

Automated Meter Reading

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Presentation overview

The plan for Worcestershire

Benefits of Automated Meter reading (AMR)

Bespoke energy reporting and developments

Difference between AMR and British Gas initiative



The plan for Worcestershire

- Installing AMR in all schools and Corporate buildings
- Includes both Gas and electricity
- Appointed independent provider through OGC Buying Solutions Framework: Stark
- Payment made through WMS billing
- Minimal cost – removal of manual meter reading charges
- Legislation will mean that most meters will be changed by suppliers by 2014 anyway – not free of charge!



Benefits of AMR

- Accurate billing and energy data
- Web based reports
- CRC – Early Action metric and accurate reporting
- Display Energy Certificates
- Eco school and Green flag assessments
- Monitoring – anecdotal savings 15%
- Educational Tool
- Bespoke reports

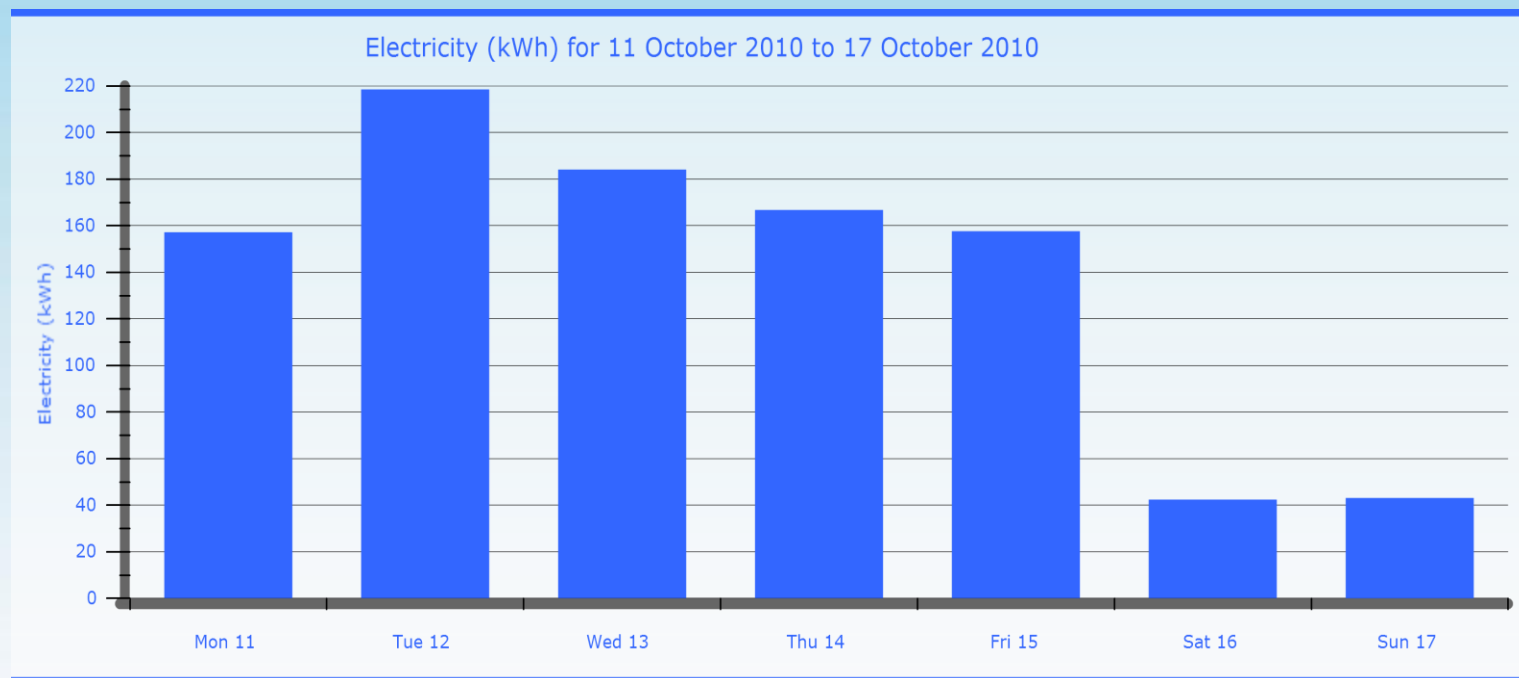


Bespoke energy reporting

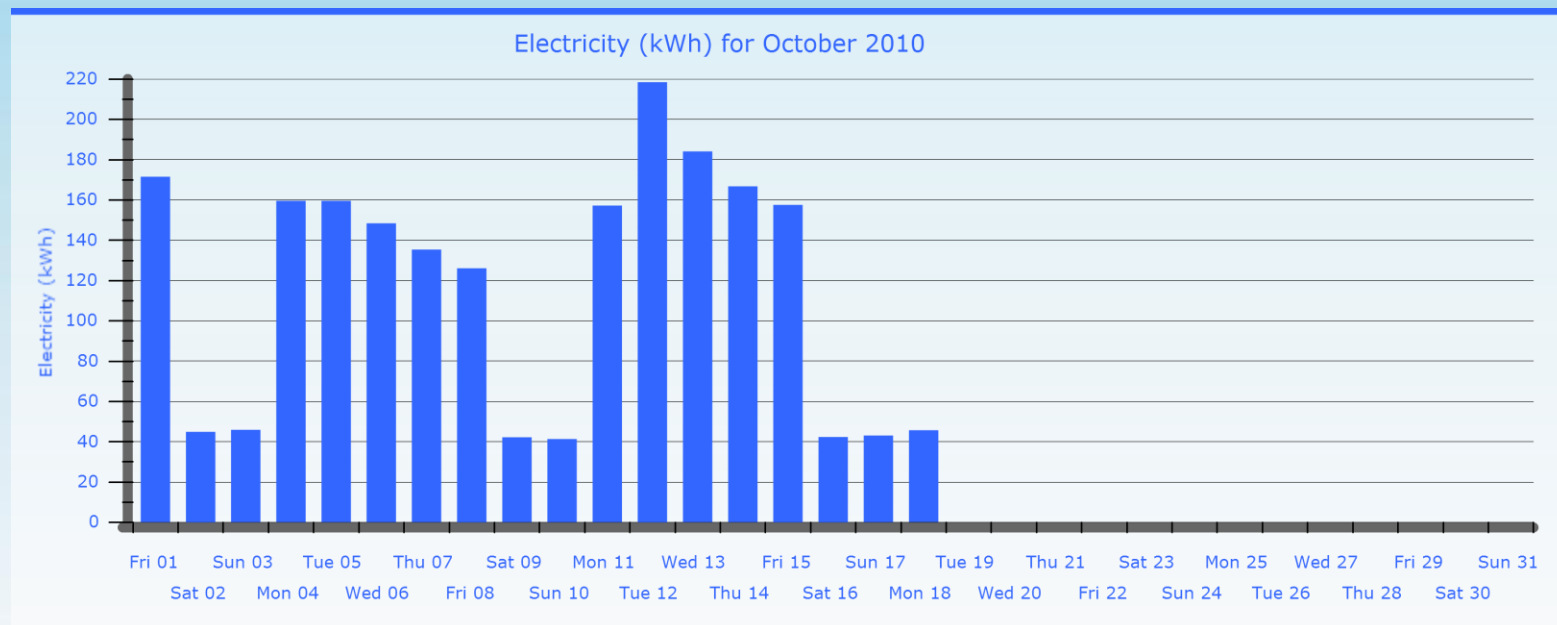
- Proviso within the tender was the ability to create bespoke reports suitable for pupil use.
- Use of existing Envido data logging software to inform the development of reports
- Working closely alongside Stark to inform report creation
- Reports currently being developed
- Keeping it simple and engaging



Envido Software



Envido Software



Stark Software reports

savenergyOnline

Summary - Year by Month - Electricity and CO2

powered by
STARK

Company: London Borough of Barking and Dagenham
 Site: Barking Abbey Lower School
 MPAN: 1200042390984
 Meter ID: 40350046

Report Start: Nov 2007
 Report End: Oct 2008

Annual Energy Consumption

9,114 kWh

Energy consumption equivalent to:

1 litre kettles boiled

1,039



100W lightbulbs in use all year

10



Annual CO2 Emissions

4,895 kgCO2

Emissions equivalent to:

