THE COSTS OF WASTE
Speaker request for Contractor's supply chain conference
The subject will be the **management of waste** but in recognition of the mindset of many in the audience I think that **the costs of waste, the impact on profits and how that can be improved is key to better performance.**

SWMP
I can talk about the work GreenSpec carried out with UKCEED, EA, Envirowise, WRAP, CE, Kier, Simons, BRE when we ran about 40 SWMP workshops across the country and road tested the SWMP checklists.

THE INACCURACY OF MATERIALS QUANTITIES:
Quantity needed for building
Inaccurate measure/take off
SMM Safety margins
JIC safety margins
Packaged quantities
Excess to requirements
Inaccurate call off
Optimistic deliveries
'Lost' on site to do PJs
Reordered to replace 'Lost'

RESOURCE EFFICIENT LOGISTICS CENTRES:
Demolition/Alteration Waste Out,
Materials Segregation,
New Materials In, JIT not JIC,
Excess to requirements Out,
Segregation redelivery,
Materials Exchange.

THE COST OF WASTEFUL DESIGN.
Is it D&B or Just Contracting
Can you influence DESIGN(ER) THAT CREATED THE WASTE?
If not, then you need to manage the waste they create
33% of waste is off-cuts (BRE SMARTWaste stats)
Cost of Materials in Waste
Embodied Energy and Embodied Carbon in waste
Cost of labour filling skips
Cost of waste removal
Landfill Gate Costs
Landfill Tax Escalator

DAMAGED GOODS
Damaged by stock piling
Damaged by delivery
Damaged by packaging reduction
Damaged by other tradesmen

PRICE DIFFERENTIAL
The most important point is that inert waste is cheap, mixed waste is costly and hazardous is very expensive to treat and dispose of, if you are not segregating your waste your waste contractor will be and they make the difference between the 3 price bands.

'WASTE COST LITE'
I told BRE Resource Efficiency team to do what industry does well and engage with costs instead of only being interested in quantity and proportion which they do very well.
They failed to hear me or thought it too difficult.
I took the information that only BRE Resource Efficiency team wanted and nobody else needed and waste costs data from Simons Construction that they used to reduce waste costs on all their sites.
Over a weekend I created a waste predictor in MS Excel, that with 7 steps and 5 minutes work you could get the QS & Buying department buy in.
The trick is getting from Question 1 How much will waste management cost? to Question 2 How much will it save?
I never did finish the full version, the industry was not ready then, it might be now.
The Full version would have calculated Embodied Energy and Embodied Carbon in the waste and EPI and KPI data.
I can demonstrate 'Waste Cost Lite' live (it was created in MS Excel)

CATALYST
I gave a copy of 'Waste Cost Lite' to BRE and 3 years later they delivered their version of it and WRAP created one too off the back of their recycled content calculator.
They missed the point you need the QS & buyers on board early and easily with no time and no expense.
Their systems take days of work to populate a model of the proposed building to get an answer.
And it's more accurate than 'Waste Cost Lite', because they have access to current SMARTWaste data sets.

BIM TO THE RESCUE?
Now with BIM on the brink of arrival for the masses you could soon be able to work out the materials waste quantities and costs if somebody could take the initial idea to create ' Waste Cost Lite for BIM'.
I could probably do a Demo using MS Excel and PowerPoint
BIM departments could develop these tools easily.
I wonder if BRE could be persuaded to share their datasets?
Chances are BRE would find a way to create their own version some years later.