GUIDE

NET ZERO CARBON PROCUREMENT GUIDE

APRIL 2023



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INTRODUCTION



Net Zero Carbon (NZC) has gained significant industry traction. Targets are embedded and the industry is grappling with implementation and delivery on those targets. Implementation is the difficult part. It is not only a design challenge but a process and cost one too.

Procurement is a key stage in achieving the planned outcomes – it is procurement that turns vision into physical construction and a built asset. It is therefore essential that any procurement activity conveys and contracts not just the physical attributes but the key performance criteria and how they contribute to Net Zero Carbon success.

Our 2023 <u>Procurement Trends Report</u> provided insight from across the industry as to how sustainability is dealt with in the procurement stages of a project. It highlighted that significant work is to be done in successfully delivering NZC outcomes. Our response has been to publish this NZC Procurement Guide.

For more information on designing and implementing Net Zero Carbon Procurement Strategies please get in touch.

The challenges of procuring projects to achieve more sustainable outcomes do not change the fundamentals of how to run an effective procurement process. They do however require a depth of understanding of those challenges by those leading the procurement. Sustainability challenges may drive a change in thinking so that procurement is seen as an activity beyond the point of entering into a contract.

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PROCUREMENT TRENDS SURVEY



GREEN PROCUREMENT

This year's survey looked at Green Procurement practices as clients and project teams look to transition to Net Zero Carbon. The results show significant gaps in procurement practices across the industry.



considered that projects achieved sustainability objectives and yet

Reassuringly 86% of responding contractors

Fewer than 25% of projects involve the contractor in objective measurement of objectives at handover

And just 17% once the completed building has been operated for a number of months (for example at the end of defects)

Percentage of Contractors Reporting that Tenders Contain:



Kev differences



Measure

Less than 15% of projects undertaking a Whole Life Carbon Assessment

CONTRACTOR PERSPECTIVES



Contractors surveyed appear to have the capacity and appetite to go quicker with Net Zero Carbon commitments. Government Procurement advice (PPN 06/21) is currently to select contractors only where they have a commitment to achieve NZC by 2050. In fact many contractors have more ambitious targets, but they recognise some need to develop their own people to deliver on sustainability.



Contractor Targets to achieve Net Zero Carbon

Contractor Sentiment of Sustainability in Procurement



PUTTING NZC IN CONTEXT



NET ZERO CARBON SCOPES (1, 2, 3)

The Greenhouse Gas Protocol defines Scope 1, 2 and 3 emissions. Scope 1 covers directly generated emissions (e.g. boilers), Scope 2 covers indirectly generated (i.e. electrical supply from the grid) and Scope 3 covers indirect supply chain generated emissions.

In sustainability terms, Scope 3 is the difficult one. Up to 70% of an organisations' emissions may be down the supply

chain. Hence procurement practices play an enormous part in truly getting to Net Zero Carbon. Many organisations have focused on Scope 1 and 2 as being easier to measure and control. Procurement activity can directly influence the Net Zero Carbon outcomes of those commissioning built assets either for their own use or as an investment or transactional activity. The procurement stage of a project can impact all three scopes.

UNDERSTANDING THE BOUNDARIES

The boundary for embodied carbon should consider the life cycle of a built asset including how the building may be let and disposed of. The boundaries of carbon assessments is key to procuring meaningful NZC targets that represent value for money. In some instances procurement may be entwined with the boundaries of carbon assessment. Example boundaries of assessment over life:

	(OPERATIONAL (DISPOSAL PURCHASE	DEMOLITION
SCOPE	Scope 1 Direct Scope 2 Indirect		Tenancy (e.g. fit out) Base Building Whole Building Portfolio		
	Scope 3 Indirect Supply Chain	Raw materials, manufacturing, transport, construction		Adaption and refurbishment	Demolition and waste disposal

LIFE OF ASSET

THE CHALLENGE



THE NZC PERFORMANCE GAP

There is a recognised gap in Carbon targets - the gap between aspiration and 'as built' performance. This Performance Gap emerges through the life of a project as shown in the graph below.



