



**CONSTRUCTING
EXCELLENCE**
IN THE NORTH EAST

**NORTHUMBRIAN
WATER** *living water*

OneFuture North East 2023



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Our Mission, Vision, and Strategic Objectives



Our Mission

Connecting the industry to enable a sustainable future.

Our Vision

Respected as inclusive, influential, and essential.

Influencer

Grow active participation

Green

Net zero by 2025

Growing membership

Total industry membership

Lifelong learning

Maximise knowledge sharing

Our OneVoice Strategy:

Through collaboration across the industry, create the most advanced region in the world for construction innovation and leadership.

OneFuture North East

Introduction

As Constructing Excellence in the North East (CENE) stakeholders look ahead and plan future capital investment programmes, there are common challenges that need to be overcome – climate change impacts, skills shortage and delivering more for less in the face of rising costs.

CENE, in collaboration with Northumbrian Water, has led this research to understand the scope and scale of the region's capital investment programmes, and the capacity and capabilities within the supply chain to deliver on this regional need.

CENE has engaged with key stakeholders to understand their investment plans and key needs, in order to develop a regional view of future investment plans to 2030 and collective call to action to the North East construction sector

The action plan outlined in the OneFuture report includes several key initiatives:

- In terms of climate, the report calls for the creation of the greenest region with targets and timelines, a collaborative approach to achieving net zero, and convening stakeholder groups to accelerate the adoption of more sustainable innovations.
- From a people perspective, the plan includes engaging current apprentices in developing the regional strategy, centrally-funded STEM incentives, attracting and retaining home-grown talent, creating a career pathway to construction, more integrated planning by clients, and a collaborative approach to talent attraction, development, and training.
- To optimise value, the plan calls for a collaborative approach to corporate social responsibility, promoting the industry and the region more widely, collectively lobbying for government support and funding for the North East, and driving collaboration through a central hub for funding information and improved sharing of plans from clients to the supply chain.

Thank you to everyone who contributed for their part in shaping this important research and action plans.

Carol Cairns

Chair

Constructing Excellence in the North East

OneFuture North East

Overview

Amidst increasing disruption and continuous innovation, the only certainty is that change will be constant and fast.

Construction is an important contributor to the UK and the regional economy, and is vital for the North East to thrive and prosper in the future.

Client organisations are planning future projects that will make a significant, positive impact to the region – and those projects can only be achieved if the North East construction supply chain is ready and able to deliver them.

This OneFuture North East report explores construction clients' ambitions, plans and requirements from the present up to 2030, alongside the supply chain's aims and readiness to deliver client projects. It shines a light on the significant challenges facing the sector, challenges that will need new and different solutions, achieved by partnership working across the industry.

The report has been created following independent research via surveys, interviews, and workshops with construction clients and supply chain organisations.

The research took place between November 2022 and March 2023. It was funded by the Northumbrian Water Group and Constructing Excellence in the North East, and developed to complement our regional OneVoice Strategy 2020-2025.

The OneFuture North East report calls for a collaborative approach to achieving a sustainable future, engaging current apprentices, attracting and retaining home-grown talent, and promoting the industry and the region more widely.

The action plan includes initiatives related to climate, people, and value, with a focus on creating the greenest region, achieving net zero, and driving collaboration through a central hub for funding information and improved sharing of plans from clients to the supply chain.

The report emphasises that partnership working across the industry is essential to overcome significant challenges facing the sector and achieve new and innovative solutions.

Supply chain participants in the OneFuture project are from Tiers 1, 2 and 3.



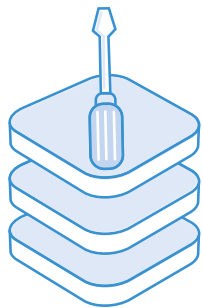
Tier 1 designer
(direct contract with the ultimate client)



Tier 1 constructor
(direct contract with the ultimate client)



Tier 2 constructor
(sub contract with Tier one contractor)



Tier 3 labour - only subcontractor



Tier 3 specialist sub contractor
(sub contract with Tier two)

Participating Clients – Sectors



Universities



Local Government



Utilities



Commercial Property Development



New Housing



Manufacturing and Warehousing



Housing Refurbishment

Strategic Goals 2023-2030

Constructing Excellence in the North East has socially and economically important, compelling, and ambitious growth goals.

