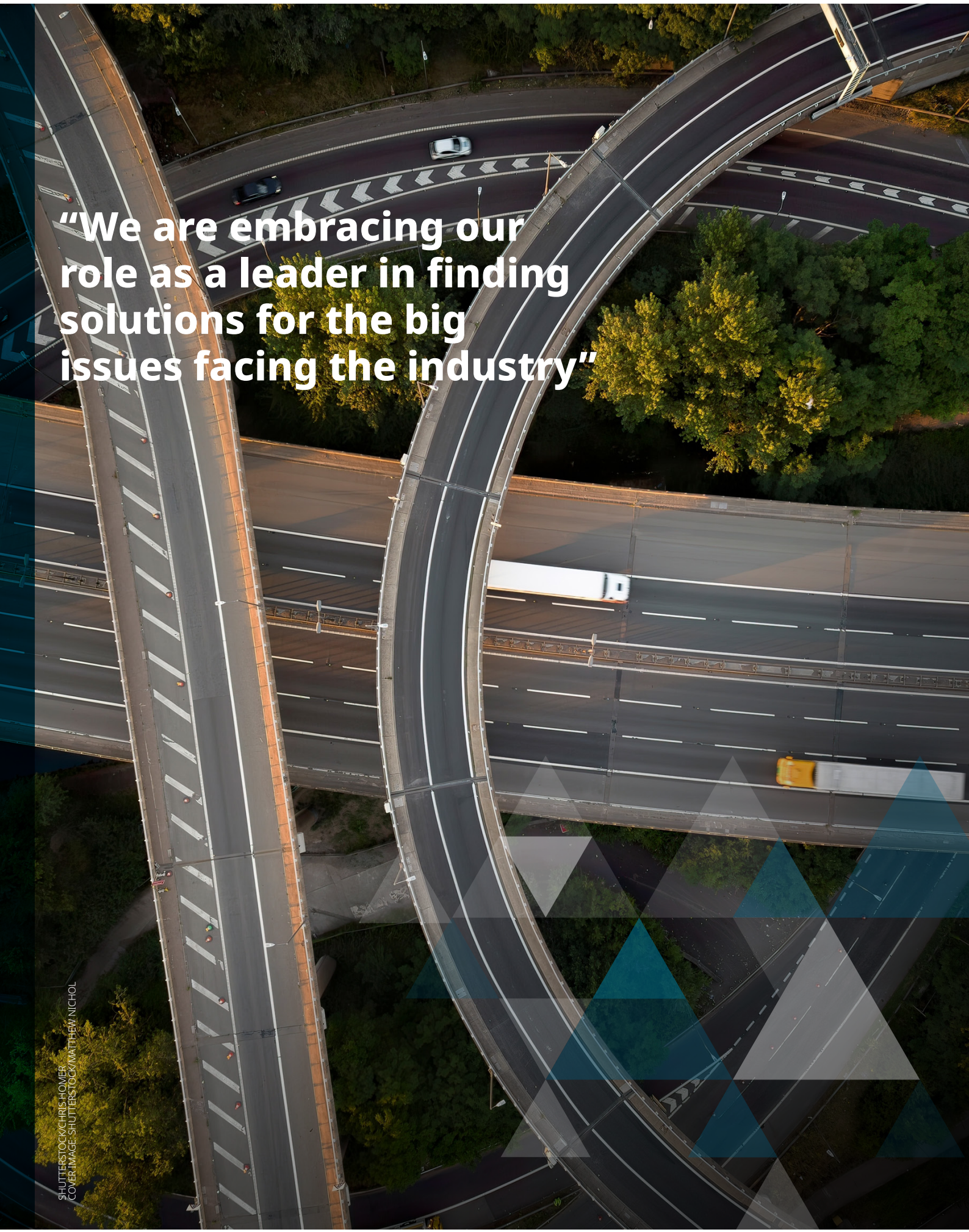
Infrastructure Client Group Annual Report 2026



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Foreword

Jason Tucker
Director of commercial operations at Anglian Water; chair of the Infrastructure Client Group management board

In last year's annual report I argued that there has never been a better time to be in infrastructure. We are, of course, affected by global events and economic conditions beyond our control, but I stand by that assertion because there are many reasons to feel positive about the year ahead.

Infrastructure is still central to the UK government's ambitions for social and economic growth, energy security and climate resilience. This is spelt out in its 10-year infrastructure strategy[1], which is "core to delivering the government's growth mission to boost living standards in every part of the UK".

In the strategy, the government admits that infrastructure investment has been too erratic and too low, and that there has been insufficient coordination across sectors and between government and industry. It calls for a new approach that prioritises long-term outcomes and takes a joined-up view to improve planning and delivery across all types of infrastructure. This is something that the ICG has been calling for and working towards for many years.

The publication by the National Infrastructure and Service Transformation Authority (NISTA) of the Infrastructure Pipeline[2] is an important step. Transparency about future projects and programmes will give our supply chains time to develop the products, solutions and skills we will need for efficient delivery.

Skills gaps represent a huge challenge for the industry. If we don't have enough people with the right skills in the right locations, many of the projects in the pipeline won't be delivered on schedule. That is why the ICG's People Task Group is making workforce planning its top priority. ICG members are responsible for a significant proportion of the projects listed in the pipeline, so it makes sense for us to be leading in this area and working with other industry bodies to identify skills gaps and support initiatives to provide training for our future needs.

The ICG is also at the forefront of industry-wide efforts to deliver infrastructure more efficiently. These include the forthcoming PAS 4010 standard for improving productivity and Project 13's work to promote enterprise models that will enable our industry to deliver better outcomes for society.

The desire for better outcomes also underpins the Infrastructure Systems Review, which the ICG is developing on behalf of the industry. This review is set to follow a similar path to the Infrastructure Cost Review and the Infrastructure Carbon Review. We will present the review's final report to NISTA in early 2027, with the intention that it will be adopted by NISTA and HM Treasury.

