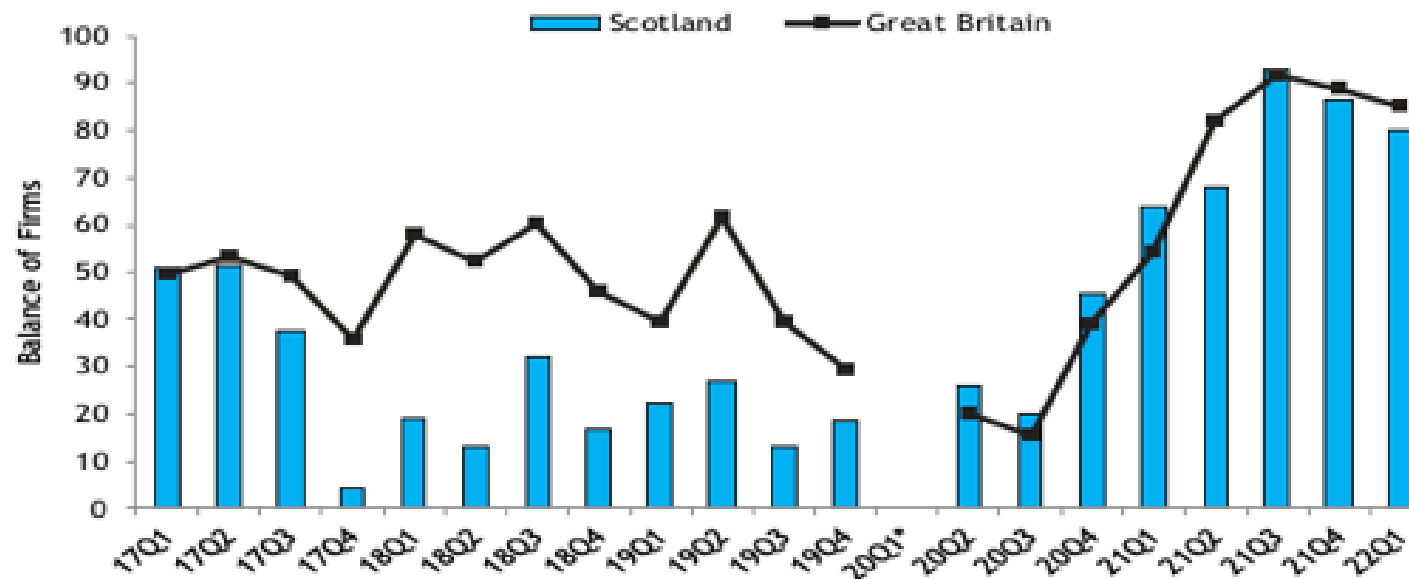


*The survey was not run in 2020 Q1 due to COVID-19

CECA WORKLOAD TREND SURVEY Q1 '22

- 80% OF FIRMS REPORTING TENDER PRICES INCREASES

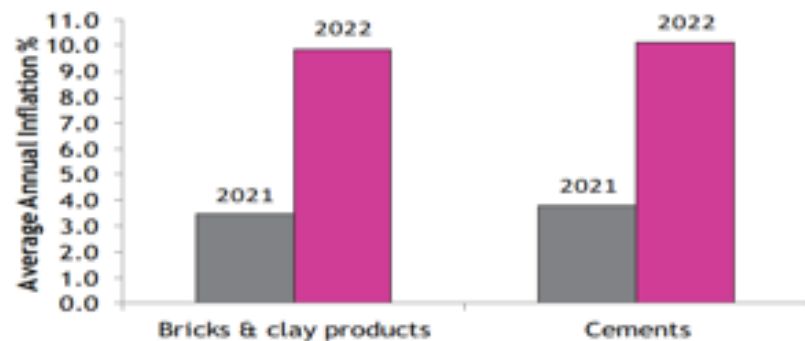
Tender Prices of New Work



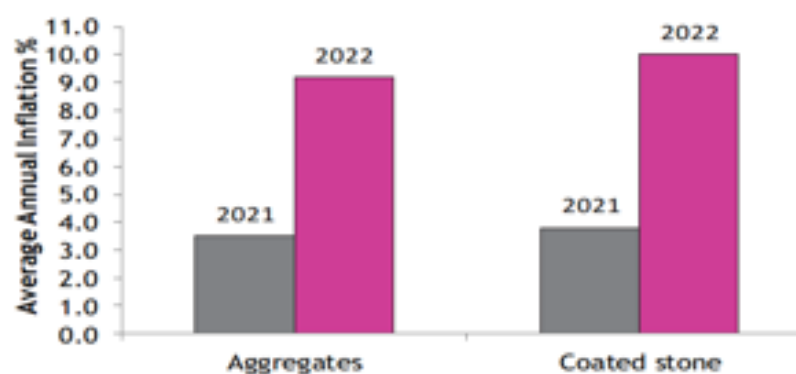
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MATERIAL PRICE INCREASES

