



Calibrate Chronicle *Issue 6*

Welcome to the Autumn/Winter edition of our newsletter, providing news, ideas and opportunities for your business.

This edition:

- How a poultry farmer slashed energy costs
- Find out more about transforming your energy strategy
- How upgraded systems can pay dividends
- Gridflex goes live - find out more!

Not Just Poultry Savings For Telford Farmer

We are in unprecedented times for energy price hikes, so never has it been more important to look at your energy-use strategy for your business.

Case Study

As energy prices soar, Calibrate has helped a Telford poultry farmer slash energy costs. The farm's energy bills had doubled so in re-engineering their older system installed by a third party, Calibrate have transformed the farm's energy profile.

Calibrate analysed energy use and optimised systems so our client could capitalise on the improvements.

- Farmer saves £117,000 p/a on electricity (54%)
- Reduces carbon emissions by 136 tonnes CO2 per year
- Increases efficiency of heat pump to Ofgem RHI standards to maintain income

Re-Calibrate - Calibrate Energy Engineering

Calibrate were increasingly seeing cases like this of older heat pumps and owners who were struggling to get the benefits due to antiquated and often unmaintained systems. The technology should be immensely efficient, with multi-heat, chilling and energy-generating opportunities, but these systems were no longer performing as optimally as they should.

Having developed **Calibrate Analytics**, a clever controller to interrogate the pump's and site's energy use and identify ways to save money, Calibrate were in an ideal position to help the farm mitigate against down time and rising costs.

Calibrate Analyser - Calibrate Energy Engineering

To future proof your business, it is well worth installing Calibrate Analytics as stage one of your business transformation strategy, financially, operationally and environmentally."

**Rob Timmis,
H Timmis Farm**

Calibrate were able to demonstrate in real time, what some simple changes would make to bottom line performance, surpassing his expectations for the system. From the data gathered from the controller, the team set about designing a series of improvements to heighten performance.

The outcome was significant. By re-working some inefficient settings and implementing some re-works to the heating loop, the heat pump's co-efficiency of performance doubled to go above the standards expected by Ofgem, meaning the farm's RHI rebate was no longer threatened. The farm was also able to drastically cut energy costs and carbon emissions.

Following this sort of project, and with a software upgrade, the next stage for this client and other businesses is to consider Calibrate's **Gridflex** service. This is where the controller acts as an energy aggregator, adjusting electricity use at peak times and selling excess energy back to the National Grid. **Gridflex** fully manages this behaviour, providing clients with a totally hands-free passive income running in parallel to business as usual.

Gridflex - Calibrate Energy Engineering



Energy Transformation Plan

How to make energy work for your business

Stage 1

ANALYSE | Take Control

Innovative energy assessment to identify energy behaviours and how they can be improved

- ▶ Bespoke software platform
- ▶ Real time, fully adjustable control of power generation and use
- ▶ Control everything from heating through to lights
- ▶ Simulate the benefits of power generation or power savings
- ▶ Track, & monitor everything from your phone or laptop.



Analyse

Stage 2

OPTIMISE | Re-Calibrate

Adjust and Engineer improvements to optimise performance

- ▶ Automate and control your energy-hungry equipment correctly
- ▶ Fine tune processes in real time from your phone
- ▶ Improve mechanical and electrical system with our in-house commercial and industrial renewables specialists
- ▶ Hands-off Maintenance Package for peace of mind.



Optimise

Stage 3

CAPITALISE | Trade Energy

Grid balancing for extra income, similar to an energy stock exchange

- ▶ Turn off heat pump at set times and receive ££ from the National Grid
- ▶ Turn up heat pump when there is too much electricity available at the Grid and receive ££ to use cheap power
- ▶ Trade carbon credits
- ▶ Balance onsite usage to match power generation, avoiding import costs
- ▶ Digital real time dashboard to evidence power income.

See page 6 for more information



Capitalise

Making Net Zero a Reality

Get in touch for further information.

Re-works Lincolnshire

We have been busy bringing several sites up to better efficiency standards. Many of these systems were installed by third parties and were outdated.

For one project, we upgraded controls and performed modification work to our client's 4MW GSHP system in Shropshire. This site has a versatile functionality, thanks to some clever engineering, both a grain drier and large-scale refrigeration system are run off the heat pump for extra efficiencies.

The Figures

£195,000

Electrical savings
per year

£190,000

Investment

<12 months

Return on
investment

3.5%

New COP after
re-works

Original COP 1.9% (below Ofgem standards)



Business Opportunity

Are you or do you know anyone who is interesting in buying or selling any RHI-approved system? There are many profitable opportunities available, to find out more email jack@calibrateltd.co.uk

Combined Heat & Power

A CHP system is definitely the technology of the moment. If you are on a low gas tariff with a high electricity rate, we could help you save up to 80% on energy costs. Our client in Barnsley is taking full advantage of this and here is the Calibrate team seeing the unit received safely.

We are also advising a new client on installing a CHP. Based on their electricity usage and rate, last month they would have saved £64,000! Based on those figures, it means a ROI of months rather than years.

**CHPs save
up to 80% on
energy costs
with a swift
ROI!**



Our Services

Air Filtrations Screens

Protect your heat exchangers on your Ground Source Heat Pump, CHP or biomass system. These can get clogged up in dusty environments affecting performance and even causing break down. We can install these innovative screens to help protect your valuable asset from extra cleaning and maintenance.

Key Benefits

- Your energy costs will be lower
- It will decrease your down time
- There will be less repairs and maintenance
- Productivity and profitability will be improved.



Here we have screens installed at one of our client's systems in the Scottish Borders.



Calibration Services

Using a specialist meter, we can calibrate your temperature probes to 100% accuracy, to give you peace of mind that your temperature readings for your assets are correct.