The review highlights the flaws in traditional siloed approaches to infrastructure delivery and shows how a systems approach can help to identify the best uses of limited resources to maximise the social, environmental and economic benefits. It will be particularly valuable in ensuring that our infrastructure is sufficiently resilient and adaptable to climate change.

This year, for the first time, the ICG held an industry-wide event to share our work and invite the UK infrastructure sector to join us in advancing collaboration and innovation. ICG Live clearly demonstrated that we have found our voice as a collective and are embracing our leadership role in tackling the big issues facing the industry. We intend to speak out more in the future and will definitely be back for another ICG Live in 2027.

1 bit.ly/G10YIS
2 bit.ly/IPIPE

About the Infrastructure Client Group

Established in 2010, the ICG brings together the UK's most progressive economic infrastructure clients in partnership with government and industry. Its key purpose is to accelerate the alignment and improvement of infrastructure delivery and development for the benefit of society, the economy and the environment.

The group's work programme focuses on five key areas where clients can make the most transformational impact: climate, data and digital, people, productivity and Project 13[1].

Management board

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Infrastructure director, Heathrow
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Chief technical officer, Tideway
Matthew Bartlett
Director, fibre build, Openreach
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Construction delivery director, HS2
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Climate Task Group

Chair
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Data and Digital Task Group

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People Task Group

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Ed McCann
Senior director, Expedition Engineering
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John Southgate, UK Power Networks

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1 project13.info

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For further information about the Infrastructure Client Group, visit bit.ly/ICE-ICG

Executive summary

It has been a busy year for the ICG. The group has played a leading role in helping the UK to deliver and adapt the infrastructure it needs, while amplifying the voice of clients to promote best practice and influence policy-makers

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The ICG's Annual Report 2026 highlights the important role that clients are playing in promoting and delivering a more productive, coordinated and collaborative infrastructure sector. It demonstrates how the ICG is taking the lead in ensuring that the UK is better able to deliver essential economic and social infrastructure while meeting the challenges posed by climate change. It also highlights how clients' knowledge is being used to promote best practice and connect the infrastructure industry with government.

Our work focuses on five areas where we believe that infrastructure clients can make the biggest impact:
- Climate adaptation, decarbonisation and nature.
- Data and digital integration.
- People and workforce challenges.
- Infrastructure productivity.
- Project 13 – an integrated, collaborative delivery model for infrastructure projects and programmes.

This report highlights the work and achievements of the individual task groups addressing these issues over the past year. It also shines a spotlight on two significant activities that the ICG community has undertaken in 2026: ICG Live and the Infrastructure Systems Review.

The first chapter (p8) focuses on the Infrastructure Systems Review – an important piece of work being developed by the ICG on behalf of the sector. The intention is that this will be adopted by the National Infrastructure and Service Transformation Authority (NISTA) and HM Treasury.

The project is investigating how a systems-based approach could aid better decision-making that improves outcomes for people, nature and the economy using the limited resources available. The review uses case studies to test and demonstrate how systems approaches can release greater value from the built environment, recommending the practical changes needed to make that happen.

The second chapter (p10) explains how the ICG's Climate Task Group is advancing work on decarbonisation, climate resilience and nature restoration. It focuses on the group's activities to bring people together, develop and share best practice, and provide a forum for new ideas to be trialled on a large scale. Highlights from the past 12 months include two accelerator programmes on concrete decarbonisation and nature, which are intended to hasten the adoption of innovative ideas and approaches.

Chapter three (p12) covers the work of the Data and Digital Task Group, which has evolved from a knowledge-sharing forum into a catalyst for industry change. The group is addressing sector-wide issues through benchmarking, deep dives and digital debates, as well as identifying initiatives that clients are best placed to take forward. This section also provides an update on the Integration Accelerator, which was launched last year to provide the infrastructure sector with practical tools to promote digital integration.

The fourth chapter (p14) highlights the work of the People Task Group, which was launched last year to address some of the sector's critical workforce challenges. The group is prioritising workforce planning, and has been liaising with industry organisations that are active in this field to identify areas where clients can add the greatest value. It has also started to focus on issues related to health and safety where its involvement could have the most impact.

Chapter five (p16) provides an update from the Productivity Task Group, including the progress of the forthcoming PAS 4010 standard on improving productivity in infrastructure development and delivery[1]. This industry-wide document will enable all parties involved in infrastructure delivery and operation to understand how they can improve productivity and give them the tools to make that happen.

The group has also looked at barriers to adopting technologies that could improve productivity, as well as how techniques used to design production systems in manufacturing could be transferred to infrastructure projects.

Chapter six (p18) focuses on the work of Project 13 and the wider adoption of integrated enterprise models by clients in all areas of the infrastructure sector. It highlights the increasing maturity of enterprise approaches in the industry, as traditional contract hierarchies are increasingly being replaced by integrated team structures. The report also showcases some of the information provided by Project 13 to support organisations that are new to an enterprise approach, including a guide to effective integration.

The final chapter (p20) reports from the highly successful ICG Live event held in Manchester in March as part of Interchange 26. At this one-day conference, the ICG used its voice to set the agenda for industry-wide improvement, focusing on the five themes at the core of the group's work. It underlined the group's value in advancing collaboration and innovation across UK infrastructure.

1 bit.ly/BSIPAS4010

Infrastructure Systems Review

As the UK's critical infrastructure networks become ever more interconnected, a major ICG-led initiative is showing how systems thinking can help to break down silos, improve decision-making and unlock the maximum value from limited resources

CHAIR

Mark Enzer
Fellow, Mott MacDonald

The UK faces growing demands on its infrastructure in an era marked by fiscal strictures, resource constraints, skills shortages and environmental pressures. Future challenges cannot be addressed simply by spending more and building more. To generate the greatest possible benefits from the limited assets, services and resources available, complex choices will need to be made about where and how to invest.

The ICG is leading a project to investigate how a systems-based approach would improve this decision-making process and ensure that resources are used to create better outcomes for people, nature and the economy. Its Infrastructure Systems Review will test and demonstrate how systems thinking can improve key decisions and unlock greater value from the built environment. It will recommend practical changes that would make a systems-based approach standard practice.

