



CRC – Where are you in the league?

Thoughts on Year 1 and the future.

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An Holistic Energy Management Solution



Energy Analysis



Contract Bid Management

Financial Analysis



Automated Reporting

Alarms



eSight®

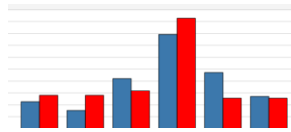


Dashboards

Calculated Meters

Tenant Billing

Benchmarking



Energy Procurement

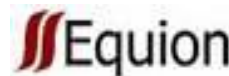
Invoice Validation



CRC Reporting



Bill Verification



Where are you in the league table?

| Ranking | Registration Number | Organisation Name | Trading Name | Weighted Score | Emissions (Tonnes of CO2) | Early Action Metric (%) | Absolute Metric (%) | Growth Metric (%) |
|---------|---------------------|-------------------|--------------|----------------|---------------------------|-------------------------|---------------------|-------------------|
| 1 | CRC0000004 | Organisation D | Brand D | 6.5 | 11569 | 100.00 | | 0.00 |
| 1 ? | CRC0000002 | Organisation B | | 6.5 | 53801 | 100.00 | | 0.00 |
| 3 | CRC0000006 | Organisation F | Brand F | 5 | 68549 ? | 75.00 | | - ? |
| 4 | CRC0000007 ? | Organisation G ? | | 4 | 4993 | 70.00 | | 0.00 ? |
| 5 | CRC0000001 ? | Organisation A | Brand A | 3 | 10100 | 35.00 | | - |
| 6 | CRC0000003 | Organisation C | Brand C | 2 | 66118 | 25.00 | | 0.00 ? |
| 7 ? | CRC0000005 | Organisation E | | 1 | ? 12524 | 0.00 ? | | - |

When's it being published?

“Autumn 2011”

Why is it taking so long?

- Based on Annual Footprint Report data
- 3 Metrics taken into account
 1. Early Action Metric - Average of:
 - the participant's CRC emissions ce management schemes which the E
 - the proportion of the participant's through voluntarily installed autor unmetered supply, and daily-read

2765 Participants

2174 Footprint Reports

2016 Annual Reports

| | | Year 2 2011/2012 | | |
|-----------------|------|------------------|-----|-----|
| Relative Metric | 100% | 40% | | |
| Absolute Metric | 0% | 45% | | |
| Growth Metric | 0% | 15% | 20% | 25% |

“At this time, we anticipate that the PLT will be published in November. We have agreed with DECC that we will notify participants of the publication date one week before release. There is much ongoing work in the background to review and produce the PLT as accurate as possible, so at this stage I cant be more specific as something unexpected could delay us.”

-Carl Sweeney, OM of CRC EES, Environment Agency

What next?

| | Year 1 2010/2011 | Year 2 2011/2012 | Year 3 2012/2013 | Year 4 and all other years |
|---------------------|------------------|------------------|------------------|----------------------------|
| Early Action Metric | 100% | 40% | 20% | 0% |
| Absolute Metric | 0% | 45% | 60% | 75% |
| Growth Metric | 0% | 15% | 20% | 25% |

| | Year 2 2011/2012 |
|---------------------|------------------|
| Early Action Metric | 40% |
| Absolute Metric | 45% |
| Growth Metric | 15% |

What does the league table mean to your organisation?

- Will it become a green-lobbyists dream?
- Will we see a tabloid name and shame?
- Is it only good for those at the top?
- Consumer viewpoint? Public views?
- Fluctuating positions in table: Year on Year improvements and Growth Metric



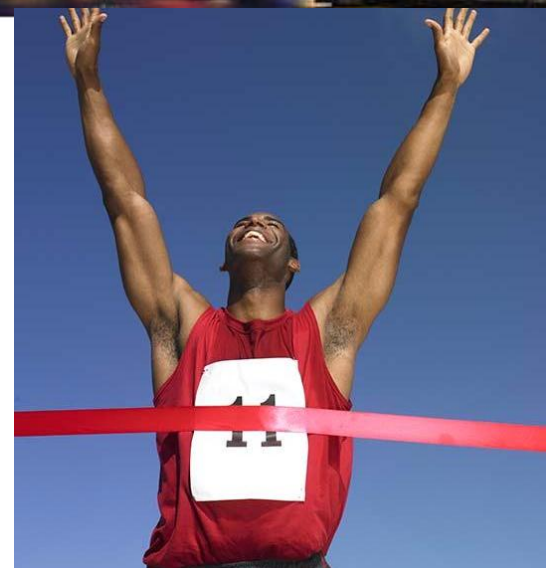
What does it mean to you?