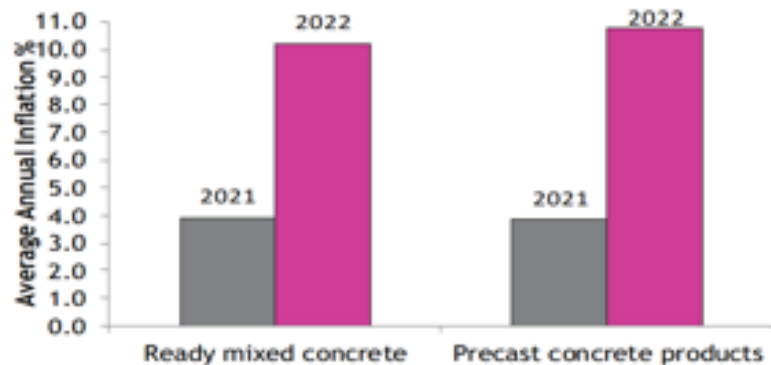
Bricks & Clay Products and Cements



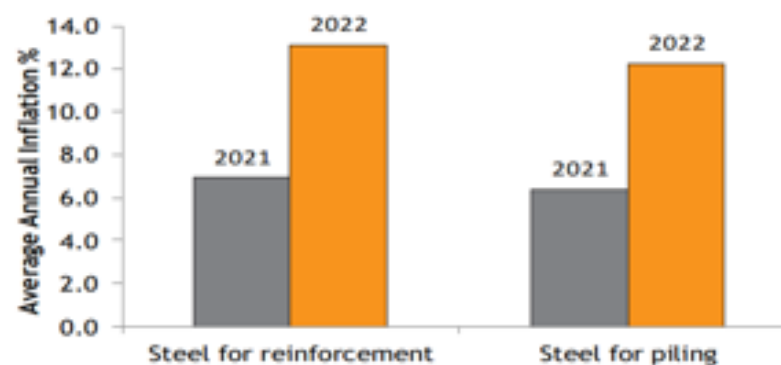
Aggregates and Coated Stone



Ready Mixed Concrete and Precast Concrete Products



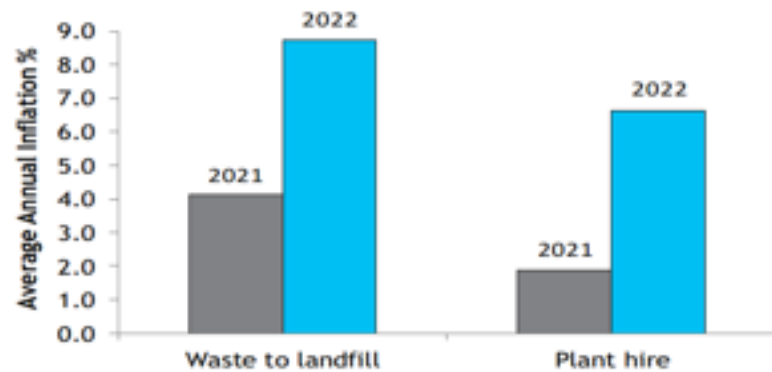
Steel for Reinforcement and Steel for Piling