Why is the review needed?

Infrastructure is essential to society. If it doesn't work properly, neither does society – it's that simple. Our infrastructure needs are becoming more complex and connected, particularly as we deal with challenges such as decarbonisation and digitalisation. But infrastructure is planned, funded, delivered and regulated through siloed organisations relying on fragmented information. This has encouraged the sector to focus on building assets rather than maximising the potential of existing ones, which often leads to work duplication, delays, unnecessary costs and other undesirable outcomes.

Many of the sector's most important challenges cannot be tackled effectively by any single organisation or initiative in isolation. Complex undertakings such as improving the nation's energy security, protecting its biodiversity and moving towards a circular economy transcend organisational and sectoral boundaries, so it would be futile to attempt them in silos. We must therefore apply more systems thinking to the built environment.

What is a systems approach?

Systems approaches start by focusing on the outcomes required rather than on individual assets, projects, organisations or sectors. They can show how activities in one part of a system can affect other areas of it, reducing the risk of unintended consequences and missed opportunities. They also broaden the range of solutions or interventions that might be considered. Crucially, systems approaches can help to determine where to allocate limited resources to create maximum social, environmental and economic value.

The management of a road provides a simple example of systems thinking. Under a siloed approach, the asset is treated in isolation as transport infrastructure. But a systems approach identifies how the road connects with other infrastructure assets and networks, including its role in flood risk mitigation. Could its surface-water run-off be managed and treated to reduce flooding, improve water quality and

provide wider environmental benefits? If the organisations responsible for managing highways, flood protection and water supplies address this question together, all of these issues can be considered on a system-wide basis, creating the potential for several co-benefits.

What will the review cover?

The ICG is co-sponsoring the Infrastructure Systems Review, which aims to test and demonstrate how systems approaches can release greater value from infrastructure and to recommend practical changes needed to make that happen. The ICG is well placed to lead in this area: it represents major infrastructure clients, owners and operators, which understand not only their own assets and challenges but also the limitations of working entirely within their specific sectors and the value of adopting a more cohesive approach. The group also has a powerful voice in the industry and direct access to decision-makers in government.

The Infrastructure Systems Review follows a pattern of leadership that the ICG has provided in the past, through both the Infrastructure Cost Review and the Infrastructure Carbon Review. This time the group is working with the National Infrastructure and Service Transformation Authority (NISTA) which brings the government directly into the process.

The Infrastructure Systems Review will use 15 case studies to illustrate how a systems approach can release greater value from infrastructure and the built environment. These span a range of locations, sectors, ownership models, scales and challenges. The intention is that the review's findings will feed into government policy and help to inform NISTA's 10-year infrastructure strategy. The case studies provide examples of effective systems thinking in individual projects or programmes, but they also indicate the benefits that could be achieved by applying the approach at a national level. Some of them are prospective rather than retrospective – the case study on the Oxford-Cambridge growth corridor, for instance, explores how systems thinking could result in a better solution.

Another case study investigates the benefits that could come from treating all road crossings of the River Thames in London as a single system. These are the responsibility of several authorities, so they are not managed in a coordinated way. But they are connected – the closure of one crossing will increase traffic on others, for instance. If they were managed as a system, spending on upgrades and maintenance could be better targeted to improve city-wide socioeconomic and environmental outcomes.

Findings to date

The case studies are fascinating. Each of them has produced about 10 transferable insights. A meta-analysis of those insights shows clear patterns across the 15 examples, from which about 30 overarching insights have emerged. The next stage is to test and validate these through a series of workshops involving consultants, academics, ICG members and representatives of civil society, among other stakeholders. This will be an iterative process. We expect it to refine, consolidate and prioritise the case studies' insights.

The Infrastructure Systems Review starts from the hypothesis that systems approaches lead to different decisions from those made in silos – and that these decisions improve outcomes, reduce risk and create greater value. Its case studies have provided the evidence. From the evidence we generate insights – and from these insights we generate recommendations. In July, we held an event to share what the review had taught us to date. The case studies demonstrated that systems approaches create value when they improve important decisions. They also revealed that looking beyond a single asset, project, organisation or sector uncovers dependencies, risks and sources of value that narrower approaches often miss.

"The case studies are fascinating – each of them has produced about 10 transferable insights"

Some of the strongest evidence concerned existing infrastructure, showing that managing connected assets as a system can improve maintenance, renewal and resilience, prevent disruption and make better use of existing capacity.

Likely recommendations

The final report will be published in early 2027, along with recommendations for practical actions to make systems approaches standard practice throughout our sector. The evidence suggests that systems-level value is often lost because decisions are made within organisational, sectoral and institutional boundaries that do not reflect how outcomes, risks and value are created.

The review is therefore likely to recommend more joined-up action by the senior decision-makers who shape the built environment through policy, regulation, investment and stewardship. This includes creating the authority, incentives, information and capability needed to support better choices across organisational boundaries over the long term.

Clients have a leadership role here, but they cannot create a system-wide change alone. The real value will come from the government, regulators, clients and investors working together to ensure that outcome-focused, systems-based decision-making becomes the norm across the built environment.

Climate Task Group

CHAIR

Rachel Skinner CBE
Managing director, transport and mobility, WSP

“The role of nature restoration in both decarbonisation and climate adaptation is now better understood, with growing investor interest in how to finance nature-led solutions”

SHUTTERSTOCK/ICEMANPHOTOS

The Climate Task Group focuses on the infrastructure sector's three related strands of climate action: decarbonisation, climate resilience and nature restoration.

With ocean temperature data suggesting that record-breaking El Niño effects will follow 2026's heatwaves, there is a fast-growing acceptance that inadequate action on climate change will have serious socioeconomic consequences. Legislation and regulation continue to push UK infrastructure forward on this. Late last year, the Department for Energy Security and Net Zero confirmed that there were well over 150 policy targets for decarbonisation across all government departments. Supporting this, the PAS 2080 carbon management standard is being adopted by infrastructure clients across the spectrum, having become firmly ingrained in project procurement and delivery. For all these reasons, decarbonisation is the Climate Task Group's main focus – as it has been since 2020.