- Top-down support?
- Staff buy-in to energy management?

What if I'm at the top?

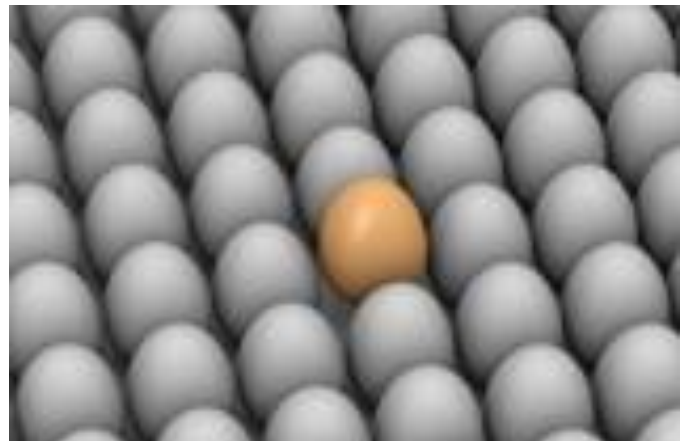
- Congratulate yourself, and your team
- Communicate it to the public & your staff
- You're well-prepared for success
- Focus next on energy and carbon savings
 - Plan efficiency projects
 - New technologies
 - Calculate ROI
 - Staff involvement in energy
 - Forecast for next year's carbon allowance requirements
 - **Focus on year on year improvements**
- Don't be complacent, it's all to play for!

aM&T



What if I'm lost in the middle?

- See where your competitors are
- EAM is still in calculation for next year, but you can't change the AMR component of its calculation – can you improve the CRC emissions certified component?
- Focus next on **energy and carbon savings**
 - Plan efficiency projects
 - New technologies
 - Calculate ROI
 - Staff involvement in energy
 - Forecast for next year's carbon allowance requirements
 - Get staff involved
 - Plan **year on year** improvements
 - USE DATA!



aM&T

And, if I'm at the bottom of the league?

- Don't be disheartened!
- EAM is still in calculation for next year, but you can't change the AMR component of its calculation – can you improve the CRC emissions certified component?
- Focus next on **energy and carbon savings**
 - Plan efficiency projects
 - New technologies
 - Calculate ROI
 - Staff involvement in energy
 - Forecast for next year's carbon allowance requirements
 - Get staff involved
 - Plan **year on year** improvements
 - USE DATA!
- You have everything to play for!

aM&T



What issues have been seen in Year 1?

"With so many climate champions across the company, First Direct does not encounter opposition to new carbon reduction measures."

First Direct

"The criteria are quite simple regarding the CRC Energy Efficiency Scheme participation and non-participation. It's based on electricity consumption. There is no grey area for us; we meet the CRC Participant requirements."

University of Manchester

"I'm head of carbon management, but I'm one person out of 5,000 employees. Everyone can play a role. We highlight the achievements we are making so staff can see the pay-off associated with their efforts."

Thames Water

"Since we implemented our Carbon Management Strategy, the college has reduced its carbon emissions by 12.5 per cent, which equates to a reduction of 4,900 tonnes of CO2."

King's College London.



What issues have been seen in Year 1?

"During 2007/2008, we met our commitment to design commercial buildings with, on average, 20 per cent lower carbon emissions than required by building regulations. We actually achieved a 35 per cent improvement. We are now on target to reach our 2010 goal of a 10 per cent reduction in CO2 emissions in our managed offices."
Land Securities Group PLC

"In 2009, we changed our street lighting policy and are now beginning the work to switch off 49,000 residential street lights in Devon from 12:30 am to 5:30am. Over the next three years this will save in excess of 3,000 tonnes of CO2."
Devon County Council

"Our Anglian region enforced a 19 degrees Celsius office temperature policy for the winter months and put the heating on two weeks later than in the previous year. This cut gas use by 34 per cent and reduced the region's heating bill significantly."
Environment Agency



What issues have been seen in Year 1?