Through collaboration, our collective goals are to be truly world-class across our three strategic themes: climate, people, and value.

Climate - Becoming England's greenest region, we will work collaboratively to ensure we deliver on decarbonising the region's built environment and driving sustainability with the North East England Climate Coalition (NEECCo) and Net Zero North East.

People – Creating the best place to work in construction. We will attract, develop, retain, reward, and celebrate people equipped with the necessary personal, technical and leadership skills.

Value - Recognising value over cost throughout a confident supply chain. We will support clients and other stakeholders to inspire greater social value beyond the traditional measure of cost, time, and quality.

Client group and supply chain members are closely aligned on these goals.

Through the research process for the OneFuture report, client group and supply chain participants each separately identified the following collective aspirations for the construction industry in the region:

Climate

- To collectively achieve Net Zero by 2030, through collaborative knowledge exchange and low carbon innovation.
- To support and leverage the North East's leading position on hydrogen, spearheading the country in low gas technology, electric and green energy, water, and wastewater.





People

- To actively support struggling communities.
- To generate more and better jobs locally.
- To grow construction skills, capacity, and capability across the region, increasing diversity and attracting the next and future generations into the industry.

Value

- To drive social and economic growth.
- To leverage significant opportunities for the region, such as the new bio-science campus on Teesside, the UK's largest multi-modal development and manufacturing capability.
- To construct world-class infrastructure.
- To lead the way in innovation, technology, and collaboration in construction.

Construction Investment in the North East



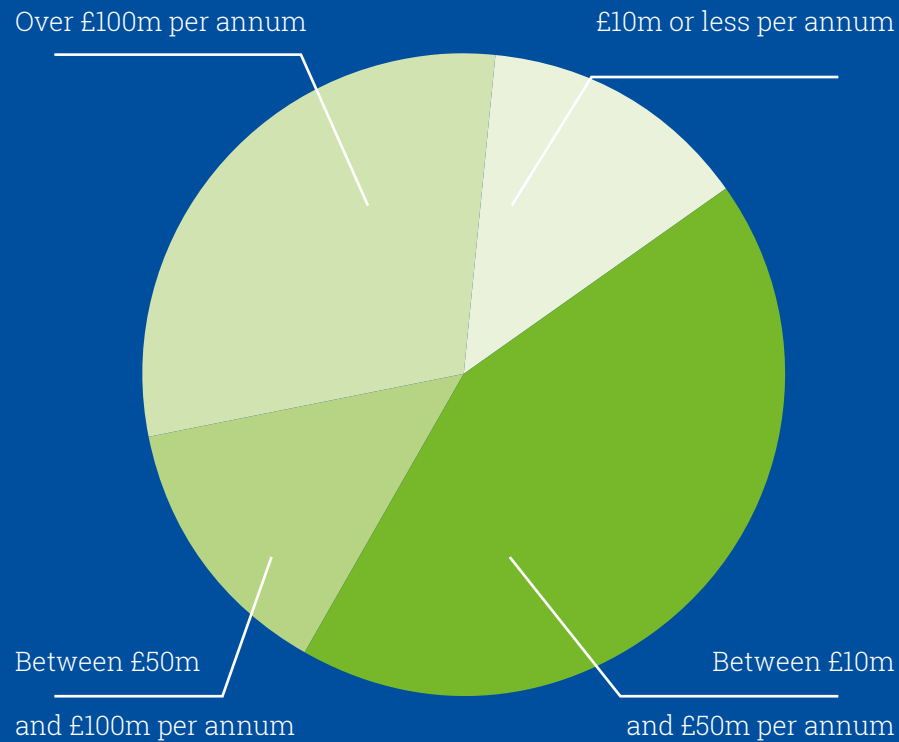
Projected construction expenditure in 2023-2030 by client organisations ranges from £10m to over £100m per annum, per organisation.