Turning to climate resilience, the task group has been looking increasingly to collaboration to support faster, more efficient adaptation since 2024. In May this year, the Climate Change Committee warned in its report A Well-Adapted UK[1] that the nation should prepare for average global temperatures to reach 2°C above pre-industrial levels by 2050, noting that a 4°C increase by the end of the century cannot be ruled out. The UK is underprepared for the extreme weather likely even at the lower end of that range. With this risk in mind, ICG members are shifting investment towards adaptation to ensure that systems can function under the tougher conditions to come.

The role of nature restoration in both decarbonisation and climate adaptation is now better understood, with growing investor interest in how to finance nature-led solutions. The task group is pushing to go faster and further to aid the achievement of closely linked biodiversity and climate goals.

The task group plays a variety of roles in support of decarbonisation, climate resilience and nature restoration. We not only bring people together from a wide range of organisations, but also develop and share best practice, while providing a forum for trialling new ideas on a large scale.

Quarterly meetings and deep dives

Members of the task group who attend its quarterly roundtables take reassurance from knowing that they aren't alone in trying to tackle major climate-related challenges. At these meetings, members take time to report on their organisations' progress, share what they have learnt and exchange views on common challenges. These peer-to-peer check-ins give them the confidence to support action on climate issues, in their organisations and more widely.

The second half of 2026 has marked the return of our deep dives. These are workshops on key topics such as site-based emission reduction and cross-sector resilience. All ICG members are welcome to join these sessions.

Accelerator programmes

Since 2024, Climate Accelerators have been our primary mechanism to develop shared approaches and apply them at pace, with a view to embedding them across the membership.

The Concrete Decarbonisation Accelerator programme has completed two distinct phases of work. The first identified seven areas of action focused on using concrete more efficiently, integrating low-carbon concrete requirements into projects and improving the quality of carbon and concrete data throughout the supply chain. It also included a collaborative effort to map future demand for specific types of concrete among participants. The second phase focused on three lower-carbon concrete materials, supporting pilot studies and trials while sharing knowledge with like-minded organisations. The Construction Leadership Council and several government departments are using findings from both phases to guide and align their approaches, paying particular attention to calcined clay technologies and their role in addressing future material supply and demand.

Also in progress in 2026 is our Nature Accelerator, which will soon produce a roadmap designed to help infrastructure organisations engage more effectively in nature restoration. With rapid industry shifts occurring this year, the programme remains aligned with – and directly supportive of – industry initiatives such as Rebuilding Nature[2], which is backed by several ICG members. The accelerator's output is contributing to the development of a strategic nature network and nature investment zones for the UK, complementing emerging nature markets and helping infrastructure clients to decide how best to incorporate practical nature restoration into their programmes and specific contexts.

Looking ahead

The task group will continue to focus on decarbonisation, resilience and nature restoration over the coming year, with a particular emphasis on climate adaptation. The ICG provides an ideal forum to address the issues highlighted in A Well-Adapted UK because its members are involved in all aspects of strategic infrastructure. The task group can analyse climate impacts at both system- and network-wide levels to identify how a serious failure in one strategic infrastructure network – transport, energy or water – can affect the others. Aligned with the ICG's wider work on systems, the task group is promoting a more strategic approach to infrastructure investment and adaptation, identifying where systems and networks may fail if they are not sufficiently resilient.

1 bit.ly/CCCWELLAD
2 rebuildingnature.com

Data and Digital Task Group

CHAIR

Ashleigh Rastall
Strategic infrastructure adviser,
Allora Infrastructure

“The Data and Digital Task Group has evolved from a knowledge-sharing forum into a client-led catalyst for change across the infrastructure sector”

SHUTTERSTOCK/DEE KAREN

The infrastructure sector faces a range of challenges relating to its use of data and digital technology. They include poor data quality, fragmented operating models, duplication across systems and the limited use of data for decision-making.

These challenges are compounded by capability gaps and a lack of clear development paths for roles that combine engineering and digital knowledge. The sector also continues to struggle in areas ranging from project handovers and interoperability to automating at scale and translating data into actionable insights. This is often because no single organisation is responsible for such tasks. Clients and suppliers must work more collaboratively to achieve significant improvements.

With these challenges in mind, the ICG's Data and Digital Task Group is helping infrastructure clients to improve their use of data and digital technology through benchmarking, expert analysis and peer-to-peer learning.

Our work takes place at a time of increased focus on information-sharing, data governance, AI readiness, resilience and cross-sector collaboration as critical enablers of better organisational and system-wide outcomes. This is reflected in the Data (Use and Access) Act 2025, which reinforces the importance of trusted data-sharing, digital verification and the sector-wide exchange of information. It's also evident in key government publications, including HM Treasury's latest Balance Sheet Framework, NISTA's refreshed Infrastructure Pipeline and both organisations' 10-year infrastructure strategy.

Furthermore, the EU Artificial Intelligence Act 2024 and the UK government-sponsored BridgeAI programme[1] are prompting organisations to strengthen AI assurance, governance and responsible adoption, as well as highlighting what is possible with AI and how to use it responsibly.

Key activities

The ICG's Data and Digital Task Group has evolved from a knowledge-sharing forum into a client-led catalyst for change. It is helping to shape standards, strengthen clients' capabilities and support the practical adoption of digital tools across the infrastructure sector.

Increasingly, our role is to determine the issues and activities that infrastructure clients are best placed to take forward. We work with other digital initiatives – including the Construction Leadership Council, the Digital Twin Hub, the Built Environment Connective and Nima[2] – to help ensure that they achieve the uptake they deserve.