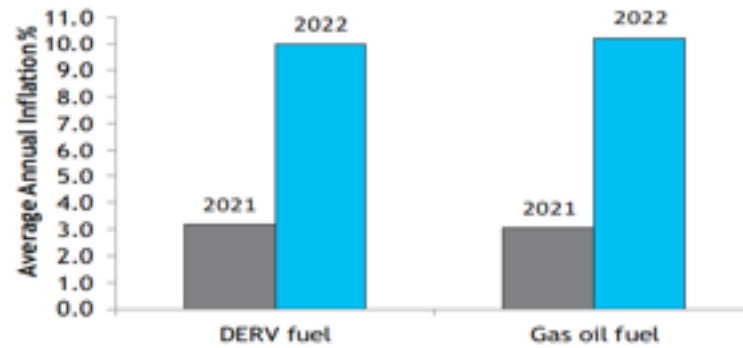


OTHER COST INCREASES

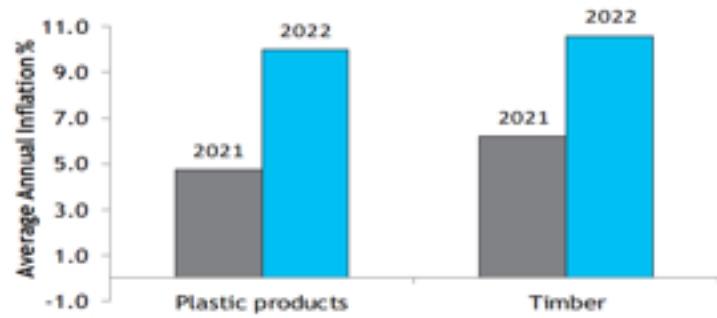
Waste Costs and Plant Hire



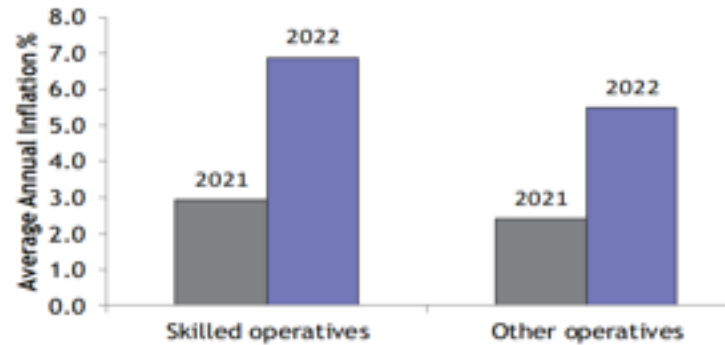
DERV Fuel and Gas Oil Fuel



Plastic Products and Timber



Skilled and Other Operative Staff



INDUSTRY WORKLOAD

- ▶ Very Busy. Decade ahead of growth and sustainable workload?
- ▶ Decarbonisation of the rail network in Scotland by 2035. £3b forecasted investment.
- ▶ Procurement for the dualling of A9 rumoured to be PPP model. Estimated cost £2.5b?
- ▶ Renewables:
 - ▶ Corrie Glas: £1b
 - ▶ Berwick Bank: £1b
 - ▶ Scotwind (Round 1) - 17 successful bidders. 25 GW capacity created with an estimated average of £1bn investment in Scotland per gigawatt of capacity built



SG Capital Spending Review - Spending Allocations for 2023-24 to 2025-26

Net Zero & Transport	21/22 budget	22/23 budget	23/24 budget	24/25 budget	25/26 budget	5 - year total
Peatland & Flooding	30.7	39.8	59.8	60.2	71.2	261.7
Scottish Water - Total	600.0	600.0	650.0	675.0	700.0	3,225.0
Maj. <u>Transp</u> Projects	173.0	247.0	238.9	397.6	273.9	1,330.4
Rail Infrastructure	501.0	427.0	442.0	411.0	492.0	2,273.0
Scottish canals	12.2	12.2	12.2	12.2	12.2	61.0
Active Travel	239.9	292.4	374.5	392.0	432.1	1,732.0
M/ways & T Roads (total)	409.4	411.0	337.1	379.2	376.7	1,913.4
Structural repairs	100.0	119.0	98.7	96.7	93.1	507.5
Vessels & Piers	63.1	74.5	170.0	117.1	81.4	506.1



