netrix[™] and carbon credits



Biogas Technology (BGT) is a recognised world leader in the development of landfill gas and related gas projects. **BGT** has considerable skill and expertise in the design, installation and management of Clean Development Mechanism (CDM) projects for Carbon Credit Trading.



Flare stack located at San Nicolas, Mexico.

Given the global operation of the company and that CDM sites could be installed anywhere from China to Peru, the main challenge for **BGT** was to find a cost effective and reliable way of both logging and then retrieving operational data from each remote site.

Auditable evidence in the form of logged data for each site is vital to the verification process that is part of the Project Operation Phase (POP) of CDM projects and necessary for the generation of Carbon Credits.

With its ability to leverage the power of the public GPRS network, **netrix**TM enables data-points logged on sites around the globe to be transmitted over the internet back to an SQL database on the **netrix Server** based in London. Being able to use standard commercial, non-roaming GPRS SIMs, native to each site's country, has provided **BGT** with an extremely cost-effective solution, costing on average 8-10 UK pounds per SIM/month.



After a successful initial trial at a new installation in Mexico, **netrix**TM was soon retro-fitted to existing installations and is now being fitted to all new sites as they are commissioned. To date **netrix**TM has been installed for CDM projects in China, Mexico, Peru, South Africa, Saudi Arabia and the UK.



netrix[™] installed alongside PLCs and switchgear related to flare stack operation.

netrix[™] not only solves the remote data acquisition problem but also provides a Live Site Telemetry page (shown below) that allows both authorised end customers and **BGT** staff to monitor sites remotely from head office.



Web application designed for Biogas Technology giving live telemetry from global installations.

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Registered Address: Dexdyne Ltd. Oakley House, Tetbury Road, Cirencester, Glos. GL7 1US, UK The second problem faced by BGT's administration team was how to keep track of the reams of manual readings and adjustments recorded and then emailed by site engineers at the end of each day.

Here Dexdyne provided **BGT** with a customized Data Entry page (see below), accessible via *netrix* **Dashboard**, so that each site engineer could enter manually recorded data and submit activity reports.

This 'secondary' data is then held in the same database as the remotely logged data from each site.

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Custom data entry page for site engineers.

With reports needed to satisfy various governmental and UN bodies, **BGT** also needed a fast, easy-to-use report generator giving them access to stored data and helping reduce the burden on their IT department.

Dexdyne added another custom Report page to the **netrix Dashboard**, giving a simple point-and-click interface to select required data points and allowing the user to import the data into Microsoft Excel where it could be added as an appendix to a statutory report.

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Custom report page for Biogas Technology.

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4	Ancon	01/09/2008 06:00	447.2207	1010.491	946.1718	45.59335	45.3401	34.48671	2.48
5	Ancon	01/09/2008 05:30	438.47015	1016.29	881.8525	45.49039	45.01583	34.41804	2.56
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Logged data is stored in an SQL database ready for extraction into an Excel spreadsheet.

Also available on **netrix Dashboard** is the facility to plot graphs directly from logged data via the Charts page, where logged datasets can be plotted against each other to provide trending information that can also be included in a report.



The netrix Dashboard charting page allows the user to plot datasets recorded from any site.

BGT has since expanded its usage of Dexdyne's **netrix**TM system to take advantage of standard features like SMS messaging to alert their operation and maintenance engineers when problems occur on site.

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