Over the past 12 months we have engaged in the following key activities:

- conducted the 2026 Data and Digital Benchmarking Survey, providing a comprehensive cross-sector view of the latest trends in data and digital maturity;
- held digital debates on various topics, including common data environments and Microsoft B2B integration;
- heard from Thames Tideway's digital management asset lead, who shared lessons he had learnt during the project; and
- convened industry engagement sessions covering geographic information systems, data platforms, product platforms and the Digital Twin Skills Academy.

The 2026 Data and Digital Benchmarking Survey has found that most organisations are not yet ready to exploit AI-enabled decision-making fully. We also see that clients take different approaches to AI depending on their digital maturity, infrastructure capability and appetite for risk. The task group is encouraging a shift towards predictive, AI-supported analytics to improve decision-making, interoperability, data quality, risk management and operational performance. Our focus is first and foremost on the foundations required for successful adoption. We are also keen to work as a client group to avoid some of the risks associated with AI adoption, such as vendor lock-in and the use of AI decision support tools without a clearly defined rationale. Within the group, clients will share examples of the opportunities that AI unlocks, including use cases in which the technology is supporting operational improvements.

Adoption and integration

We have established two sub-groups. The first is the Adopters Group, in which clients discuss their progress towards digital maturity and demonstrate how they are addressing key challenges. The second, the Integration Accelerator, is focused on developing best practice in areas where we see significant gaps and slow uptake.

Over the past 12 months the Adopters Group has explored "The making of a data dream team" – a research project involving the ICG and global data association DAMA[3] – as well as the Department for Science, Innovation and Technology's data valuation framework. Later this year the sub-group will hear from the Environment Agency and HS2 about their progress towards data maturity.

The Integration Accelerator has formed a set of data integration maturity levels to enable clients and their ecosystems to set common goals. It has also gathered data integration case studies to share best practice. Alongside this, we now have a blueprint showcasing what else could be developed to further increase the sector's maturity in data integration. We will expand the programme over the coming year to include several parties to fast-track development and best practice.

1 bit.ly/BRIDGEAI
2 wearenima.im
3 bit.ly/DAMADREAM

People Task Group

CHAIR

Sahil Chaini
UK and Ireland client director, Transcend

SHUTTERSTOCK/PEOPLEIMAGES

Within the first few meetings of the People Task Group after its establishment in October 2025, it became clear that we wanted to concentrate on two main themes: workforce planning and health and safety. Although these are related, they will require separate efforts, so we created two sub-groups to decide what our focus should be in each case and to take the work forward.

Workforce planning is one of the biggest challenges the sector is trying to address. The UK has a lot of infrastructure work scheduled over the next decade. There is genuine and widespread concern that there aren't enough skilled people available to do that work, which would jeopardise the timely delivery of several programmes and projects of all types and sizes.

A wide range of companies, trade bodies, industry groups and professional institutions are already looking at workforce planning and the provision of construction skills. We don't want to duplicate their efforts. The People Task Group's approach is to build on what's being done by other infrastructure organisations to amplify its impact and to focus on specific areas where we have identified gaps.

That's why our first step has been to meet those already working in this area, including the National Infrastructure and Service Transformation Authority, the Construction Leadership Council[1] and its newly established Construction Skills Mission Board.

It has been interesting to understand how these organisations are approaching the issue and to consider how we might be able to support them. Most of them are not specifically client groups, although they have involved clients to a certain extent. They want a wider client perspective to give them a full picture of demand.

Identifying future skills requirements

A large proportion of the projects in the infrastructure sector are being commissioned by ICG member organisations, which are producing workforce plans to support their delivery. We have already started sharing these plans within the task group and the next step will be to compile all of this information to give the wider industry a more accurate view.

One useful resource is NISTA's Infrastructure Pipeline, a comprehensive list of large-scale public and private capital programmes and projects scheduled over the coming decade. The next step is to add more detail to that list to help the industry plan more accurately.

Everyone involved in the sector needs data to know what skills will be needed, where and when. With most clients working to five- or 10-year plans, the challenge is to ensure that we are equipping people now with the skills we'll need from them in the longer term.

This is probably where the ICG can add the most value. Other industry groups receive client input, but the information often comes from many sources. By bringing together workforce planning data from our members, we can support the work these organisations are already doing by providing them with a clearer picture of future demand.

Health and safety

We are convening the sub-group that will focus on health and safety and deciding what issues it should prioritise. As always with health and safety, there are many things we could do – and, once again, we don't want to replicate work being done elsewhere.

In these early days of the health and safety sub-group, we are keen to understand what relevant concerns ICG members are focusing on in their organisations and where we could make the greatest contribution. One issue that is high on everyone's agenda is fatal accidents because, unfortunately, they are still occurring across the industry.

It is important that the work of both sub-groups offers two-way benefits: we want to take on work that will deliver the most value to the industry, but each ICG member must also feel that they are receiving something worthwhile in return.

"Everyone involved in the sector needs data to know what skills will be needed, where and when. With most clients working to five- or 10-year plans, the challenge is to ensure that we are equipping people now with the skills we'll need from them in the longer term"

1 constructionleadershipcouncil.co.uk

Productivity Task Group

CHAIR

Ed McCann
Senior director,
Expedition Engineering

SHUTTERSTOCK/CHRISPO

The need to improve productivity in the infrastructure sector has been clear for many years. Still, despite several initiatives aimed at doing so, the consensus is that insufficient progress has been made. Recent reviews – including those by the Competition and Markets Authority, Sir Jon Cunliffe, John Fingleton, James Stewart and Sir Stephen Lovegrove – add to the existing body of knowledge and paint a clear and somewhat stark picture.

There are many reasons for the lack of headway. In my view, a large part of the problem has been a failure to apply a sufficiently systematic approach to both analysing the problems and prescribing their solutions.

I believe that we have reached a critical juncture: there is both a national imperative to improve and an infrastructure community of owners and suppliers determined to collaborate and do better. In this context, the ICG's Productivity Task Group is focused on advancing a systematic approach to improving productivity across the sector.

PAS 4010 – the infrastructure productivity standard

The ICG has had a vital role in developing PAS 4010:2026 (Infrastructure – Improving productivity in infrastructure development and delivery). The initial draft was completed in May this year and went out for public consultation in June. The aim is to have it ready for publication in November.

