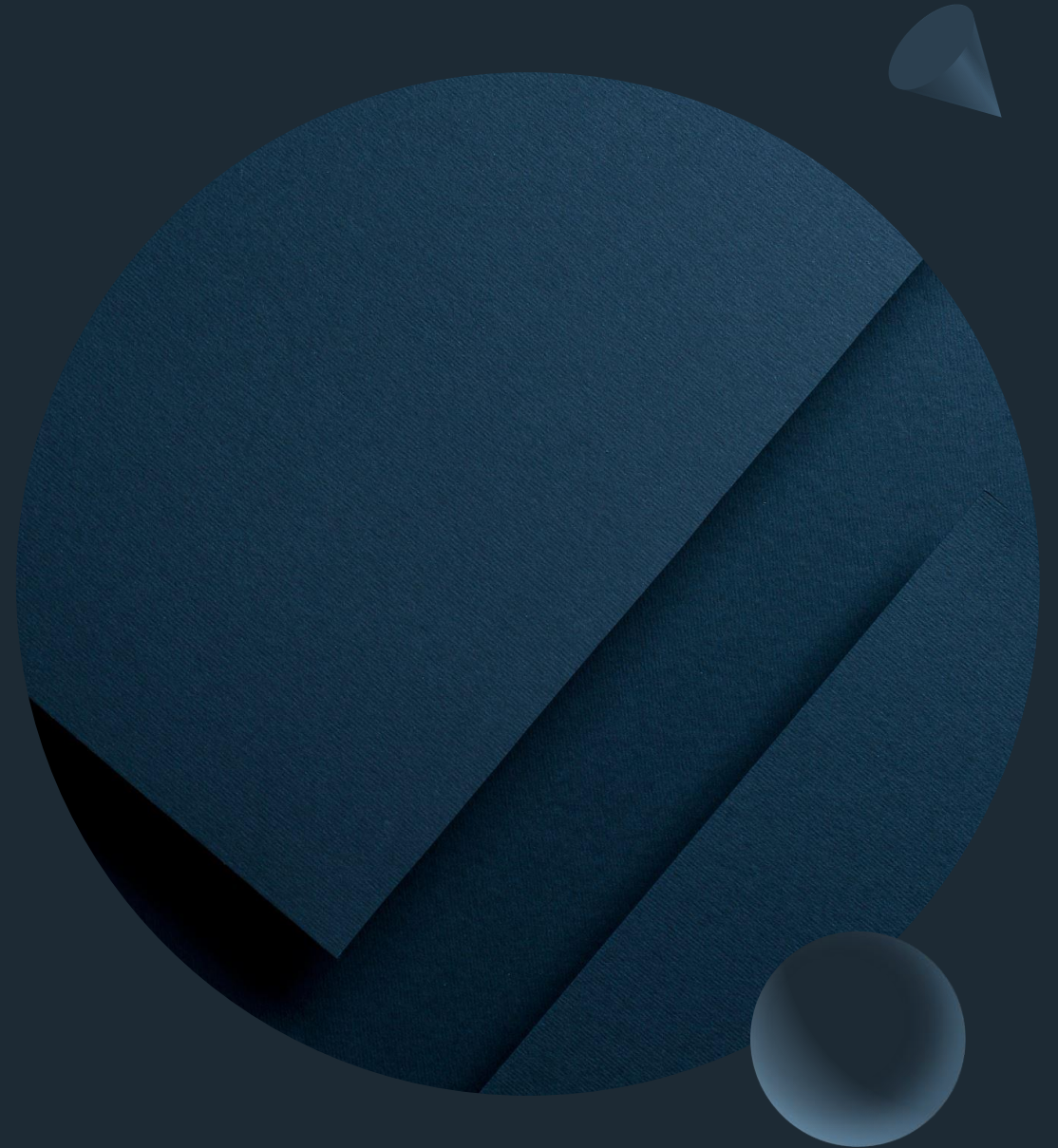


The role of “Procurement” in achieving Net Zero Carbon

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KING'S
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Assael



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Over the years, we've won and been shortlisted for many awards for design, for our practice as a whole, for being a good employer and for giving something back.

