

Zero Tolerance – Carbon Strategies for Major Projects

Highlights

Highlights from the Major
Projects Association event
held on 19th April 2023



**MAJOR PROJECTS
ASSOCIATION**

What are we up against?

The latest **IPCC synthesis report** provides a stark warning of the impact that climate change will have on our planet.

We are now a third of the way through what has been called the decisive decade; a decade where we will need to cut global emissions by over 40% if we hope to limit warming to 1.5C. And yet global CO₂ emissions continue to rise.

This seminar looked at how the major projects community can play its part to help deliver net zero.

‘Waiting for policy certainty and perfect information creates an excuse to slow things down. But this is a collective action problem where seemingly rational individual inaction makes our collective future problems much bigger.’

Emma Howard Boyd, Chair, Major Projects Association

Emma Howard Boyd, Chair of the Major Projects Association, identified five key challenges that we face:

- The world does not stand still. We have seen unexpected political and economic headwinds and we should assume more will come.
- Climate security has not been given sufficient emphasis.
- Net zero and climate security needs financing.
- System-wide change is complex, especially when the actions of one are dependent on actions of others.
- It is vital that we make transition-driven business decisions in the absence of complete clarity on our pathway to net zero.

‘When Greta Thunberg talks about “cathedral thinking” to avoid climate breakdown, and says we must lay the first stone without knowing exactly how to construct the ceiling... she is right.’

Emma Howard Boyd, Chair, Major Projects Association

Carbon Code

One initiative that is facilitating collaborative action across the supply chain is the recently published **Carbon Reduction Code for the Built Environment**.

With UK statutory targets of 68% carbon reduction by 2030, 78% by 2035 and net zero by 2050, the transition to low carbon heating, lower

energy consumption and low carbon materials are key for our sector, which represents circa 40% of UK emissions.

Importantly, the Code provides consistency across the sector. It is aligned to initiatives such as **CO₂nstructZero**, **PAS 2080**, and **Procurement Policy Note 06/21**, etc. – but does not replace them.

It enables clients to show leadership, committing to work *with* the supply chain to achieve carbon reduction and not to just delegate the responsibility down the supply chain.

If clients sign up, then their prime contractors and supply chains sign up, which will move the sector towards the same goals and contribute to wider impact. It is free to sign up to the Carbon Code via a simple online application form. Contact: **carboncode-enquiries@eng.cam.ac.uk**

‘A focus on carbon, such as through the Carbon Code, is our best bet for driving whole industry progress – as it drives both productivity and sustainability.’

Fergus Harradence, Deputy Director, Infrastructure & Construction, Department for Business and Trade

Adrian Johnson, Technical Director at Scantec UK, echoed the feeling that we are starting to see a ‘sea change’ in carbon management approaches: *‘Focusing on assets will not get us to net zero, we need to work with the wider network and systems in which we operate. We must focus on whole life carbon reduction.’*

Engaging the supply chain

The UK’s supply chain is made up of over 5.5 million small businesses, which represent 99.5% of our total supply chain. These companies are therefore fundamentally important in our ability to achieve net zero, and yet despite 90% of them recognising that environmental sustainability was important to their business, 45% still have no formal commitment to net zero. (Source: **Business population estimates for the UK and regions 2022**)

Against this backdrop Nicky Wright, Infrastructure Partner at Gardiner & Theobald (G&T), provided guidance on engaging with our supply chain to ensure maximum impact. *‘We have to recognise that suppliers are driving their own agenda to innovate and deliver sustainable solutions in order to grow and win work.’*

G&T’s own research revealed that 75% of suppliers in the sector noted there was a lack of cascade and consultation on carbon and net zero strategies from clients.

Since infrastructure projects utilise unique supply chains each time and suppliers are only aware of the project strategy via their client, we must get better at communicating with the supply chain and sharing good practice.

Nicky's top tips:

- Recognise that setting a Net Zero Strategy does not ensure your supply chain are on board.
- Engage early and allocate specific resource to cascade intelligence and support.
- Acknowledge that we are all on a learning curve.
- Recognise your supply chain are driving their own agenda too.

The UK Infrastructure Bank

Alex Doyle, Deputy Chief Impact Officer at the **UK Infrastructure Bank** (UKIB) outlined how financial markets develop for the sectors and how the technologies that will contribute to net zero develop. She also outlined some of the barriers to investment that UKIB can support. She urged organisations to consider seeking UKIB's finance, given the Bank's role to support first-of-a-kind projects and technologies.

Case studies to inspire

Challenging us to think differently, Ian Jopson, Sustainability Director at NATS, presented details on delivering net zero when you are managing the *'Invisible infrastructure above our heads'*. The case study spoke to the power of metrics – the **3Di environmental score** that is now used to measure the performance of all flights – and a game-changing first for regulated industries of a financial incentive for carbon reduction performance.

You can watch the fascinating video [here](#).

Nicky's message about the importance of supply chain engagement to tackle this hard to decarbonise sector was powerfully illustrated by the **Sustainable Aviation Group** – which comprises Air Traffic Control, airports, air operators and aircraft manufacturers.

Of a more conventional infrastructure nature is the **Lower Thames Crossing** (LTC) project being delivered by National Highways.

'Delivering a net zero project is as much a state of mind as developing new systems and processes,' said Andrew Kidd, Director of Solutions & Outcomes at Lower Thames Crossing.

Soon, net zero construction will be the only option and we must embrace that now. We must focus, filtering out the noise in a marketplace that is long on experience of the problem but short on experience of delivering the solution. You must be single-minded, relentlessly optimistic and persistent.

Andrew also reminded us that measuring your carbon footprint is a means to an end and needs to be seen as a tool, not a product. Whilst National Highways has done detailed assessments of the carbon footprint for LTC, it was evident from very early on that the three main areas that would be influential were concrete, steel and diesel.

For these three priorities they needed different approaches:

- Steel – be selective about where you buy from.
- Concrete – focus on technical standards and competence of low and zero cement mixes.
- Diesel – create a new market for alternative fuels.

National Highways set an ambition to go as low as practicable with a minimum of 30% reduction at no additional cost. The market has taken on the challenge, with the first successful bidder identifying ways of delivering another 40% to 60% reduction which National Highways will now work with them to deliver.

'One of the most important things you project owners can do is be transparent about demand and willingness to pay.'

Andrew Kidd, Director of Solutions & Outcomes, Lower Thames Crossing

Points for further discussion

- Recognise the importance of the supply chain and especially the SMEs within it.
- What is required to give and get a clear sense of strategic direction on carbon for every project you work on?
- How can you support and empower all project professionals to become more knowledgeable on sustainability?

Chair

Kay Hughes, Design Director, HS2 Ltd

Contributors

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Participating organisations

Accenture
Anglian Water
Arcadis LLP
Arup
Associated British Ports
Atkins - part of the SNC-Lavalin Group
BAE Systems
Cabinet Office
Casewise Consulting Ltd
Cavendish Nuclear/Babcock
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