

Optimal monitoring

ENERGY UTILITIES CARBON



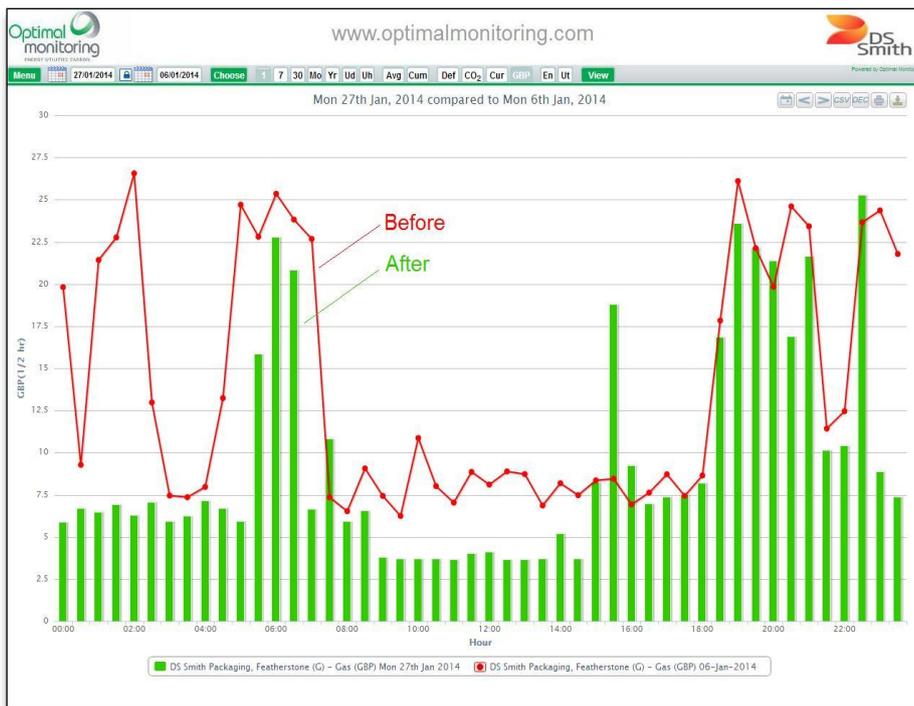
What gets measured, gets managed, gets saved

Case Study: DSS Featherstone package Energy Management using Optimal Monitoring

Summary

DS Smith Featherstone have successfully completed the piloting of the Optimal Energy Monitoring solution and identified £15k in annual savings in the first 6 weeks of use.

How was this achieved?



With the ability to analyse the ½ hourly gas supplies to the corrugators using the live reporting from the Optimal system it became apparent that idle time on the plant, around 6 hours per day was costing £15 per hour.

By engineering changes to the plant setting and apply a low fire option on the boilers the hourly running cost was reduced to £8 resulting in the 47% saving, equivalent to £15k per annum.





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Background

The engineering team at the Featherstone plant were looking for ways of gaining a better understanding of operational costs through the live monitoring of energy consumption across different manufacturing processes and at different times of the day and night.

Ronnie Wilson, Senior Engineering Manager was using a system that provided limited data, but was not able to deliver quick and easy reporting and get to the essential information he needed to understand what was really happening across the site.

As an experienced and established provider of energy monitoring solutions Optimal was appointed and commissioned to install a flexible solution that made use of the existing equipment and introduced new hardware in its design to meet the mid to long term needs of DSS.

Initially coverage was across the main supplies for electric gas and water with the key objective to manage operational costs in a consistent reporting format and to save money.



DSS also needed coverage for temperature and humidity monitoring as part of the manufacturing process, Optimal's expertise and focus on customer service and support found a cost effective solution that seamlessly extended the system to cover temperature and humidity data points as part of the live platform, this was installed and up and running within a few days.

Mandate

DSS required a reliable real-time web based monitoring system that delivered a number of key benefits with the focus to drive down cost and carbon savings combining with staff awareness and involvement through dashboard displays, these included:-

- Contain costs by utilising existing on site hardware
- Ease of use – flexible and simple to operate
- Deliver technical information in a non technical format
- Plant and department sector reporting
- Encourages involvement through awareness
- Incorporate multi energy sources and combines with production non energy data
- Automatic, management, benchmark, exception and bespoke reporting
- Reception display, engineering displays and flexibility