The majority of this spend will be invested in the North East region on housing, transport, infrastructure, education, commercial property, manufacturing and warehousing, and health projects.

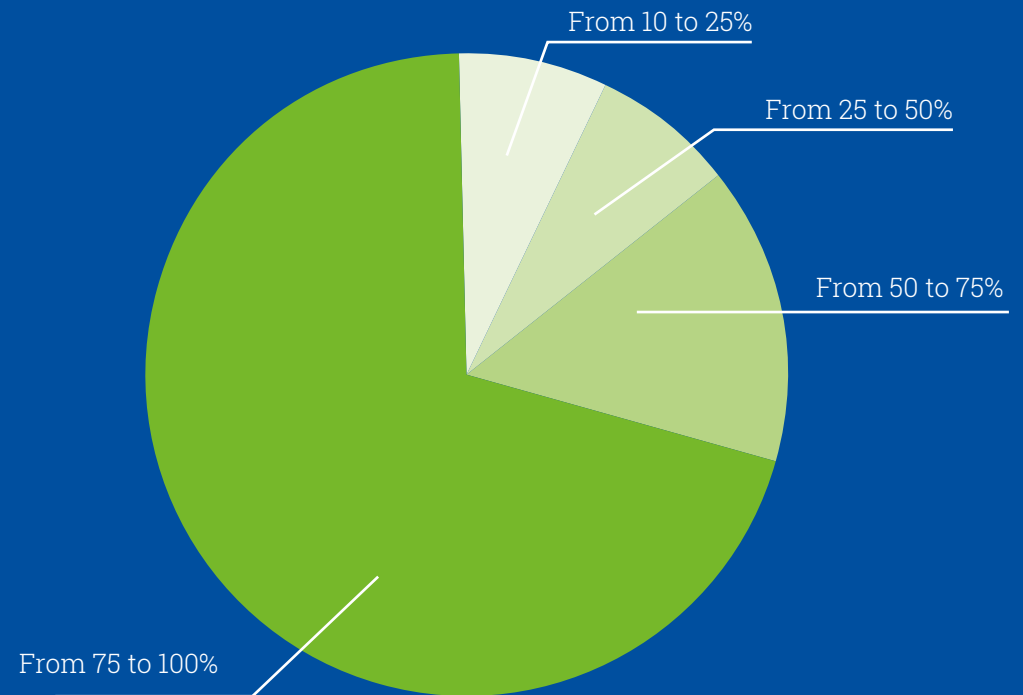
2023-2030

Construction Investment in the North East

On average, how much do you think your organisation will spend on construction annually between 2023 and 2030?



How much of your total construction spend 2023-2030 will be allocated to projects in the North East?



Getting Future Ready Client Perspective

Client organisations are getting ready to leverage future opportunities.

The North East devolution deal brings an opportunity to attract greater levels of funding and opportunity to invest in areas such as green infrastructure, and to tackle long-standing housing needs through regeneration.

Building on the region's existing reputation for being forward thinking, innovative and collaborative will continue to make the North East an attractive proposition for inward investment.

The region's frameworks and strengths in working together, combined with communication of future investment plans, will help supply chain partners to plan for demand.

Alongside these big regional goals and opportunities lie significant challenges for clients.

These challenges include increasing regulation, especially surrounding safety and the environment, inflation, economic uncertainty, an ageing workforce, a competitive skills market, and the sheer pace of change.

The financial stability and capacity of contractors are also of concern for Client Group members.

"We are naturally concerned about the global and UK economy, interest rates, taxation, ease of obtaining finance."

“We are concerned about the availability of suitable local contractors able to deliver our capital programme. The financial stability of contractors is also a concern.”