PAS 4010 will specify requirements for managing and improving the productivity of infrastructure programmes and projects. The standard will identify actions and responsibilities for all members of the value chain. It will be accompanied by a guidance document, which is supported by the ICG both financially and through member input.

The standard should help everyone across the infrastructure sector to understand what they can do to make both individual projects and the wider industry more productive. It should also be of interest to financiers, regulatory bodies, the government and regional authorities. Their input is essential to ensure that projects and programmes are planned, procured and incentivised to be more productive right from the start.

One key requirement of PAS 4010 will be that every project must have a productivity plan. Members of the Productivity Task Group are already trialling what this might look like, including those working on the civil works programme for Sizewell C nuclear power station. The programme has produced a value-for-money strategy – its equivalent of a productivity plan. Testing such strategies will give the industry valuable insights into how to formulate a productivity plan and what it means for the delivery process before PAS 4010 is adopted more widely.

Understanding resistance to new tech

Another valuable piece of work to come from the task group is a white paper examining the barriers to adopting technologies that could improve productivity. Once we know the reasons why individuals and organisations are reluctant to use these tools, we can start to address them. The paper is due to be published later this year.

Learning from manufacturers

It is almost 30 years since Sir John Egan's review of the construction sector called on the industry to adopt methods used in the manufacturing sector to improve productivity, but it feels like we still haven't learnt the right lessons. I hope that the situation is about to change, as major infrastructure clients are starting to explore how techniques used to design and operate manufacturing systems could be transferred to their projects. Task group members experimenting with production systems engineering include representatives from Sizewell C and HS2's stations programme – and the improvements have been notable.

Members are also trialling some of the modelling techniques used in manufacturing, which differ greatly from the tools that our sector would normally use to predict the performance of construction processes.

Developing a design maturity framework

An important issue identified by James Stewart in his 2025 HS2 review[1] was that projects often lacked design maturity when they were commissioned and contracts were awarded. In response, the task group intends to develop a framework that organisations can use to assess their level of design maturity.

The Lower Thames Crossing project has developed and piloted a method for assessing the design maturity of its programme. It will be sharing information with us to help inform a framework that the ICG can offer to the whole sector.

"There is both a national imperative to improve and a community of owners and suppliers determined to collaborate and do better"

1 bit.ly/STEWREV

Project 13 Task Group

CHAIR

Dale Evans
Partner, Allora Infrastructure

"We can help owners to understand the value of putting a delivery strategy in place from the outset"

SHUTTERSTOCK/CLARE LOUISE JACKSON

Project 13 was set up eight years ago to drive the infrastructure sector's shift from transactional delivery models to an enterprise approach. At that time, most major projects were still procured using transactional arrangements, while organisations that had established enterprises were just starting to grasp their potential. There was little sharing of experience across the sector, resulting in a poor understanding of best practice.

Today, the industry has a far more consistent understanding of best practice in infrastructure delivery. We are in a phase of greater maturity, in which the enterprise approach has a proven record of success across a wide range of adopters, with learning being shared more widely. Some of this knowledge has been consolidated into influential industry guidance, including a range of Project 13 products and, more broadly, publications such as the government's Construction Playbook, Transforming Infrastructure Performance: Roadmap to 2030 and, more recently, the Built Environment Connective's Connect to Change. All these advocate a consistent direction for infrastructure delivery.

This increased understanding of best practice has developed to the point where it is no longer acceptable for owners simply to default to traditional transactional arrangements. Instead, organisations are considering their delivery strategy and, where it is relevant and possible, transitioning to integrated models such as enterprises and alliances.

For many owners, starting the process by asking "what's the best delivery strategy for this investment?" represents a different approach. Understandably, they want evidence and case studies to support that decision. This is where Project 13 comes in. We can share the experiences of members who have been through that process and offer guidance to help them build their own case for change. We can help them to understand the value of putting a delivery strategy in place from the outset – one that is right for their organisation.

Integration

We have always known that the silos inherent in traditional delivery models make collaboration difficult, contributing to poor delivery outcomes. That is why integration is one of the five pillars at the heart of the Project 13 approach[1].

Now that many adopters have experience of working with enterprise models, we have greater evidence from a range of projects and programmes that integration leads to better delivery performance and improved productivity. These insights informed Effective Integration in Infrastructure Delivery – a Project 13 Guide[2], which we published earlier this year. The guide identifies four layers of integration and emphasises the importance of putting fundamental integration features in place from the start. This reflects the experience of adopters who gained the greatest benefit by clearly designing integration into their delivery models.

Ecosystem engagement

In parallel, we have been considering how to achieve wider engagement across the whole project ecosystem. While traditional contracts engage suppliers on a tiered or hierarchical basis, the Project 13 model recognises that successfully achieving a client's targeted outcomes requires a network of organisations that are all engaged and committed to those outcomes. Later this year, we will publish a paper highlighting the importance of involving the entire supply network in an enterprise and providing advice on engaging partners, suppliers and subcontractors within an enterprise context.

Contracts

Over the past year, Project 13 has investigated whether there is a need for a specific enterprise form of contract. We worked with NEC[3] on this and concluded that its existing range of contracts works well for enterprises. Now that many adopters have reached a level of maturity with this approach, we have used their experience to develop guidance on applying NEC forms of contract to enterprise-based projects and programmes. We issued this guidance earlier this year[4].

Looking ahead

With enterprise models becoming more established among UK infrastructure clients, we have taken the opportunity to review the key lessons from Project 13's first eight years. These are being compiled into a report that shares progress and insights from the Project 13 community. We will follow this with events involving sponsors and government stakeholders.

We are also updating the Project 13 commercial handbook. This is often an aspect that organisations find difficult: they may be committed to using an enterprise model but do not know how best to adopt a more progressive commercial strategy. The updated handbook – due in early 2027 – will draw on adopters' experience of establishing successful commercial plans.

