

## Infinis uses eSight® for load balancing across their UK biogas plants



Infinis is the UK's largest independent generator of renewable power from biogas, producing 10% of the nation's total green energy. They operate 80 sites across the UK, employing over 200 people.

### ■ The Requirement

One of the naturally occurring products of decomposing organic matter in landfill sites is gas. Around 60% of landfill gas is methane; a highly potent greenhouse gas with a contribution to global warming that is more than twenty times greater than that of carbon dioxide.



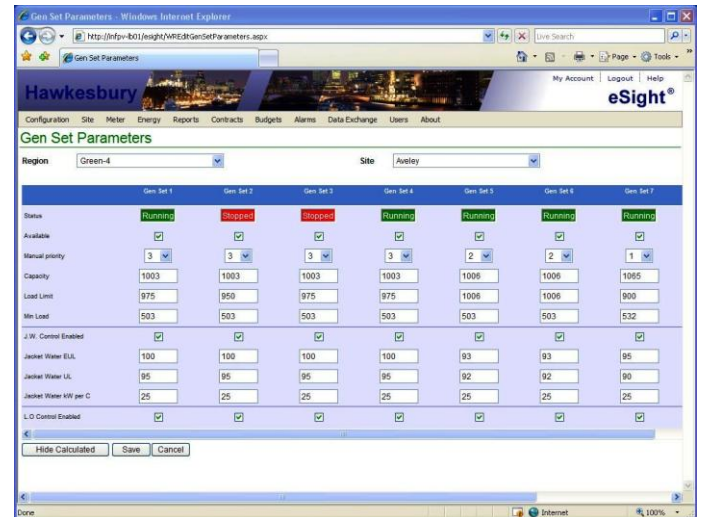
The generation of power from landfill gas therefore reduces the impact of methane upon global warming, as well as providing an efficient and

secure source of local power generation.

Infinis required a system whereby the central control room operator would be able to see a real time comparison of actual data compared to individual site operating parameters and rules set by local staff, optimising environmental control and utilisation. To help achieve these objectives, Infinis needed to maximise the load factor of all generators within the set operating parameters. Where the load limit was site based rather than generator based, the system would prioritise load to generators on higher electricity selling prices.

Some Infinis sites also have the capability to exceed continuous running levels for short periods. Therefore, there was an additional requirement to incorporate within the solution, the ability to identify sites or generators with this short term "overload" capacity.

The overload capacity would then be utilised to maximise revenue from sites with STOD pricing for electricity sales and also to compensate for other generators which might be off-line due to maintenance.



### ■ The Solution

To meet Infinis' project requirements, Hawkesbury was able to offer a bespoke customisation of our existing web-enabled energy suite, eSight.

As eSight is accessible from any PC, the Control Room Operator is able to log on and gain access to site and generator data as needed.

To enable Infinis to manage their load balancing process, Hawkesbury customised eSight to enable Gas Parameters to be set at site level.

The "overload" facility is controllable via the Gas Parameter page, which allows users to enter a figure for the percentage of overload allowed and a figure for the percentage of underload on each site.

In its customised form, Infinis have been able to integrate eSight into their existing software system. They have also been able to use eSight for its standard M&T functionality.

"We have been thoroughly satisfied with the level of service offered by Hawkesbury. For anyone looking for a bespoke software service with excellent results, we highly recommend them."

**Neil Douglas**

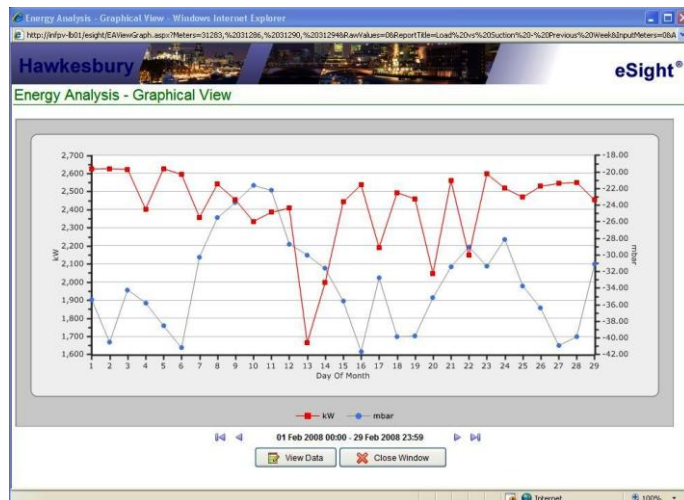
IT Manager - Infinis

## ■ eSight Customisation

Alongside eSight's established energy and reporting tools, Infinis required further tailoring of the system to meet their precise requirements.

By working closely with Infinis, Hawkesbury's programmers were able to produce a tailor-made version of eSight to include the following:

- User Management - modification of the eSight log-in page
- Expansion of the sites and meters configuration menu
- Exception Reporting - alteration of the eSight Exceptions Reporting Module to interface with an existing SCADA system



"We have thoroughly enjoyed working so closely with Hawkesbury. Our customised edition of eSight has enabled us to successfully load balance across sites, enabling us to optimise our energy production"

**Anthony Collett**

Logistics Centre Engineer - Infinis



## ■ Bespoke Software Development

When designing bespoke software, Hawkesbury follow the 'Evolution' Development Model - a fail proof system designed in-house.

This model combines an iterative RAD style development process with a more traditional project management framework.

The iterative-based development approach, followed by Hawkesbury ensured that Infinis remain close to development process throughout.

Through the frequent release of iterations of the software, Infinis were able to see the application grow, and were able to offer input. This ensured production of a successful solution.

Hawkesbury's bespoke software development solutions are able to meet client's specific requirements. The project which we have delivered to Infinis is a perfect example of a tailored solution delivered on time and to budget

## ■ About Hawkesbury

Hawkesbury specialises in the supply of **aM&T** solutions. Built upon the very latest Microsoft technology, eSight is our fully browser based energy monitoring and targeting suite.

eSight may be used in conjunction with other products from Hawkesbury for the collection and transfer of data between sites.

Please contact Hawkesbury if you would like to receive further information about eSight, data collection, data logging, meters, manual meter reading solutions, or pricing and licensing options for your organisation.

eSight is a registered trade mark of Hawkesbury Consulting Limited.