89 Design awards

26 Employer awards

15 Practice awards

2 Giving Something Back awards

Centre of Construction Law & Dispute Resolution

King's College London

Our expertise lies in the creation of innovative approaches to construction procurement and contracting that translate seemingly complex ideas into processes that the industry can more easily understand and adopt.



Agenda

- ❖ Backdrop
- ❖ What is Net Zero Carbon
- ❖ Net Zero Carbon and collaboration
- ❖ Why can't we just instruct NZC requirement?
- ❖ Procurement Strategies – Improve sustainability
- ❖ Benefits of Collaborative Procurement
- ❖ What is strategic Net Zero procurement



Backdrop

COP 26: *‘Businesses in the building sector to commit to **radical collaboration across the value chain** in order to develop, promote and adopt sustainable building practices that achieve the reduction of embodied carbon in buildings at scale and without delay’*

What is net zero carbon?

- UK government defines *'net zero carbon'* outcomes as those where *'any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere'*
- 2016 Paris Agreement requires carbon emissions to be at *'net zero'* by **2050**
- World Green Building Council calls for:
 - All **new** buildings to operate at Net Zero Carbon from **2030**
 - All **new and existing** buildings to operate at Net Zero Carbon by **2050**
- Increasing UK legal obligations to achieve net zero in bidding for government contracts over £5 million p.a. (PPN 6/21), in Building Regulations and National Planning Policy Framework and in the Environment Act



NZC and collaboration

- COP 26 called on *‘National and subnational governments around the world to adopt a **life cycle approach** to the reduction of emissions from buildings, and ensure that embodied emissions get addressed from the **early stages of planning and building design**’* and for *‘Businesses in the building sector to commit to **radical collaboration across the value chain** in order to develop, promote and adopt sustainable building practices that achieve the reduction of embodied carbon in buildings **at scale and without delay**’*
- UK Green Building Council states *‘Achieving net zero whole life carbon will require **close collaboration within the supply chain** to minimize embodied carbon and related liabilities for offsets’*

Net zero collaboration

- Who collaborates?
- Why do they collaborate?
- When do they collaborate?
- How do they collaborate?
- What is the effect of their collaboration on continuous improvement towards meeting the 2030 and 2050 Net Zero Carbon deadlines?




Can't we just instruct NZ compliance?

- The '*Climate Contract Playbook*' (part of the '*Chancery Lane Project*') proposes tackling climate change by:
 - Amendments to standard form construction contracts covering '*Energy Efficiency and Environmental Obligations*', '*Green Project Modifications*' and '*Green Design and Construction Standards*' (pp. 184,187,191)
 - A '*Carbon Budget*' to incentivise the industry to reduce GHG emissions across the project lifecycle.(p.197)
- Consultation on '*NEC Option X29*' envisages '*Climate Change Requirements*' included in the '*Scope*' linked to targets and incentives in a '*Performance Table*'
- These proposals are valuable, but they cannot deliver significant impact unless they form part of a long-term strategic approach using collaborative construction procurement and contracting systems



Focus

Planning, delivery and maintenance of a built asset is and will always remain a team endeavour



The right combination of collaborative and commercial factors can successfully shift mindsets away from defensive standpoints and avoid misunderstandings through improved communication


Procurement strategies – improve sustainability

Procurement strategies must **establish clear sustainable objectives** that should be put into actions by creating new lines of communication, clear commitments and clear timescales for the client and the industry to agree sustainable solutions that are practical and affordable


Example:

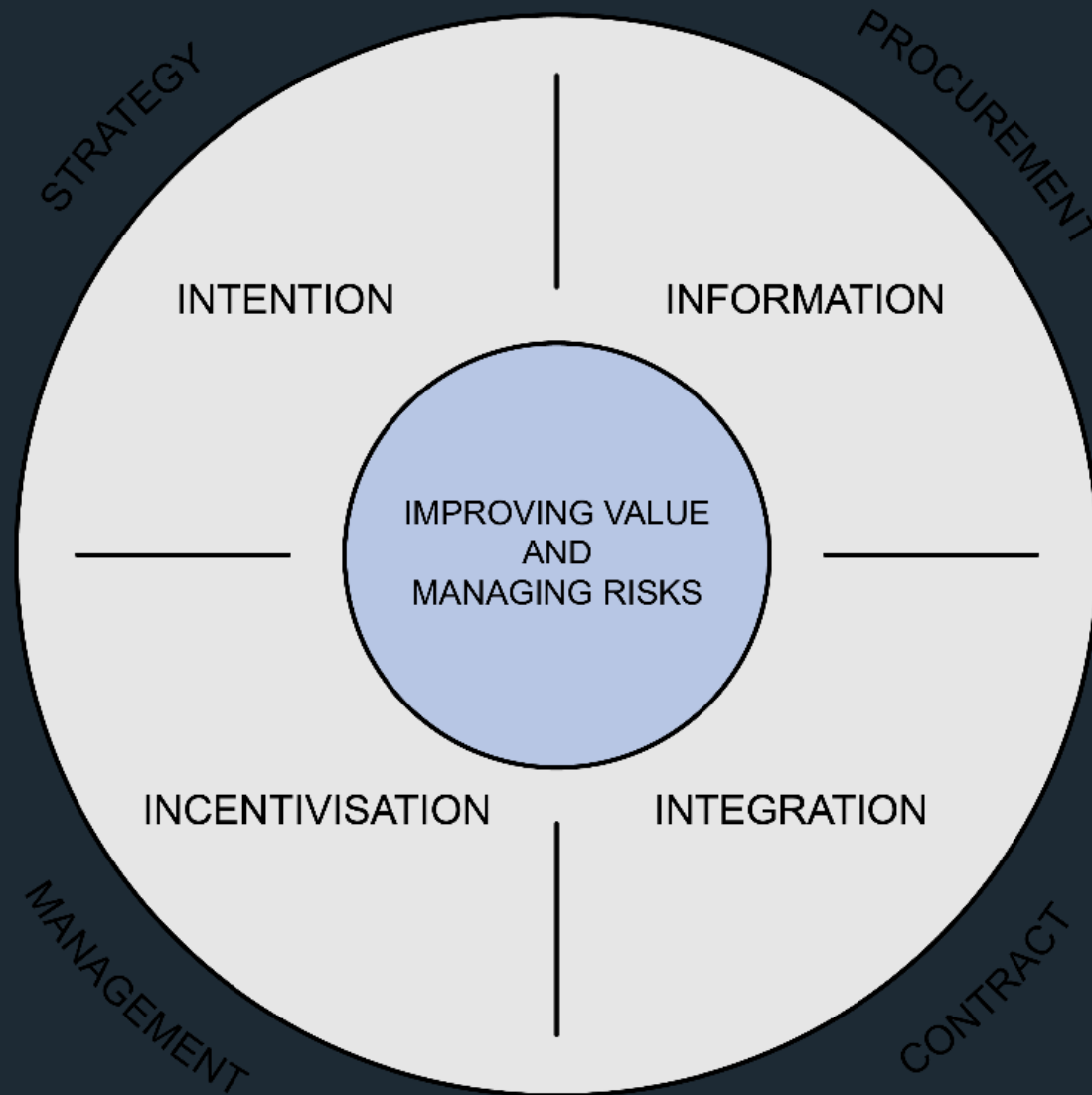
- **Highways England:** *“commitment to how we will protect the environment and neighbouring communities, while preparing our roads for future developments. Our work will unlock jobs and help drive the country’s economy”*
- **HS2 Environmental Director:** *“Using innovative techniques and products in the construction of the new high-speed railway, we can not only build HS2 more sustainably, but we can lead by example, showing how the construction sector can help deliver Britain’s cleaner, greener future”*
- **Surrey County Council:** *“acting on climate change can deliver a wide range of benefits for Surrey itself – the evidence clearly shows that climate action can help Surrey to tackle congestion, improve air quality, enhance public health, stimulate employment, provide better homes and tackle inequality. Instead of thinking why would we act, Surrey should be thinking why wouldn’t we*

