MK Energy Club  25th June 2014

Milton Keynes – CRC Success story

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MKC Corporate response to CRC (Phase 1)

Lessons learnt & how we did it
What is the Carbon Reduction Commitment (CRC)?

- CRC started as a ‘Revenue Neutral’ scheme. Now in all respects it is a Tax on Carbon Emissions.
- Qualification based on Half Hourly metered electricity exceeding 6,000,000kWh
- £12 a tonne p.a, with penalties for improper reporting
- Operates in Phases – currently at the end of Phase 1
- Phase 2 qualification based on 2013/14 FY emissions
- Phase 2 costs rise to ~£16/tonne
Phase 1:

- 2010/11 – 34,289 tonnes – no cost
- 2011/12 – 18,161 tonnes - Cost £218k
- 2012/13 – 24,136 tonnes – Cost £289k
- 2014/15 - ?? Still in final stages of calculation

Projected costs Phase 2 if MKC Qualified

- Years 2014/15 – 2017/18 (estimated)
  
  @ 19,520 tonnes p. a. - £312,320

Potential cost over 4 year Phase 2 period

= £1,249,280
MKC response

• During phase 1, targeted energy reduction projects at Half Hourly electricity metered sites

• Dual benefit: a) Save £’s  b) Reduce consumption at qualifying sites

• Changes in CRC phase 2 mean schools are excluded from LA ‘account’ and streetlighting does not qualify

• Lesson: Monitor closely in Phase 2 qualifying year!
Result!

- HH electricity use reduced from projected **6,200,000 kWh** (without ee measures) in 2012/13 to projected ;
- **5,461,543 kWh**

- This is against a backdrop of more HH sites included in the portfolio, due to growth and property transfers

- As well as making energy savings associated with each project, the strategy has prevented our participation in the scheme, thereby **saving a projected total of £1.25m**

- As a consequence of this, energy efficiency has increased its profile within the corporate priorities
How did we do it?

Use Salix internal loan fund to pay for projects such as:

- Lighting improvements & Occupancy Controls
- BMS replacement & improvements
- Use of Variable Speed Drives (VSDs)
- Voltage regulator (Powerperfector)
- Cavity / Loft Insulation
- Valve Covers

Invest To Save Fund

- Money saved is reinvested in new projects
- Criteria for payback < 5 years (Cost / Savings)
- £100 / tonne carbon saved lifetime
Current focus

• Due to advancement of LED technology current focus is LED lighting replacements
• Payback depends on existing technology: how energy efficient compared to LED’s
• Hours of use biggest determinant of payback: double the hours, halve the payback
• So target lights on for longest periods of time
• Need to procure well – need specification for LED’s
Summary

• Monitor energy consumption closely at Half Hourly electricity sites

• Carry out energy efficiency measures at those sites: monitor savings to help make business case

• Rules change frequently for this scheme – it is prudent to reduce your organisation’s exposure to CRC, even if they don’t qualify under the current rules.

• Set up and use Invest To Save fund as way to turn £0.5M Investment into £1M of savings (MKC experience)

• ANY QUESTIONS?