“The ability of the supply chain to adapt to the changing focus of investment programmes, e.g. move from traditional construction to nature based solutions. The capacity of the regional supply chain.”

“Availability of land; costs of construction, not knowing how best to meet the Future Homes Standard, skills/people shortages- constructors and local authorities e.g., planning, and legal. Finally, Nutrient Neutrality.”

Clients’ confidence in the supply chain’s ability to deliver is mixed.

There is agreement that the construction supply chain always adapts and delivers, and will continue to do so into the future, despite the turbulent operating environment.

However, there are concerns that there may not be enough contractors available for the projects.. Some say they are already seeing a shortage of suitable contractors, with the situation potentially worsening as economic challenges continue.

Getting Future Ready Supply Chain Perspective

The case for building an even more resilient, connected, and collaborative construction eco-system in the North East is compelling.

Projected revenue from construction projects in 2023-2030 for supply chain participants ranges from £1m or less to over £100m per annum per organisation.

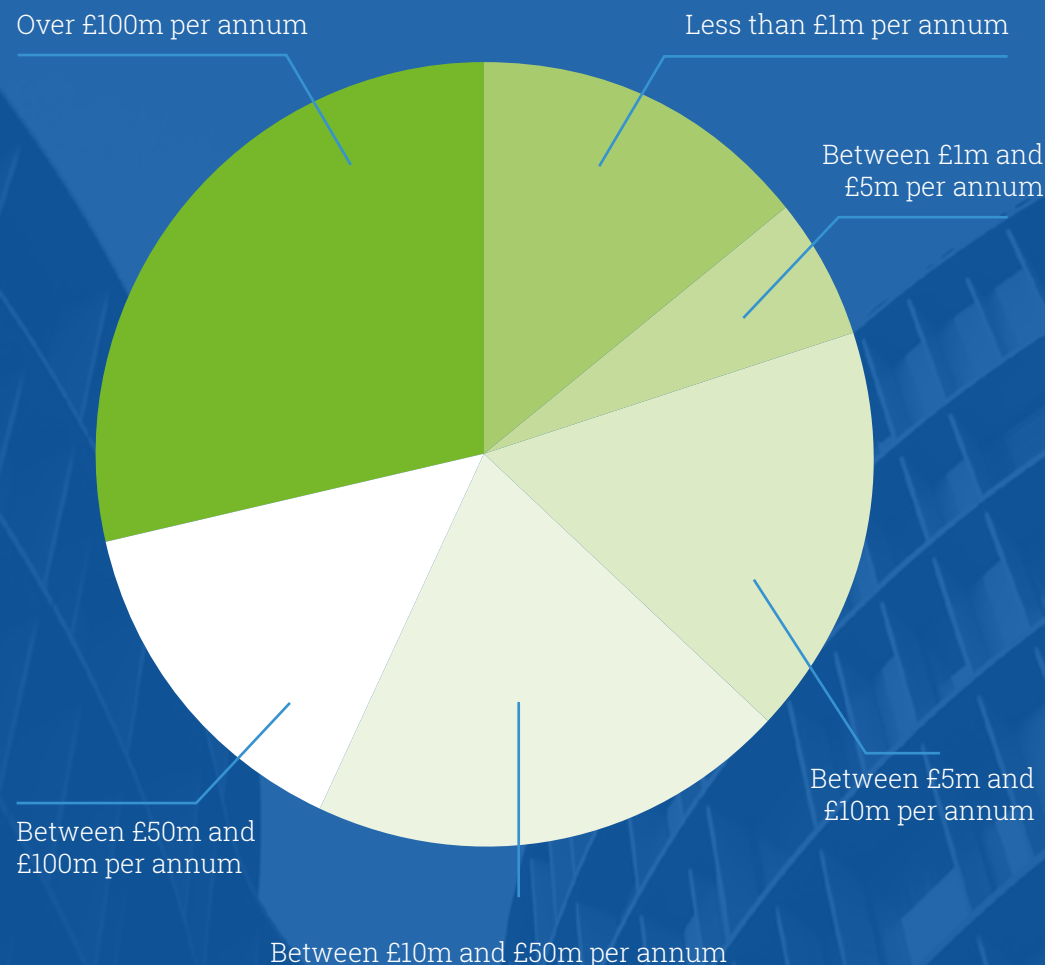
Most supply chain revenue is expected to come from North East projects in health, transport, infrastructure, education, commercial property, manufacturing and housing.