1. Reporting Issues

- Property Co-ownership and transfer
- Ownership knowledge – don't know where the meters are!
- Multi-tenanted buildings – does the landlord pay, do they have the information?
- Participants "remembering" properties at the last minute
- Source list tool not suitable for large organisations
- More complicated than ever imagined

2. Accuracy Issues

- Carbon Laundering
 - Outsourcing carbon intensive business areas
- Construction of new builds
- Data from suppliers vs. data from other sources

3. Scrapping of recycling payments

- Is it now viewed as an administrative & financial overhead, not an energy-saving policy?



What issues have been seen in Year 1?

4. Data Collation

- Multiple suppliers – different data output methods
- Sourcing, ownership and access to data
- Using aM&T

5. Participant Uncertainty

- Moving policy goalposts = Delayed preparations = late panic (FIT)
- Economic uncertainty (organisations downsizing)
- EU uncertainty



What issues have been seen in Year 1?

6. Internal Organisation & Communication

- Defining staff roles & responsibilities
- Creating procedures, arranging data storage, reporting & audits
- Embedding CRC in the organisation and communicating it

7. Learning Curve

- Year 1 was STEEP!

8. Supplier Data Issues

- Have had to setup specific departments to deal with CRC data requests



What benefits have been realised in Year 1?

- CRC Participants are forced to understand what they spend on energy
- They now see the need for energy information, and want it available at the click of a button (aM&T)
- Participants are enthusiastic about installing AMR to better understand their energy consumption
- Energy has become a known unknown
- Now some effort has been taken to invest in AMR and aM&T, it's much simpler to move on to energy monitoring and targeting for efficiency



What effect will the simplification have?

- provide greater business certainty by introducing two fixed price sales a year (one forecast and one retrospective), rather than auctions of allowances in a capped system, in the second phase. – “buy to comply” or “forecasting” approaches.
- allow for greater flexibility for organisations to participate in ‘natural business units’;
- reduce the administrative burden (e.g. reducing the number of the fuels reported from 29 to 4; using only electricity measured by settled half hourly meters (HHMs) for qualification purposes; ending the requirement for footprint reports etc.);
- reduce scheme complexity (by removing the complex residual percentage rule (‘90% rule’) and CCA exemption rules, but aiming to achieve broadly the same outcomes)
- reducing overlap with other schemes (so that businesses covered entirely by CCAs do not need to register; no longer requiring EU ETS installations to purchase allowances for electricity supplies).



What else can be done to ease CRC Reporting?

- Needs further simplification
 - Alignment with info gathered for DEC's, EPC's etc.?
- Designated personnel within organisations
- Integrated Energy Management and CRC Reporting
- aM&T System or help from a dedicated consultant



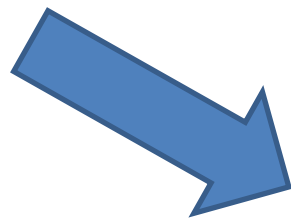
What will we see in the future?

- The league table (hopefully!)
- Prosecutions & fines – first hearing due next week
- From hereon, subsequent years' reporting should become easier
- Further simplification?
- A corporate push towards improved energy efficiency!



How can integrated aM&T & CRC Reporting help?

- Utilise data from your existing energy management system for CRC EES reporting and compliance
- Produce accurate Footprint and Annual Reports quickly and easily
- Store supplier invoices, statements etc.
- Generate structural records for your Evidence Pack
- Maintain a full audit trail
- Monitor carbon allowance purchases
- Manage CRC submissions for multiple organisations
- Manage CRC across multiple sites from one central area



- ✓ Improve energy efficiency
- ✓ Reduce energy consumption
- ✓ Reduce energy costs
- ✓ Reduce carbon emissions