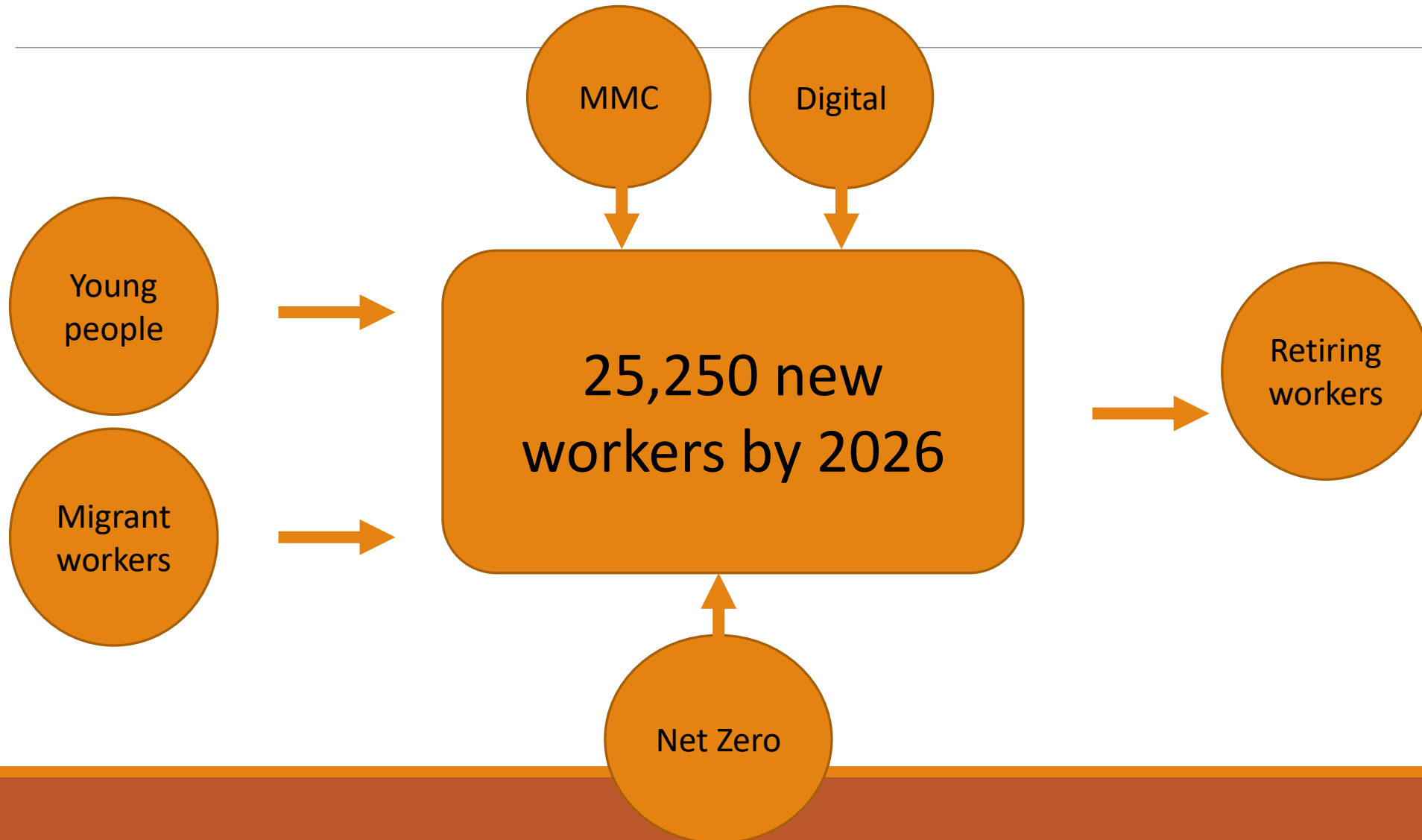
CECA Scotland Board Priority

Attracting, Securing & Training a Diverse, World Class Workforce

- Work with others to assist members to access a programme of school engagement to promote the civil engineering sector as the career choice for school leavers

However, now a pressing need to attract and encourage new entrants to our sector to fill the range of skilled roles that we need to deliver a rising workload.

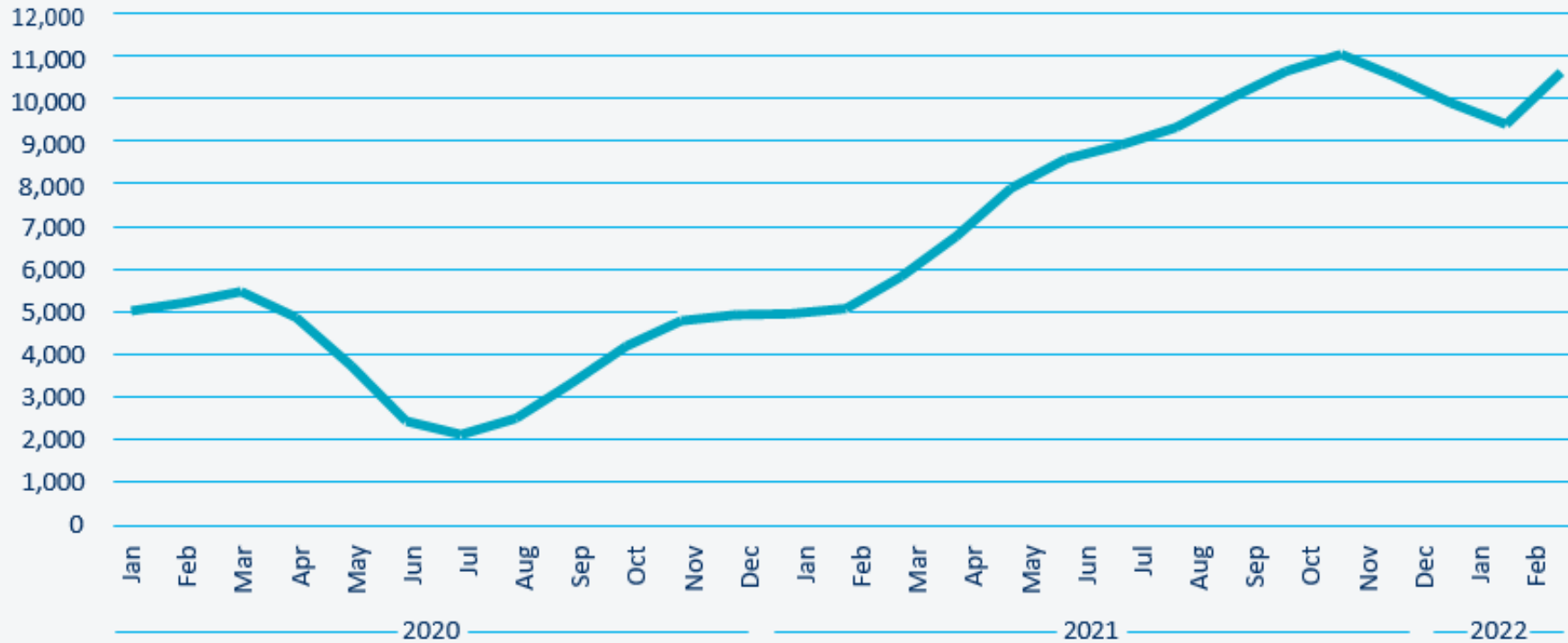
In a nutshell...