Sustainability performance degradation through typical projects stages

BRIDGING THE GAP





HOW TO PROCURE BETTER NET ZERO CARBON OUTCOMES



In bridging the performance gap there are there are three key activities that need to be planned as part of the procurement process. These activities need to be spelled out as tender stage and followed through in construction and operational stages.



SOLUTIONS



mpact	Greenhouse Gas Emissions	€	Scope 1 Directly Produced	Scope 2 Indirectly Produced	Scope 3 Supply Chain
urement l	Embodied Carbon	€	Ð		What is procured How it is delivered
Proct	Operational Carbon Operational performance of what is procured				
\bigcap	Define (for tender) Define clear performance objectives with explicit minimum measurable component parts		Set an embodied carbon brief		
or mentation	Monitor (tender review, design and construction)	€	Assess contractor's proposals against performance brief Monitor design progression against objectives (and not just the outcome)		Assess tender return methodology for embodied carbon Include embodied carbon review at each contractor design stage
olutions f ient Imple	Measure (as implemented)	€	Measure performance criteria at practical completion and end of defects		Define an embodied carbon measurement methodology and responsibilities
S Procurem	Absolute KPI	€	KgCO2e/m2 per annum		KgCO2e
	Simple Proxy KPI	€	EPC rating		Targeted BREEAM points (Mat01, Mat02 and Mat04) SKA (various credits) LEED (MR credits)

SOLUTIONS



	Greenhouse Gas Emissions	€	Scope 1 Directly Produced	Scope 2 Indirectly Produced	Scope 3 Supply Chain
g Sustainable Procurement	Key Challenges	Understanding the reasons for operational performance 'drift' Forecasting unregulated loads Contracting for absolute performance outcomes is difficult due to the challenges of the operational gap beyond contractor's control		Whilst a number of embodied carbon frameworks exist (e.g. BS EN 15978: 2021 or the RICS "Whole Life Carbon Assessment for the Built Environment", certification and or / verification is currently absent Procurement of an appropriate methodology	
	Solutions	∢	Procure soft landings Procure seasonal commissioning Effective energy metering strategy to enable operational interventions		Consider carbon offset as contractual 'damages' for failure to achieve embodied carbon brief
Advancir	Guidance	€	CIBSE TM61: Operational performance o	of buildings	RICS "Whole Life Carbon Assessment for the Built Environment" BS EN 15978 2021

SOLUTION IMPLEMENTATION



EMBODIED CARBON BRIEF

An embodied carbon brief is a way of communicating a client's aspirations for embodied carbon. It should not only cover the aspiration but roles and responsibilities for undertaking the assessment, its timing and the boundaries of the assessment.

Starting the process of monitoring and measuring embodied carbon will enable those regular procuring built assets to set incremental improvements. Starting a process of measurement is key to learning and developing supply chain expertise and capacity. Once a process is established it may be possible for clients to set more stringent responsibilities for their supply chain. This may include, for example carbon offsets as contractual damages for failure to achieve the embodied carbon brief.

MONITORING DESIGN PROGRESS TO CLOSE THE PERFORMANCE GAP

Where a client hands over design responsibility to a contractor or specialist designers, it is essential that there are very clear performance objectives set and also gateways for testing the likely performance of the building. Assessment milestones may include at conclusion of a tender activity (for example where contractors may submit different Contractor's Proposals in response to Employer's Requirements or where a Contractor has developed the design under a Pre-Construction Services Agreement. Subsequent milestones may align with conclusion of Stage 4 design and specialist design input.

Currently around 60% of project are procured on a Design and Build basis and approximately half of those without Stage 4 design. Clients may start to adapt their procurement practices in response to a focus on the performance gap or otherwise find strategies to reduce it.

KEY PROCUREMENT ACTIVITIES FOR NET ZERO CARBON





ABOUT RIDER LEVETT BUCKNALL

100% INDEPENDENTLY OWNED AND MANAGED

4200 EMPLOYEES WORLDWIDE

140 GLOBAL OFFICES



GET IN TOUCH

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