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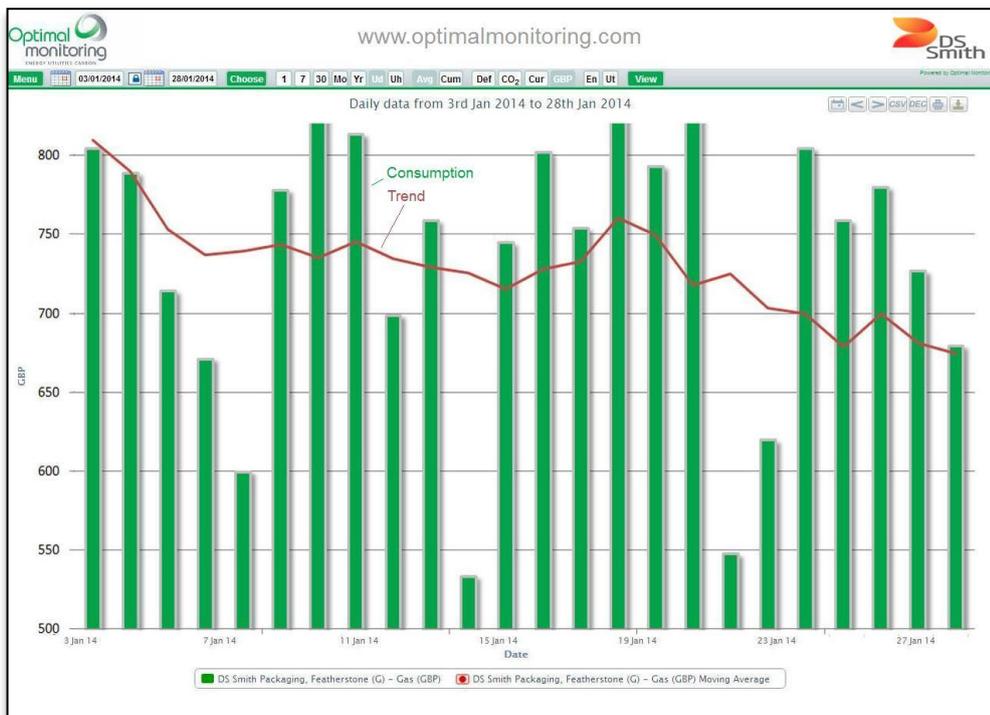
DSS found exactly what they were looking for in the Optimal Monitoring system; Ronnie commented *“we were really impressed with the knowledge and passion the Optimal team have for the product and in the support and attitude towards service and proceeded with implementation”*.

Detailed Findings

With the system up and running the energy management journey began with the evaluation and analysis of the gas supplies into the production process, within the first 4-6 weeks of the system going live the gas supply that supplies the heaters for the corrugators/s machine was analysed and the plant standby periods assessed.

Typically the equipment was running for approximately 6 hours per day on standby where gas usage was on average costing £15 per hour. With this period identified an equipment engineering alteration was possible which allowed changes to the setting and apply a low fire option on the boilers which resulted in the hourly costs being reduced by 47% to £8 per hour, a saving of £7 per hour

Ronnie Wilson was thrilled with the savings made and said “after only a few days I have found the system extremely user friendly and easy to find my way around”



After the boiler correction was made the hourly savings equate to approximately £42 per day or £15.3k per annum, this saving alone has already provided payback for the system and we have only just begun.

“Right information, Right time, Right people”





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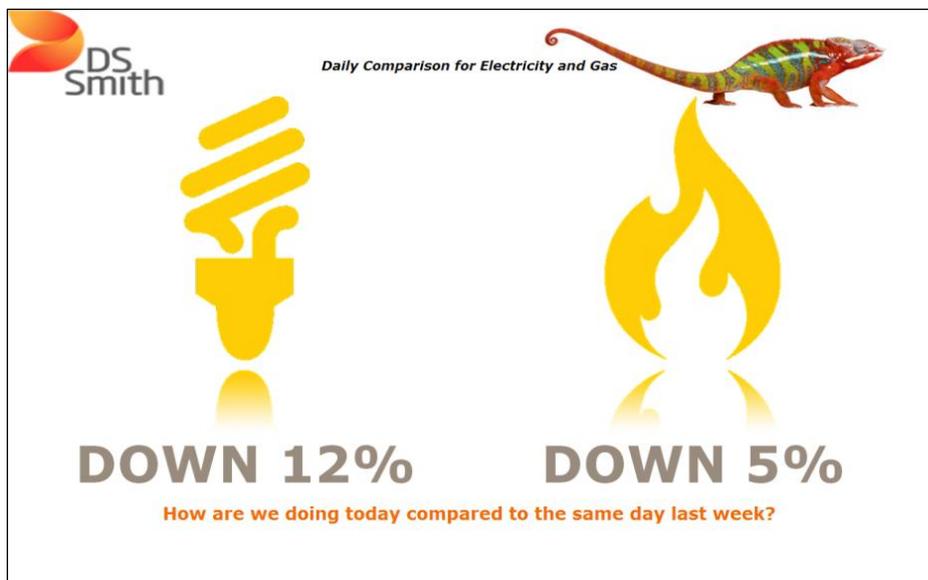
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Conclusion

The most exciting energy saving opportunities on electricity and water costs in the production process are still to come but now with a powerful energy system in place DSS have information at their fingertips and a system that can grow and adapt to their changing operational requirements.



Example of a Live Dashboard display

In closing, Ronnie commented *“the ability to now easily identify unusual and unexpected usage, eliminate waste, create a greater awareness amongst the staff is now made a lot easier with the tremendous features of the Optimal Monitoring Solution, ultimately it’s all about saving money and we are now well prepared to take up these challenges at DSS having already made a great start and paid for the initial investment from the very first investigation”.*

About DS Smith

DS Smith is a leading provider of corrugated packaging in Europe across 25 countries, employing around 20,000 people today who adopt the company policy of striving to do more with less and follow the companies’ sustainability strategy in all that they do.

At DS Smith we are committed to conducting our business in a responsible and sustainable manner and our activities take into consideration reducing our carbon footprints, environmental sustainability and finding ways of doing more with less.