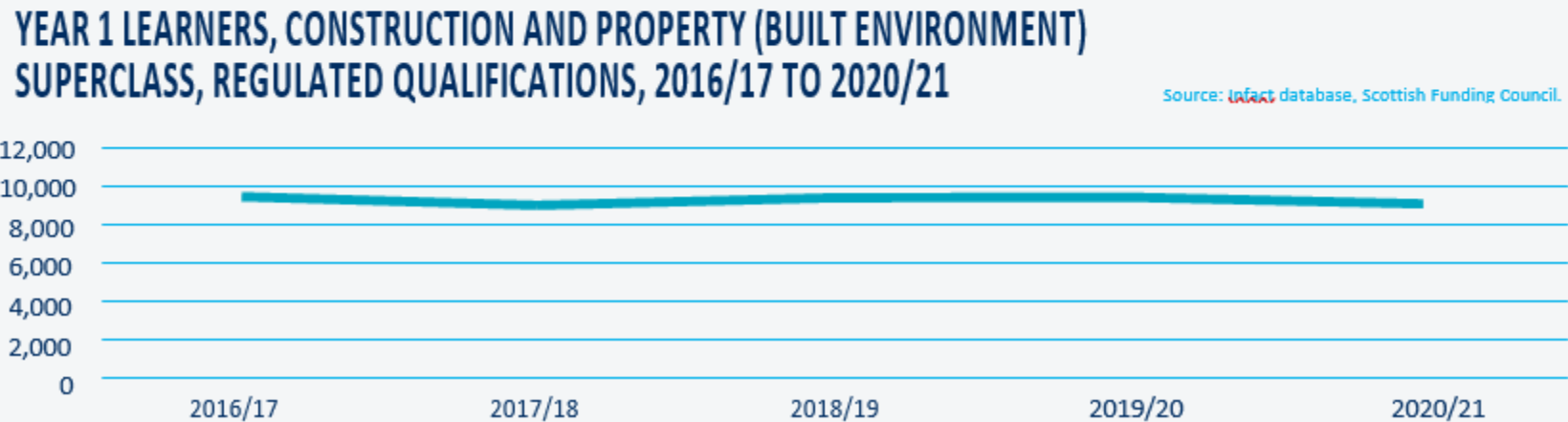
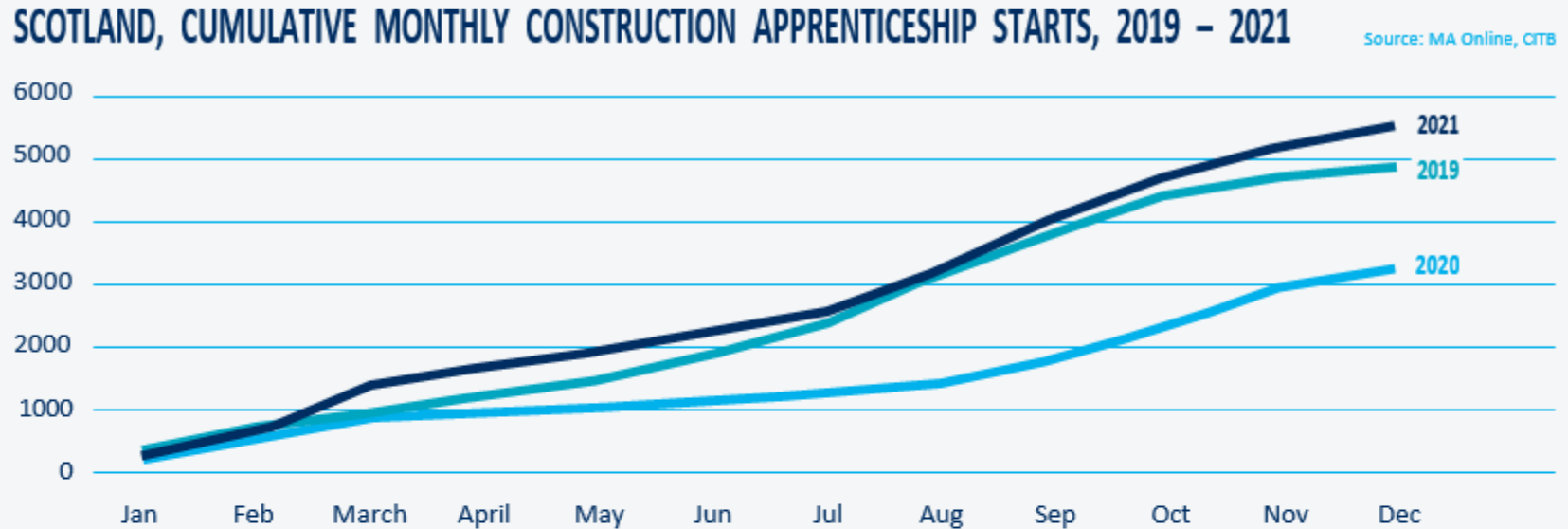
Workforce Content