The importance of paying close attention to current cash flow, profitability and costs in the current economic climate was a consistent theme across supply chain participants, who raised numerous concerns about inflation, reduced budgets and the financial robustness of some client and tier 1 organisations.

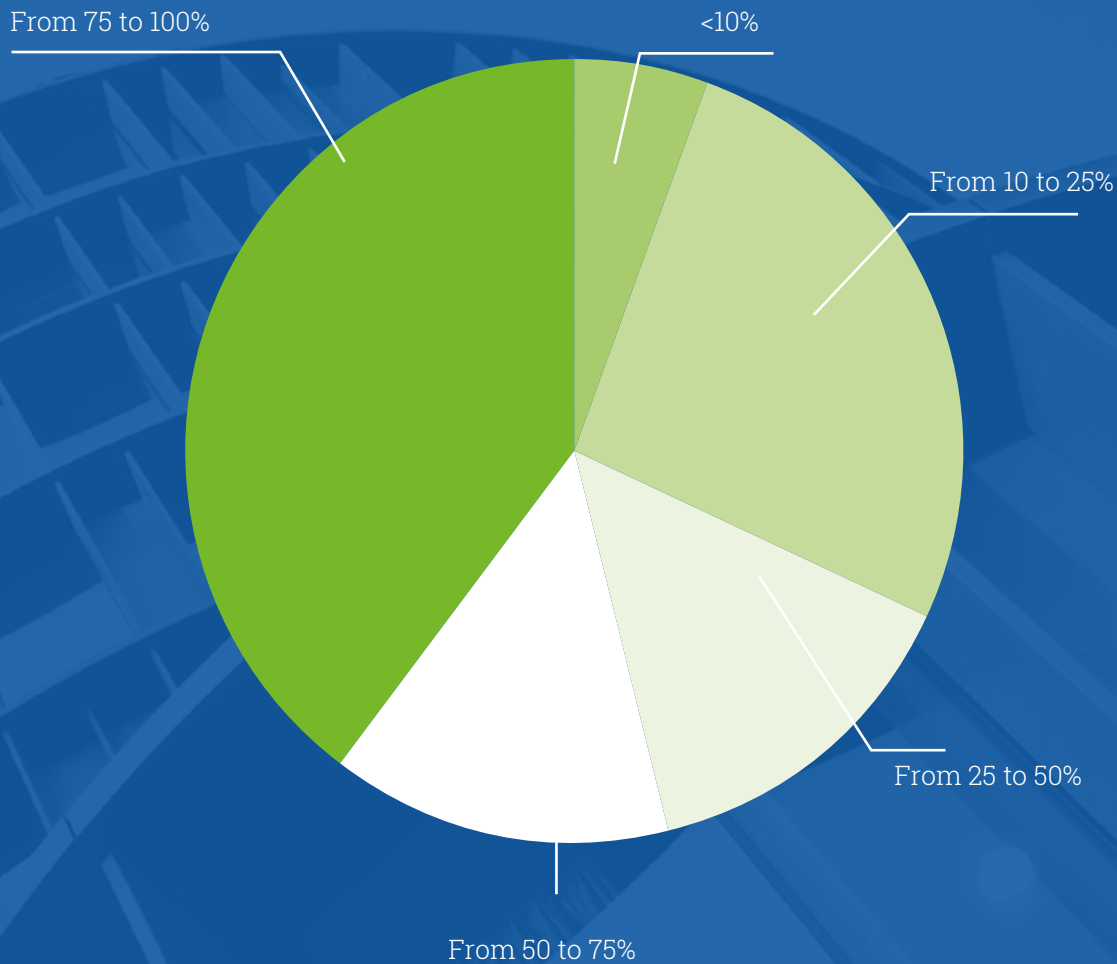
At the same time, ambition for growth, creating social value and carbon reduction, expanding apprenticeship programmes, procuring responsibly, and investing in the future were shared themes.