These activities are all part of Project 13's role: identifying and consolidating best practice in enterprise delivery and sharing it across the infrastructure community, thereby accelerating our collective progress towards integrated models that deliver better outcomes.

1 project13.info/about-project13
2 bit.ly/P13Integration
3 neccontract.com
4 bit.ly/NECP13

VICKI SHARP PHOTOGRAPHY

From left: Ed Beard, NISTA; Mark Thurston, Anglian Water; Mark Hansford, event host

ICG Live

At the inaugural ICG Live event in March, senior decision-makers from across UK infrastructure came together to discuss the sector's most pressing challenges and how best to tackle them

The first ever ICG Live gathering, at Manchester Central on 3 March, provided frank debate, genuine ambition and a clear call to action on the sector's biggest challenges of the decade. It was the first time the Infrastructure Client Group had opened its work up in this way to a wider industry audience and it came at a fascinating time for the sector. The event, hosted by journalist and infrastructure commentator Mark Hansford, was split into five sessions focusing on key problems and their potential solutions.

1. Delivering the 10-year infrastructure strategy

ICG Live began by looking at the big picture. Becky Wood, CEO of the National Infrastructure and Service Transformation Authority, set out the government's 10-year infrastructure strategy, making clear its extraordinary level of ambition and the scale of the task facing the industry. Mark Thurston, chief executive of Anglian Water and former CEO of HS2, then gave a candid assessment of performance, acknowledging where the infrastructure sector has fallen short and identifying the greatest opportunities for improvement. He was joined by Ed Beard, NISTA's assistant policy director, for a searching Q&A.

After spelling out the challenges, the event moved on to one potential solution: AI. Anshuman Mishra, MD and partner at Boston Consulting Group, and Mark Coates, vice president of infrastructure policy advancement at Bentley Systems, joined ICG Data and Digital Adopters Group chair Miranda Sharp and ICG chair Jason Tucker for a thoughtful debate on

1 bit.ly/ROAI2025

this sensitive issue. The verdict was unambiguous: AI is highly relevant to infrastructure and cannot be ignored. Opportunities span portfolio-level planning, client organisations and the supply chain, but unlocking its power will require a change of operating model allied with better data discipline, interoperability, aligned incentives and capable sponsorship.

The session included a debate on climate action led by Rachel Skinner, chair of the ICG Climate Task Group. She was joined by Isabel Coman, director of engineering and asset strategy at Transport for London (TfL), and David Riley, Stantec's technical director. Together they made a powerful case for climate considerations to be embedded in all projects from day one. TfL commissioner Andy Lord then delivered an ambitious keynote address on the future of transport in the capital.

2. Making the big projects happen

How do you get a £3bn scheme off the ground when public trust is fragile, planning is complex and private finance isn't guaranteed? The second session kicked off by tackling that challenge, focusing on United Utilities' Haweswater Aqueduct Resilient Programme (HARP) – a bold new model for UK infrastructure delivery. Neil Gillespie, the company's transformation and strategic programmes director, and Tim Jones, CEO of project delivery firm Cascade Infrastructure, told the HARP story with striking candour, bringing into sharp focus the importance of collaboration, regulatory clarity and public confidence in making projects of this scale succeed.

Architect Harbinder Birdi, who is design champion for the Grand Union Canal Transfer project, explained how engineers are linking pipes, aqueducts and existing watercourses to move water from wet areas to drier ones while respecting the landscapes they pass through. His account of listening to local communities and enabling them to inform what gets built was a powerful example of the benefits of public engagement.

Darryl Murphy, MD and head of infrastructure debt at Aviva Investors, explained what institutional investors want to see before committing significant capital, while a discussion about the Direct Procurement for Customers regulatory model went to the heart of what a smarter, more transparent approach to delivering nationally significant infrastructure looks like in practice. Naomi Green, MD of England's Economic Heartland – the transport body for the Oxford-Cambridge growth corridor – spoke about its new integration taskforce, a practical demonstration of thinking across modes and boundaries.

3. The ageing assets emergency

The third session focused on a challenge that has become a serious national risk: ageing infrastructure. Steve Denton, MD, civil, at WSP, highlighted the Reviving Our Ageing Infrastructure report[1], published last year by the National Engineering Policy Centre and led by the Royal Academy of Engineering. Warning that much of UK infrastructure is approaching a critical tipping point, the report makes recommendations for policy-makers, asset owners and key influencers.

Dr Hazel McDonald, chief bridge engineer at Transport Scotland, gave vivid examples of the pressures being felt on the road network. David Coles, chief engineer at the Department for Transport, discussed policies in place to improve resilience, raising concerns about the level of competence across the sector. Andrew Pierce, senior engineer at Calderdale Council and co-secretary of the Adept National Bridges Group, was frank about the resource pressures facing local authorities with ageing assets. TfL's Coman made a compelling case for better data and digital tools to enable smarter asset management. David Porter, director of engineering and transformation at Northern Ireland's Department for Infrastructure and President of the Institution of Civil Engineers, captured the session's conclusion well: maintaining and renewing the infrastructure we already have is just as important as delivering new assets.

4. Enterprise, productivity and the tools that work

Enterprise models – the collaborative delivery structures championed by Project 13 – took centre stage in the fourth session. Project leaders from the Southern Renewals Enterprise, United Utilities' AMP8 programme and Yorkshire Water's Storm Overflow Alliance shared honest assessments of what enterprise delivery looks like in practice: where it works, where it's still bedding in and why it represents the most credible path to lasting productivity gains. Project 13 chair Dale Evans set out the evolution of the model and where it goes next.

Speakers including Andy Alder, managing director of major infrastructure delivery at Anglian Water, Alistair Hitchcock, director of engineering at Northern Powerhouse Rail, and Kelachi Amadi-Echendu, associate director at Expedition Engineering, covered the full productivity landscape: from the Get It Right Initiative and the forthcoming PAS 4010 standard for infrastructure productivity to digital tools, maturity models and the challenge of embedding better behaviour across supply chains. The key lesson was that the initiatives, frameworks and tools are there – the bottleneck is adoption.

