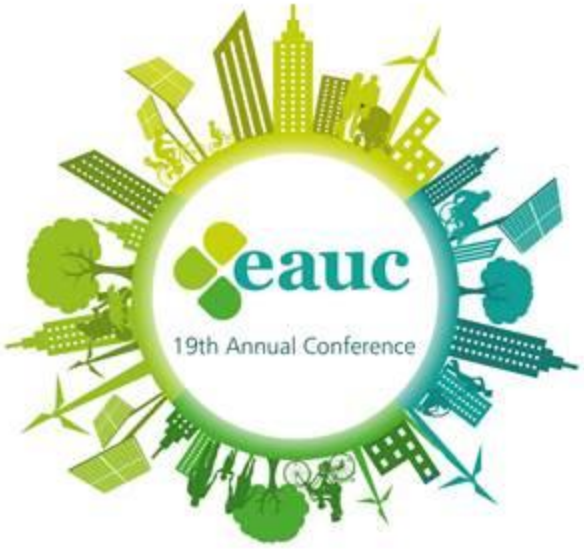


EAUC Annual Conference **University of Leeds 23 – 25 March 2015**

# CHALLENGING CONNECTIONS

Incorporating the Student Sustainability Summit, Further Education Sustainability Summit and Transformational Leadership Summit

## Exchange A1: The support required to make Energy Performance Contracting a viable energy and carbon solution (TEC)

*Steve Creighton, Senior Relationship & Business Development, The Energy Consortium and Tom Yearley, Energy Manager, King's College London*

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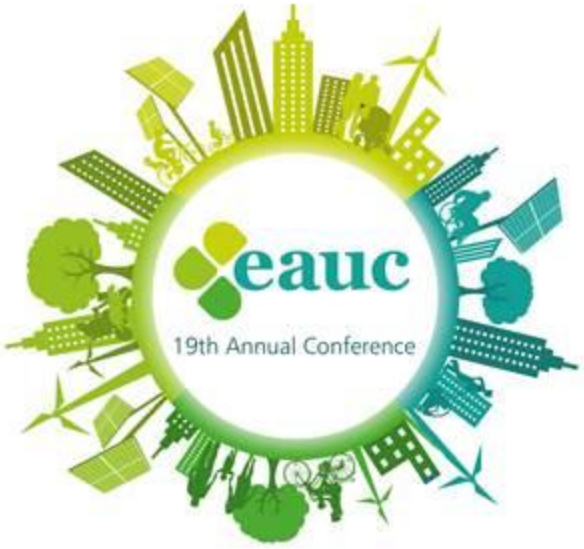


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**CHALLENGING CONNECTIONS**

# Energy Performance Contracting

## The support required to make Energy Performance Contracting a viable energy and carbon solution

**Tom Yearley**
Energy Manager, Kings College London
**Steve Creighton**
Senior Relationship & Business Development Manager, TEC

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Estates and Operations

# Contents

Estates and Operations

- What are the supporting drivers for an EPC
- EPCs' from a customers perspective
- Partnering contracts in support of EPCs
  - Flexible, risk managed, energy procurement

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# Supporting drivers – decarbonising UK generation

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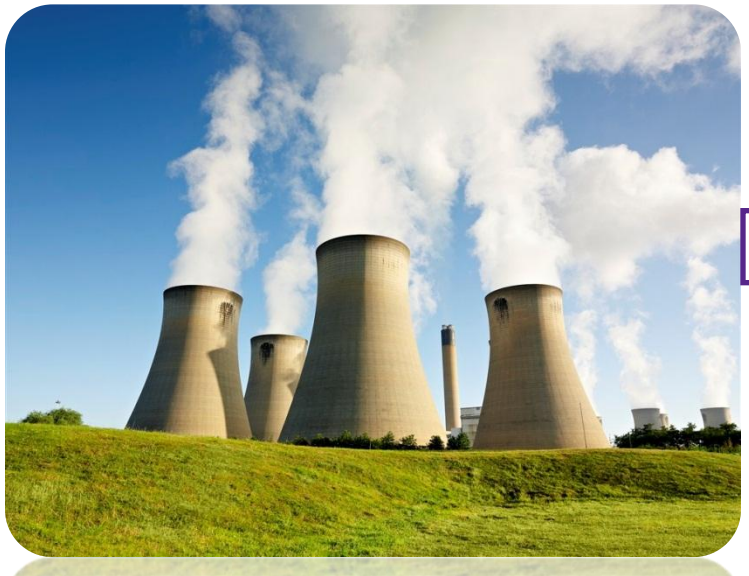

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# Supporting drivers – Electricity Market Reform

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**FOUR CENTRAL POLICY INSTRUMENTS THAT WILL TRANSFORM THE UK ELECTRICITY MARKET**

- Feed in Tariff
  - Long term feed-in tariff Contract for Difference (CfD) to provide stable financial incentives to invest in all forms of low carbon generation
- Capacity Mechanism
  - To remunerate capacity providers, based on their availability, allowing for investment in flexible plant
- Emissions Performance Standard
  - A regulated limit on CO2 emissions allowed from new (or life extended) power stations.
- Carbon Price Floor
  - The carbon price floor aims to underpin and top up the price of carbon in the EU emissions trading scheme making low carbon investments more attractive

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# Kings – Background to the PFI

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- King's College London
- Buildings subject to the EPC
- Legal landscape

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# Kings – Approach to the PFI

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- Phase 1: Memorandum of understanding
- Phase 2: Journey to the contract
- Phase 3: Implementation, measurement & verification

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# Kings – Challenges and assumptions

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- Using a funded scheme
- Understanding the legal landscape
- Risks of energy performance contracting

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# Flexible, risk managed, energy contracts

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**Potential benefit**

- Energy is a very volatile commodity, so why buy it on a “1 in 250” day?
- Longer period to optimise purchasing and balance demand changes due to energy efficiency interventions
- Gives access to short term markets potentially removing any forward market premiums
- Utilise within period deliveries i.e. day-ahead leads to lower supplier balancing fees
- No “take or pay” or volume risk fees as requirement can be adjusted as strategy and demand develops
- Potential to provide lower prices than if purchased for whole year in advance, less sentiment more fact
- Non-commodity costs applied on a pass-through basis, so no supplier premium needed to fix these charges
- Pricing can be capped to defend a budget and baseline

**Issues and risks**

- The final cost is not known – no absolute budget certainty, but is there on so called “fixed price” contracts?
- The final price might not be set until days before the consumption period
- May lead to different prices each month which could create an extra administrative burden

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# Benefit

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**To really benefit from a flexible strategy you need scale, the guidance issued from what is now the Cabinet Office Efficiency Reform Group is that the public sector should by it's energy via an aggregated, risk managed, flexible solution, through a public buying organisation.**

**This route very much provides the flexibility needed in supporting changes in estate through the growing demand from students and continual improvement of learning and working environments whilst supporting commitment in reducing carbon emissions.**

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# Questions

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