CRC Reporting Module

CRC Confirm Supplier Statements

| Select Meter | Lookup Key | Meter | Start Date | End Date | Consumption | Unit | Estimated | Overlap |
|--------------|---------------|---------------|------------|------------|-------------|------|-----------|---------|
| Select Meter | OFF>MainElec | Main Elec | 01.04.2010 | 31.12.2010 | 5786 | kWh | No | ▲ |
| Select Meter | OFF>MainGas | Main Gas | 01.04.2010 | 31.12.2010 | 3379 | kWh | No | ▲ |
| Select Meter | WORK\WorkElec | Workshop Elec | 01.04.2010 | 31.12.2010 | 10568 | kWh | No | ▲ |
| Select Meter | WORK\WorkGas | Workshop Gas | 01.04.2010 | 31.12.2010 | 5793 | kWh | No | ▲ |
| Select Meter | WORK\WorkOil | Workshop Oil | 01.04.2010 | 30.11.2010 | 1008 | m3 | No | ▲ |
| Select Meter | WORK\WorkCO2 | Unknown Meter | 01.12.2010 | 30.11.2010 | 0000 | m3 | No | ▲ |

CRC Footprint Report - Wireless Intranet Explorer

Phase 1, Reporting Year 2010 - 2011

| Supply Type | Amount | Emissions Factor | Emissions (CO2) |
|------------------|-----------|------------------|-----------------|
| Core Gas | 15052 kWh | 0.0001836 | 2.764 |
| Grid Electricity | 23364 kWh | 0.000537 | 12.546 |
| Medium Fuel Oil | 3500 m3 | 3.223 | 11260.5 |

CRC Source List - Wireless Intranet Explorer

Phase: 1, Reporting Year: 2010 - 2011

| Year | Footprint Report | Annual Report | CRC Allowance | Lock Year |
|-----------|---|---------------|---------------|-----------|
| 2010-2011 | Reported Emissions: 11,293.81 tCO ₂ e | | | |
| 2011-2012 | Total Emissions: 11,293.81 tCO ₂ e | | | |
| 2012-2013 | Total Core Emissions: 2.764 tCO ₂ e | | | |
| 2013-2014 | Total Residual Emissions: 11,293.05 tCO ₂ e | | | |
| | Total RML Emissions: 11,283.50 tCO ₂ e | | | |
| | Total Regulated Emissions: 11,283.26 tCO ₂ e | | | |
| | Total CRC Emissions: 11,283.26 tCO ₂ e | | | |
| | Regulated Emissions: 99 % | | | |

| Id | Profile Class | AMR | Meter Frequency | Measurement Unit | Is Core | In RML | In Footprint | CRC Data Source | In CRC | Supply | Emissions |
|----|---------------|---------|-----------------|------------------|---------|--------|--------------|---------------------|--------|--------|------------|
| | | Hourly | kWh | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 8300 | 4.50543022 |
| | | Hourly | kWh | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 4419 | 0.81328411 |
| | | Hourly | kWh | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 14974 | 0.04337356 |
| | | Hourly | kWh | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 10633 | 1.85223877 |
| | | Monthly | m3 | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 3500 | 11260.5 |
| | | Hourly | | | ✓ | ✓ | ✓ | Supplier Statements | ✓ | 0 | 0 |

- Utilise data from your existing energy management system for CRC EES reporting and compliance
- Produce accurate Footprint and Annual Reports quickly and easily
- Generate records for your Evidence Pack
- Maintain a full audit trail
- Monitor carbon allowance purchases
- Manage CRC submissions for multiple organisations



eSight eZdash Interactive Dashboards

The dashboard features a dark header with the eSightenergy logo. The main content area has a blue background with a white airplane flying through clouds. The text reads: "This year, we've saved 54 tonnes of carbon – the equivalent of flying 74,250 miles". Below this is a call to action: "Please feel free to scroll through and view our energy savings information!". On the right, there is a sidebar with a clock, date (Tuesday 08 March 2011), weather for Cambridge (3°C), and a list of news items with RSS icons: "scientific jargon", "Huhne promises 'green jobs' boost", "Human origin 'in southern Africa'", "Lab-grown urethra 'world first'", "Returns of the panther", and "DECCgovuk".

Fully customisable

Converts energy-saving data into tangible facts

Perfect for increasing participation in energy management projects

View energy information, weather, news and twitter feeds, videos and more

Please feel free to scroll through and view our energy savings information!

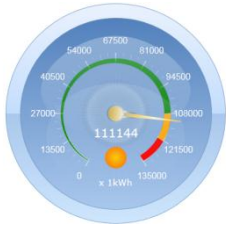
How was it for you?

- Industry experiences?

What do you see in the future for CRC EES?

- League Table
 - When?
 - Likely outcomes?
- Next year's reporting
- Proposed simplifications
- The longer term





eSight®

Thank You



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