3 MONTH MOVING AVERAGE OF CONSTRUCTION VACANCIES, SCOTLAND

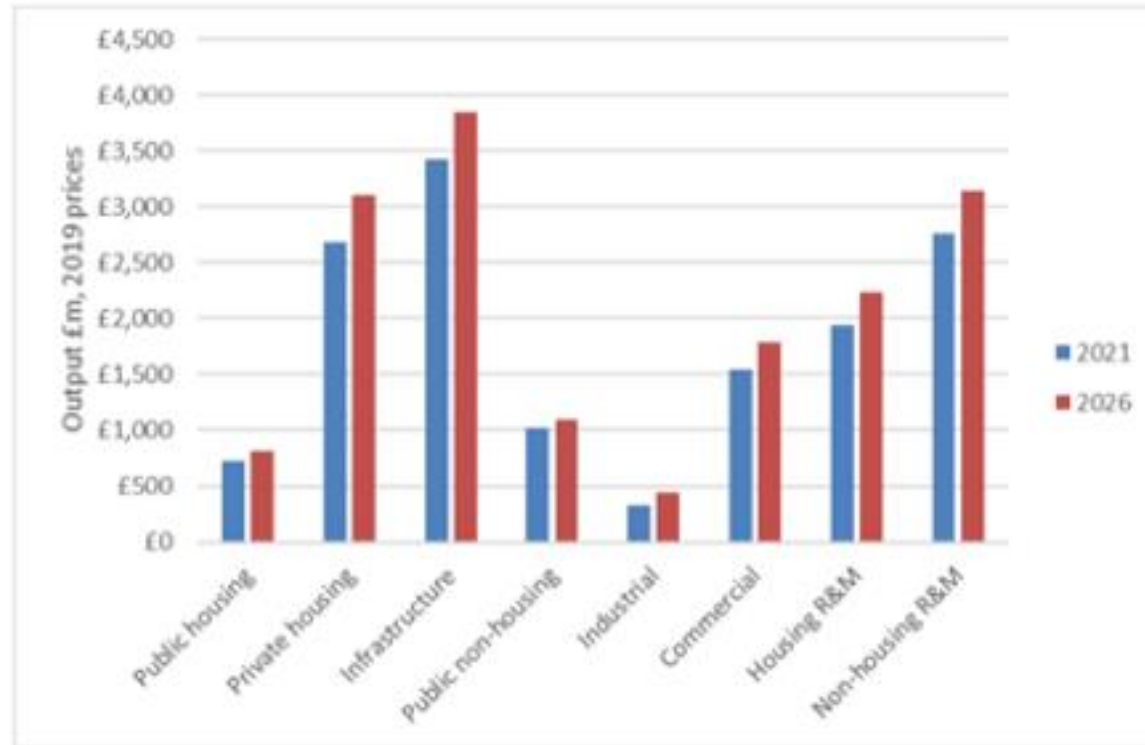
Source: Burning Glass, construction vacancies, Scotland



Apprenticeship starts are increasing, but need to grow further



Sector forecast – output values



Blue columns – output in 2021

Red columns – forecast output value for 2026

Main gains in output from:

- Private housing
- Infrastructure
- Non-housing R&M

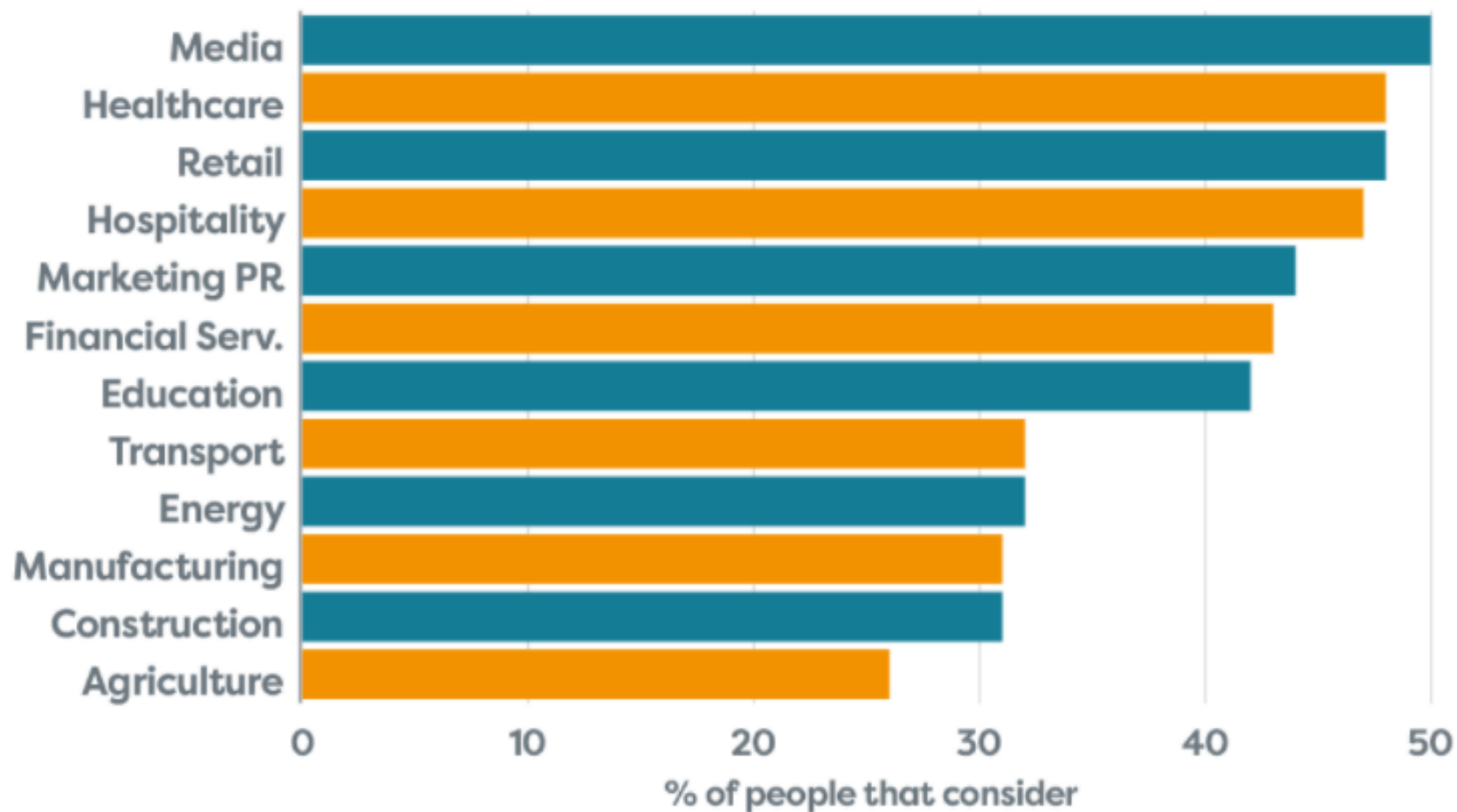
Challenges of an ageing workforce

- Large proportion of workers expected to retire within a short time-frame - significant and rapid loss of skills and experience from the sector. How do we pass these skills on to the next generation?
- Despite value of their experience, older workers also report that they feel excluded from training opportunities as they get closer to retirement age.
- Over 50s in construction more likely to leave industry before state pension age.
- Need to offer more flexibility - construction workers in Scotland are more likely to ask their employers for reduced working hours than their peers in England and Wales.

The Gen-Z problem

- Younger people tend to be mission-driven and are not motivated by profit without purpose. Careers must be aligned with their values.
- Morgan Sindall, Gleeds and HBD launched a joint initiative to engage with Gen-Z. Six of their recent graduates took part in a year-long programme of engagement to identify ways to attract Gen-Z and help businesses understand what young people want from their careers.
- Survey of 16 - 24 year olds showed how young people perceived the industry:
 - 20% believe that construction jobs are poorly paid
 - Less than a third think of construction as a career
 - Only 31% think construction is a sector in which they can use and develop their digital skills
 - Three most common words associated with construction: Dangerous, Cold and Dirty

Consideration of industry sectors





What does this mean in the future?

- 5 years - Decline in new apprentices will result in further shortages of skilled workers
- 10 years - Based on current demographics the workforce will shrink by 25% within a decade.
- 20 years - Ageing UK population puts further pressure on smaller cohort of young people



Scotland's Colleges Opportunity

Expected job output over next 10 years £8.5 billion in civil engineering including railways, highways and renewables