5. Big ideas for a different future

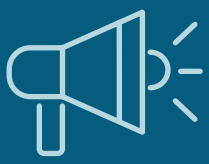
The day ended with a deliberate look forward. Nicola Small, Very Light Rail (VLR) regional programme director at Transport for West Midlands, explained why Coventry's VLR project is a model for how cities can develop and test radically new transport solutions. Adam Scott, co-founder of strategy and design agency Experience Foundation, and Hiro Aso, transit hubs sector lead at Jacobs, explored how shared human experience can serve as the golden thread linking infrastructure vision to reality. It was a timely reminder that the buildings, roads, railways and water systems that the sector delivers are not ends in themselves, but the daily backdrop to millions of lives.

Future plans

ICG Live 2027

Infrastructure Systems Review – case studies and final report

Be the voice for UK infrastructure clients



Refreshed Project 13 From Transactions to Enterprises report

Project 13 ecosystem paper

Data integration blueprint

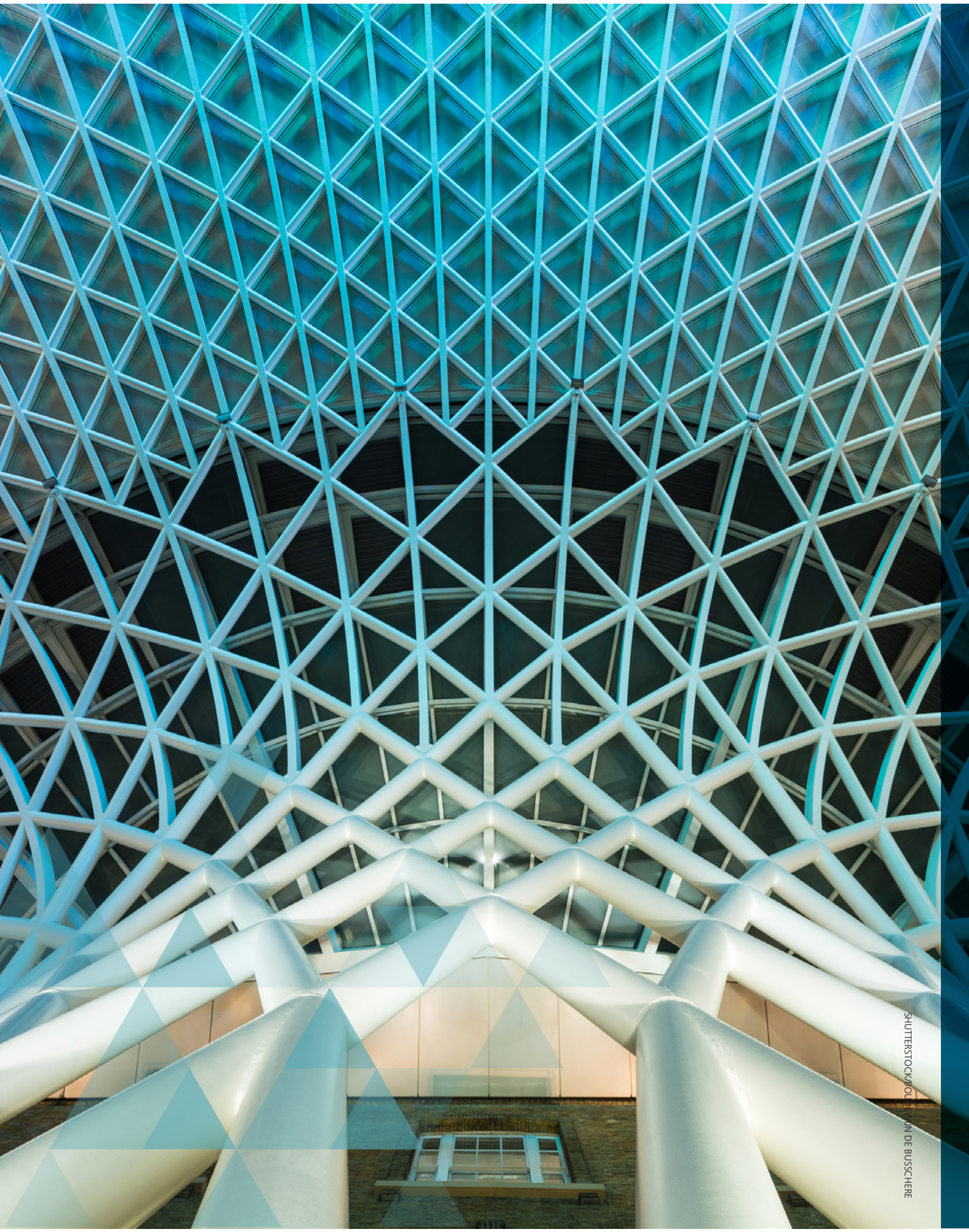
Release of PAS 4010 and ICG-co-funded guidance

Concrete Decarbonisation Accelerator results

Productivity toolkit

Data and Digital Benchmarking Survey results

Climate Task Group Nature Accelerator



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The Infrastructure Client Group (ICG) brings together UK economic infrastructure clients in partnership with government and industry.

The ICG's key purpose is to lead the acceleration of improvement and alignment in the delivery and development of UK infrastructure, for the benefit of society, the economy and the environment.

The ICG is sponsored by the Institution of Civil Engineers (ICE), the home of infrastructure. A professional institution with 95,000 members and more than 200 years of history, the ICE qualifies civil and infrastructure engineers, promotes lifelong learning and provides trusted, impartial, expert advice to decision-makers.

Its vision is a world where infrastructure enables people and planet to thrive. Its global membership designs, builds and maintains trustworthy and sustainable infrastructure.

Follow the ICG on LinkedIn:
bit.ly/LinkedinICG

The UN Sustainable Development Goals

Linking the ICE's work back to the UN Sustainable Development Goals (SDGs) is a core part of the institution's plan and mission. This report ties in with the following SDGs:

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