Number of hot air balloons filled

1.0



Number of times round the Earth in an average car

0.6

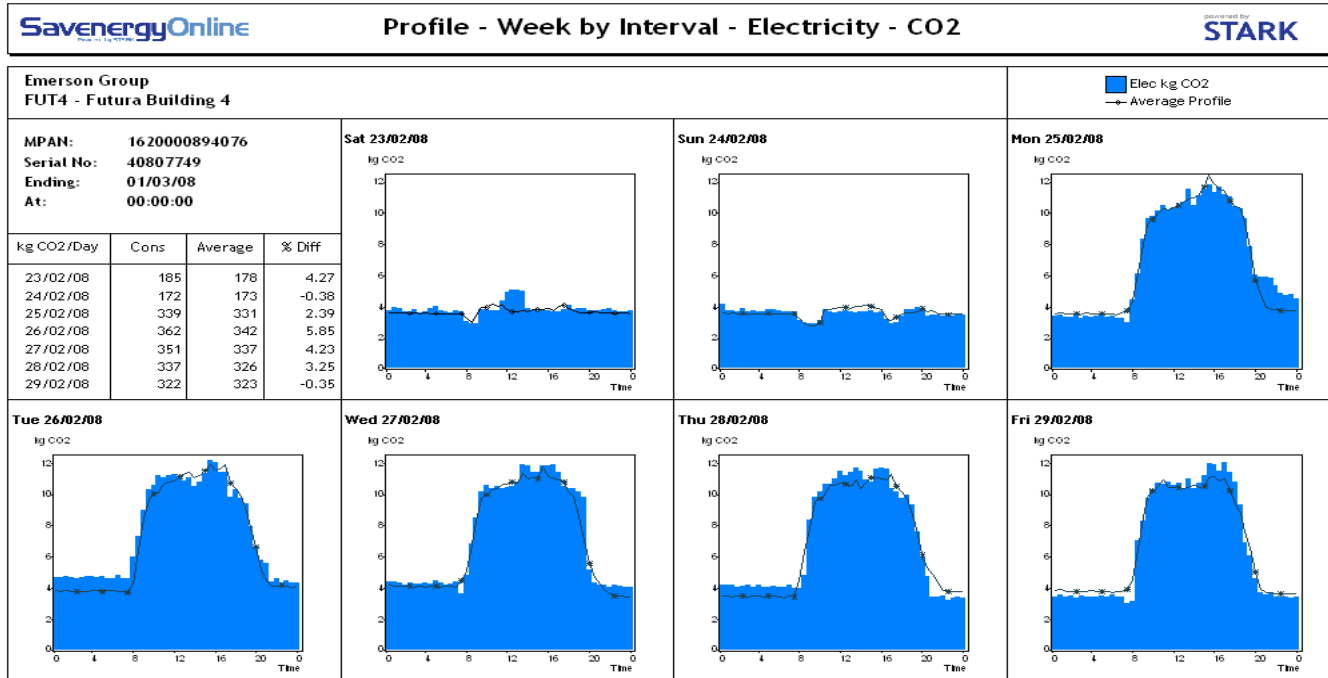


Month	kWh Year Ending Oct 2008	kg CO2 Year Ending Oct 2008
Nov	1,768	949
Dec	1,092	586
Jan	1,590	854
Feb	974	523
Mar	772	415
Apr	547	294
May	112	60
Jun	0	0
Jul	0	0
Aug	0	0
Sep	794	426
Oct	1,465	787
Total	9,114	4,895

Volume of Typical Hot Air Balloon at 2500m³
 Energy consumption for boiling 1L water in kettle = 0.114kWh
 based on average value obtained by which? (<http://www.which.co.uk>)
 All energy related values obtained from 2007 Guidelines to Defra's
 GHG conversion factors for company reporting

Report Time Zone: (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Stark software reports



Electricity CO2 Conversion Factor: 0.523 kg CO2 per kWh

Differences between AMR and British Gas/DoE offering

- Ed Balls announced a £12 million initiative to install 'smart metering' into schools.
- The offering is a display device connected to the electricity meter showing real time electricity consumption.
- **Implications of DCSF offering**
- The DCSF option covers *only electricity* and not gas
- It will not be considered Voluntary AMR and therefore no benefits to be had under CRC.
- The data will not be communicated back to the Supplier and therefore has limited benefits, in terms of supplier billing or CRC accuracy.
- Whilst offering potential for behavioural change though viewing the monitor. The DCSF option will not be so readily able to be used within lessons and will not be able to be accessed over the internet.



Worcestershire County Council

Further information:

www.worcestershire.gov.uk/spendtosave

www.worcestershire.gov.uk/beacon

www.worcestershire.gov.uk/climatechange

www.worcestershire.gov.uk/cms/community-and-living/property-services.aspx

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