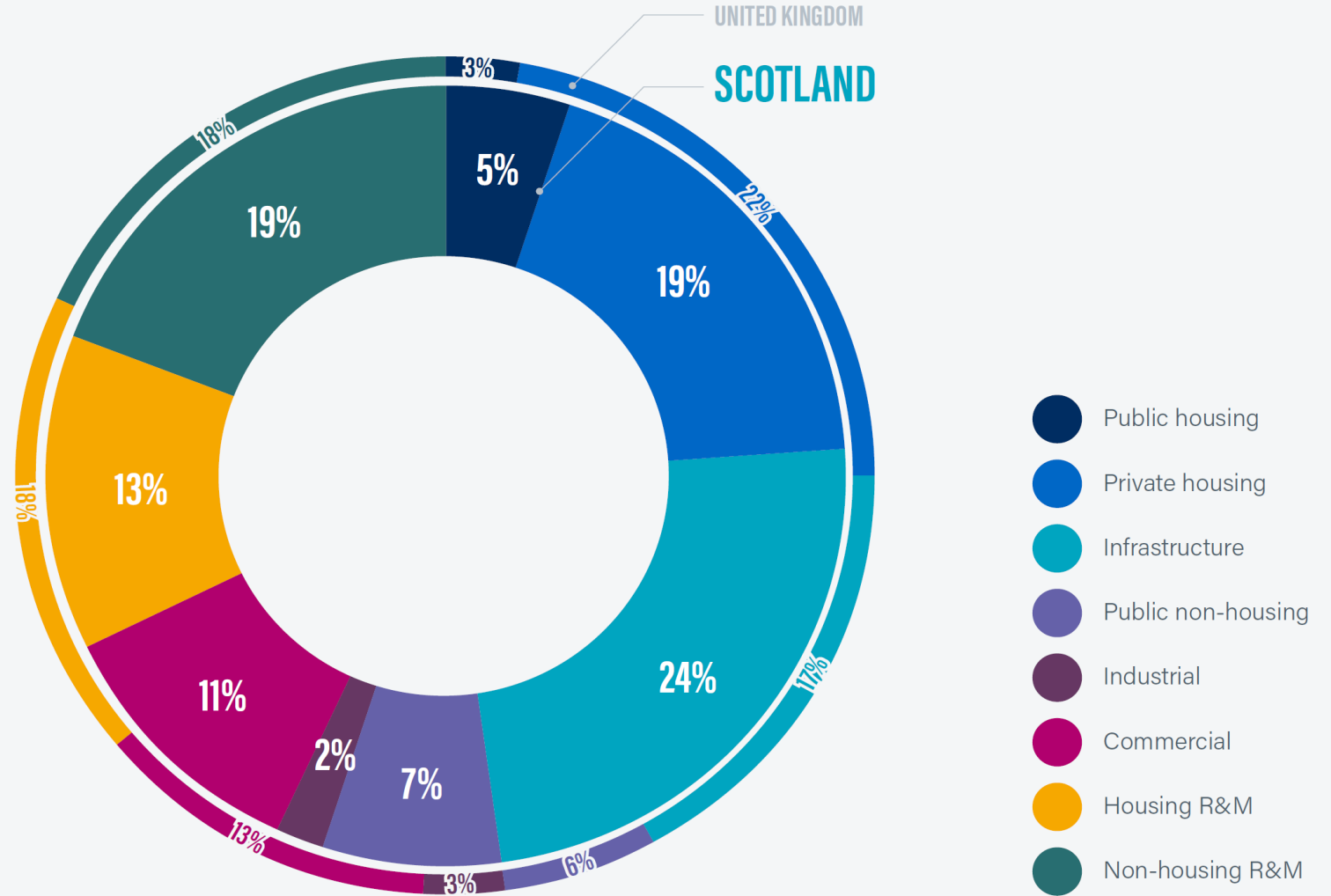
Purpose of pilot

- CECA have identified a need to recruit new workers into their sector of the construction industry
- Action is required to ensure an aging workforce within this sector is replenished
- Agree a sustainable training programme with accredited qualifications with various pathways
- A CECA training Academy would highlight investment in their workforce

Scotland's colleges – delivering skills for the energy, engineering and construction sectors



To better understand the skills pipeline requirement for the civils sector to create a “CECA Academy” of work ready young people.



CONSTRUCTION INDUSTRY STRUCTURE 2021

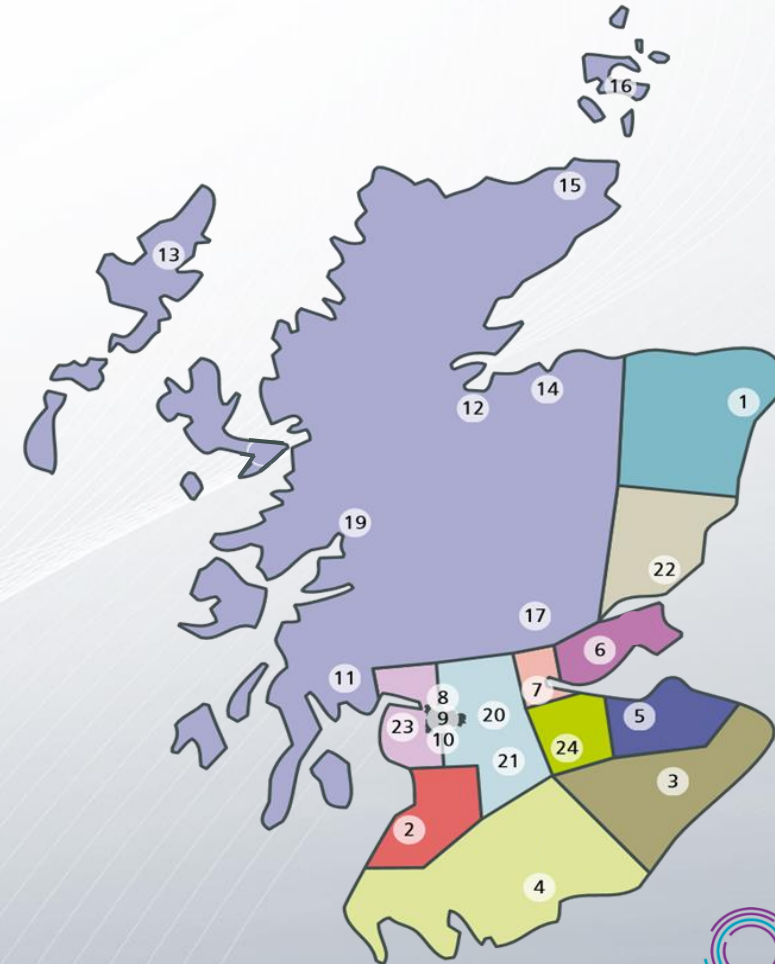
SCOTLAND VS UK



Scotland's Regional Colleges



Aberdeen & Aberdeenshire	1- NESCol (Inc. Fraserburgh)
Ayrshire	2- Ayrshire College
Borders	3- Borders College
Dumfries & Galloway	4- Dumfries & Galloway College
Edinburgh & Lothians	5- Edinburgh College
Fife	6- Fife College
Forth Valley	7- Forth Valley College
Glasgow	8- City Of Glasgow College
	9- Glasgow Clyde College
	10- Glasgow Kelvin College
Highlands & Islands	11- Argyll College UHI
	12- Inverness College UHI
	13- Lewis Castle UHI
	14- Moray College UHI
	15- North Highland College UHI
	16- Orkney College UHI
	17- Perth College UHI
	18- Shetland College UHI
	19- West Highland College UHI
Lanarkshire	20- New College Lanarkshire
	21- South Lanarkshire College
Tayside	22- Dundee & Angus College
West	23- West College Scotland
West Lothian	24- West Lothian College





Next steps

- CECA work with ESP to identify the regional needs for their sector
- ESP to identify suitable college(s) for pilot programme
- Identify employers to work on pilot
- Establish a SLWG to develop the programme with
 - CECA / industry
 - Colleges
 - CECA training and Development Forum
- Agree timeline

Lifelong Career Opportunities & Progression Exist