Despite challenging financial conditions, supply chain partners continue to strive to lead their businesses consciously and responsibly.

On average, how much revenue do you think your organisation will generate from construction annually between 2023 and 2030?



How much of your total construction revenue 2023-2030 will come from projects in the North East?



Supply chain participants are confident in their capability to deliver clients' projects between now and 2023.

"Always room for improvement but we have a solid, capable team with determination to succeed in the region."

"We have negotiated economic issues in the last 20 years and been able to grow the business, I have no doubt there will be new challenges which as in the past confident we will overcome."

"We recognise that being the best in the industry is about more than our bottom line. We are committed to doing the right thing and being a good corporate citizen. That means we act ethically in everything we do, hold ourselves accountable to the highest standards, and pride ourselves on our open and inclusive culture."

Getting Future Ready

Strategic Theme:

Climate

Around two thirds of the client organisations say they are planning to use more sustainable solutions in their construction projects 2023-2030.

In some cases, understanding how net zero will be achieved is a work in progress. Clients are specifying the need for more sustainable solutions in their projects due to customer or funder demand, regulation requirements and clients' own values and goals.

Environmentally sustainable solutions are often unproven, with the need for more testing and monitoring of performance over time. This imports additional risk, and on occasions regulation does not yet align with net zero requirements. This situation creates a need for testing, experimentation, collaboration, and shared risk, involving regulators and insurers in the innovation process.

Supply chain commitment to net zero solutions is strong, but sometimes the market isn't ready.

Supply chain participants gave many examples of current activities and plans designed to accelerate their organisation's journey towards net zero. These include day-to-day management and operational solutions, through to the design of new, more sustainable technology, materials, and production methods.

Some expressed frustration that viable sustainable solutions aren't being adopted quickly by the market due to perceived risk, slowing the rate of progress towards net zero.

Local procurement.

Clients and supply chain organisations expressed a strong preference for procuring responsibly from local suppliers wherever practically possible.

Getting Future Ready

Strategic Theme:

People

The skills gap is a major challenge.

More than 9,200 additional construction workers will be needed in the North East of England by 2026 to meet growing demand in the industry, according to a 2022 Construction Skills Network report.

Each year, an estimated 50,000 new recruits are needed in the industry as a whole, but there are barriers to attracting new talent. The CITB says that research shows that only 30% of potential new recruits feel that construction is 'for them'.

The North East needs a wide range of skills.

OneFuture participants said that a greater understanding and depth of knowledge are essential across the sector to deliver its green plan commitments. More confident skills in carbon calculation and low carbon engineering design are needed, with a less risk-averse approach to design and delivery.

There is a shortage of general trades and skilled labour, also project and programme management, engineering, and design skills across all disciplines. This is not helped by an ageing workforce and a generational lack of 35-50 year-old workers.

Design and contracting skills need to adapt to consider soft engineering solutions.

Local authorities have a shortage of planners, which creates delays.

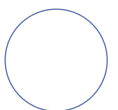
Links with schools, further and higher education are built through individual organisational effort.

Whilst there are some fantastic further education facilities in the North East who engage with employers, client and supply chain participants fed back consistently that more secondary education pupils need to be encouraged to enter the construction industry and convinced that it is an attractive option. Schools are perceived to generally focus on pure academic education, with little attention given to vocational and practical skills. Work needs to be done by the industry to drive a change and present construction as a more desirable career.

There is also a shared view that adult re-education programmes are not sufficiently funded to re-direct people into construction professions.

The sector lacks diversity.