For more information or a no obligation quote, drop Martyn an email at service@calibrateltd.co.uk and he will be in touch.

Ground Loop Extensions (Modified Capacity)

Did you know that OFGEM allow extensions to your existing ground-loop for extra RHI income for the remainder of your tariff?

Our clients are finding that for a swift ROI, they are benefiting from a significant increase in income.

If you are interested in finding out more about modifying capacity on your system for a better bottom line, visit

www.calibrateenergy.co.uk

or contact martyn@calibrateltd.co.uk



New Awards

Celebration of awards continue for the Calibrate team.

We are proud winners of the Non-domestic Heat Pump Project award as well as a highly commended for Heat Pump Installer in the ACR & Heat Pump Awards. We also received accolades in the Energy Efficiency Awards and at the Royal Highland Show.

**NATIONAL
ACR & HEAT PUMP
AWARDS
2021/22
WINNER**



Royal Highland Show

After two years out due to Covid, it was a rewarding experience to finally be able to attend the Royal Highland Show again to meet prospective customers and catch up and share some overdue hospitality with many clients who have been with us for several years. We were thrilled to be able to showcase many new products and services as well as demonstrate our commitment to excellence through our various awards secured over the last two years.



Technical Training Day

In April we invited our maintenance clients to a technical training day on how to get the most out of your heat pump. This was hosted at Murton Farm near Berwick-upon-Tweed and run by the operations team, with Martyn Scott leading.

The session involved finding out more about how a heat pump works optimally and understanding how to get more out of your system. Quizzes were held and tours were conducted to help all attendees to learn more. It was also a good opportunity to network with like-minded agri-businesses.

Referral Offer

We offer third parties a referral fee for introducing us to new clients requiring either new systems or upgrades and extensions to an existing system.

This offer is valid on Air and Ground Source Heat Pumps and CHPs referred to us and purchased from us. Our finders fees are outlined below and are applicable on the execution of an order and payable on commissioning.*



**Earn cash
from a
referral!**

Up to and including £100,000	£1,000 flat fee
£100,001 - £1,000,000	£1,000 + 0.6% of contract value
>£1,000,001	£1,000 + 0.6% of contract value capped at £15,000

For more information contact: jack@calibrateltd.co.uk / 07719 330 616

*Please contact us for further finder's fee contract information.

Gridflex Goes Live!

Flexible Energy Solutions

Gridflex is an innovative platform for managing electricity usage, through Demand Side Response (DSR). DSR financially incentivises energy users to reduce non-essential energy use at times of peak demand or increase use at times of low demand.

By adjusting your demands on the National Grid, you save money and can receive additional income. Gridflex will do all the work for you by using innovative software to monitor your site alongside the demand of the National Grid to buy and sell your energy for you using an automated system, a bit like a stock exchange.

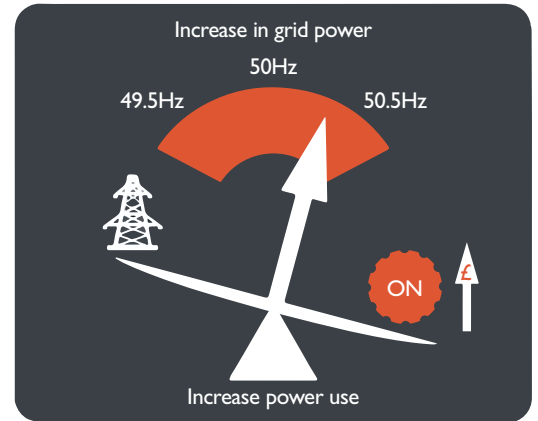
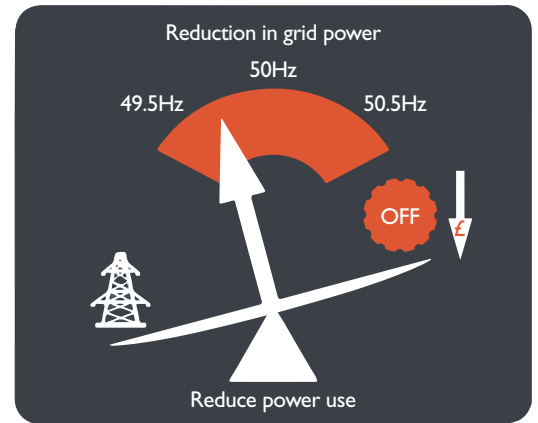
And our Gridflex launch could not have come at a better time!

Export rates have just tipped 74p/kwh. This is up from 16p/kwh this time last year which is unprecedented... The average export rate increase has been some 2p/kwh maximum per year for the previous decade. So we have seen a 50 year+ leap in under 12 months!

Our service addresses these challenges head on as you can earn £150,000 per 1mW of power as of today, with the same again once the trading APP goes live this month (October).

We are thrilled to announce that the first 4 R&D sites have come online and the first real time trading site went live in early October with potential flash peak export rates of some 3000p/kwh! This comes as the National Grid has released a 'winter turn down' scheme that we are subscribing directly to.

For more information visit www.calibrateenergy.co.uk/gridflex



New Team Members

Due to our growth plan, we have some new members who have joined the Calibrate team.

We welcome Martins Yves to the operations team. He is an integral support function for all procedural and legislative requirements as well as Morgan Stewart and Lewis Anderson to the electrical team. James Grieve and David Hitchen join the sales team, James as a support function and David as a lead generator.



Martins Yves
Operations Support



James Grieve
Sales Support



Lewis Anderson
Electrical Controls



Morgan Stewart
Apprentice Engineer



David Hitchen
Lead Generator

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Calibrate Energy Ltd



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Calibrate

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Accredited Installer

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