Benefits of collaborative procurement

- **An alternative** to the defensive and fragmented culture caused by fear of disputes and failure to share information
 - **Improved integration** among design consultants, contractors, subcontractors and manufacturers
 - **Clearer involvement** of users and other stakeholders
 - **Improved amalgamation** of capital/operational works
 - The means to get the best out of **digital technology** and **modern methods of construction**
 - **Motivation** for improved performance
 - A strong basis for **integrated working** combined with **clear legal rights and obligations**
 - **Allocation** and **management of risk** by those best placed to take responsibility in managing it
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What is strategic Net Zero procurement?

- **Collaborative strategies** that establish client Net Zero **intentions** in credible plans, commitments and timescales
 - **Collaborative procurement** processes that exchange and evaluate Net Zero **information** between one or more clients and prospective consultants, contractors and supply chain members
 - **Collaborative contracts** that create and sustain the **integration** of Net Zero plans, commitments and timescales agreed by clients, consultants, contractors and supply chain members
 - **Collaborative management** that achieves Net Zero **incentivisation** through instructions, support, guidance and motivation
- 



Procurement process – improve sustainability

- Ensure selection process (consultants, contractors and supply chain team) - **fair & transparent.**
- Fair and transparent by **guaranteeing appraisal of bidders considers a balanced assessment** of cost and quality combined with other measurable proposals and capabilities.
- Adopt a **value-based and net-zero outcome-based** approach focused on whole life value, performance and cost.
- To attract supplier solutions, it is important to make clear in the procurement process ways in which clients and suppliers **may agree to share solutions for the benefit of the project as a whole**
- An **outcomes-based specification** should be **linked to the measurement of performance** by reference to the achievement of net zero outcomes

supply chain collaboration support efforts to tackle climate change

Link to BIM

- Joint working and coordination
- Collective effort into a single model
- Improve & integrate activities
- expect more data driven fact-based decision making in procurement.
- Joint problem solving

Link to contracts

- Create a formal eco system
- Better understand the mechanism
- Commit to teamwork
- Set up appropriate behaviour
- Shared financial motivation



Create collaborative culture

Important steps

- Selection by value to avoid race to the bottom
- Early supply chain involvement that improves safety and reduces risks
- Build relationships to improve commitment
- Build relationships, involving stakeholders
- Integrate the design, construction and operation

Important steps

- Integrate differing needs
- Align commercial priorities
- Build shared knowledge at time most effectively used to improve project outcome
- Project outcome benefit rather than benefit at someone else's expense
- Procurement process and contracts that build relationships

Create collaborative culture

Who to lead - Client

- Play active role
- Focal point to integrate interests
- Define scope & objectives
- Clear brief
- React swiftly
- Monitor progress & performance

Who to manage – Multi-party

- PM: manage coordination
- PM: collaborative role- reconcile differing interests
- Lead designer managing other contributors
- Main contractor managing subcontracted supply chain members
- Collective governance system



Create added value

Improve commitments

- Roles and responsibilities more clear, integrated and collaborative
- Fair payment terms, eliminate late payment cost models
- Transparent decision making systems
- Joint risk management and fair accountability
- Contractual relationships and processes supporting collaborative culture

Improve economic & social value

- Improve quality
- Improved supply chain relationships
- Cost certainty and cost saving
- Local/regional opportunities
- Improved training and local output
- Improved safety
- Reduced impact on the environment

Create added value

Team benefit

- Improve quality
- Reduce risks
- Avoid delays
- Control escalating costs
- Time efficiency & time saving

Team benefit

- Improved safety
- Cost savings
- Avoid misunderstandings
- Encourage improved performance
- Avoid disputes



In summary

collaborative relationships, processes and practices:

- improve design, construction and operation of a built asset and;
- create added value for the project, the team and support efforts to tackle climate change and improve sustainability

across the whole life cycle of the asset



Thank you

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