To reflect the local community, enrich the industry with different experiences and perspectives, attract and retain new recruits, the construction industry needs to become more appealing and inclusive to a wider talent pool. Several supply chain participants are working hard to appeal to a more diverse audience, but say they struggle to attract people who are new to construction.



Getting Future Ready

Strategic Theme:

Value

Regulation

Regulatory requirements influence the significant majority of client and supply chain organisations' 2023-2030 construction projects.

All regulatory changes such as fire, building regulation and planning impact the delivery of projects, and the sector in the North East is skilled at adapting to these changes when they happen. Currently, the industry is experiencing a lot of regulatory change, such as amendments to BS7671 and Building Regulations that are influencing delivery requirements to clients, training, and asset allocations.

There is acceptance that construction is a highly regulated space, especially with regard to safety and environmental standards.

Pioneering natural value.

Nature-based solutions involve working with nature to address planning, construction, community, and environmental challenges. They are designed to benefit both human well-being and biodiversity, and protect, restore, or support natural and semi-natural ecosystems. For example, systemic, soft engineering approaches intentionally use the natural environment to help reduce issues such as coastal erosion and river flooding.

There are already some excellent examples of pioneering natural value in the region, facilitated by the North East construction industry's strengths in collaborative working.

Creating value through systemic soft engineering and nature-based solutions will continue to grow in importance for client and supply chain organisations between now and 2030.

Leading the way in creating social value.

The term 'social value' refers to the non-financial impacts that a project or initiative has on people and communities, beyond the direct benefits it provides. It relates to the positive impact on social and environmental factors, such as local employment, community development, social inclusion, and environmental sustainability, which can create wider benefits for society.

Social value is increasingly seen as an important consideration in public sector projects and procurement in the region, with an emphasis on delivering benefits that go beyond the immediate project objectives and contribute to broader social and economic goals.

Creating social value was an important theme for the client and supply chain organisations who participated in this OneFuture North East report. They shared numerous positive examples of working with and supporting local communities.

Some participants said that there was a lack of evidence that Levelling Up in the North East has taken place, and that the construction sector could unite more effectively to lobby for better Government support for the region.

Innovation

The OneFuture North East report participants highlighted the importance of innovation as a key enabler of all the themes in this report. Innovation underpins the future success of the industry.

Participant feedback also emphasises the importance of innovation in addressing challenges related to costs, availability, sustainability, low carbon requirements, and increased energy costs. The report calls for the development of relationships with framework partners, the use of UK-sourced products, and modern technology, to reduce client costs, and meet occupier demand for low carbon and low-cost commercial property.

Innovation in materials and construction methodology is needed to improve net zero carbon targets.

Around half of participating organisations are planning to use more digital solutions in future construction projects. The themes include the use of Building Information Modelling (BIM), digital solutions for green infrastructure modelling, GIS systems, automated manufacturing, contract management systems, drones for asset monitoring and survey, and system-based planning tools.

However, from an innovation perspective, choosing the wrong procurement route and automated procurement can hinder collaboration and be inconsistent with the Construction Playbook.

There is substantial scope for improvement in the industry.

There is a consistent view that the construction industry takes a long time to change, and that there may be not enough change between 2023 and 2030.

Offsite manufacturing could be a part-answer to the skill shortage and speed up some projects, but mainly the larger ones. Some believe that offsite manufacturing needs to improve significantly as it has caused problems in the sector.

Whole life costing is not often considered in the industry. This would ensure future maintenance requirements are understood and factored into upfront decision-making – for example, specialist services or skills. An understanding of the key drivers behind the whole life cost can help to unlock opportunities for innovation.

Some believe that design quality is at an all-time low, resulting in buildings that are not as well suited to their purpose as they could be.

Every collaboration helps the sector to grow.

Research participants agree that, whilst there is scope to do more, the North East region excels at collaboration, both between clients and the supply chain, and across the industry.

Greater collaboration is seen as an essential enabler of achieving the region's and individual organisations' ambitions and goals between now and 2023. Collaboration is critical to the success of becoming the greenest region, addressing the industry-wide talent and skills shortage, lobbying for greater Government support and funding for the North East and addressing some of the challenges in balancing innovation, risk and regulations.

Supply chain partners said they would benefit from more transparent sharing of clients' future plans, to help them prepare in advance.

OneFuture: Call to Action

Action plan

The action plan created by participants in the **OneFuture North East** project includes several key initiatives:

- In terms of climate, the report calls for the creation of the greenest region with targets and timelines, a collaborative approach to achieving net zero, and convening stakeholder groups to accelerate the adoption of more sustainable innovations.
- From a people perspective, the plan includes engaging current apprentices in developing the regional strategy, centrally-funded STEM incentives, attracting and retaining home-grown talent, creating a career pathway to construction, more integrated planning by clients, and a collaborative approach to talent attraction, development, and training.
- To optimise value, the plan calls for a collaborative approach to corporate social responsibility, promoting the industry and the region more widely, collectively lobbying for government support and funding for the North East, and driving collaboration through a central hub for funding information and improved sharing of plans from clients to the supply chain.



Climate

- Greenest region – with timeline and targets.
- Collaborative approach to net zero.
- Convene interested stakeholder groups – clients, supply chain, regulators, insurers – to accelerate safe adoption of more sustainable innovations.

People

- Engage current apprentices in developing the regional strategy.
- Centrally-funded STEM incentives.
- Attract and retain home-grown talent.
- Career pathway to construction.
- More integrated planning – clients.
- Collaborative approach to talent attraction, development, and training.

Value

- Collaborative approach to CSR.
- Promote our industry and our region more widely.
- Collectively lobby for Government support and funding for the North East.
- CENE to drive and connect the network and breakdown barriers to collaboration.
- Central hub for funding to increase awareness of and accessibility to what's available.
- Improved, earlier sharing of plans from clients to the supply chain.

Implementation of these actions will be led by CENE's theme groups:

- Climate Change Sector Theme Group
- Innovation Sector Theme Group
- People Sector Theme Group
- Construction Clients Group

There is more information about the sector theme groups here:

<https://cene.org.uk/sector-theme-groups/>

OneFuture North East - How to Get Involved and Find Out More

To get involved with these initiatives, or for further information about this report and the action plan, please contact the team here:

<https://cene.org.uk/contact-us/>

Generation for Change (G4C)



Generation for Change (G4C) is part of Constructing Excellence, with joint aims. Following the lead of Constructing Excellence in collaborative practice, G4C seeks to harness the power of new people in the industry to make changes for the better and improve the way the sector works together. G4C members will also play an important role in shaping and progressing the actions from this OneFuture North East report.

To find out more about G4C, go to:

<https://cene.org.uk/g4c/g4c-north-east/> (North East)

<https://cene.org.uk/g4c/g4c-tees-valley/> (Tees Valley)

OneFuture: Contributors

Thank you to everyone who contributed for their part in shaping this important research and action plan.

Client Organisations

believe housing
Environment Agency
Fujifilm Diosynth
NB Clark Ltd
NEPO
Newcastle University
Northern Gas Networks
North Star Housing
Northumberland Estates
Northumbria University
Northumbrian Water
Port of Tyne
Thirteen Group

Supply Chain Organisations

Applebridge Construction
ATG Group
Chemplas Ltd
Clarke Bond
Esh Construction
Esh Stantec
Hadrian Architectural Glazing
Systems Ltd
Harry March Engineers Ltd
Hewitson Ltd
Imtech
Integral UK Ltd
Interceil Ltd
IPInitiatives
McNally and Thompson
Mott Macdonald Bentley
Protector Security
Rosebirch Ltd
Seymour Civil Engineering Ltd
Sir Robert McAlpine
Special Branch Tree Services NE
Ltd
Stantec
Turner & Townsend Ltd
xsite architecture LLP