

Welcome

ISEG celebrated its first year of business in January 2015 with a growing number of schools in the ISEG community and new projects across the group. We are now very much focussed on growing the number of schools in the community and helping schools with ESOS compliance, which we cover in this newsletter.

We are delighted to announce that two new associates, Cordelle Sheldon and Ben Coulter, have joined the existing ISEG team to bring additional talents to the group and strengthen the support we can offer our members and Independent Schools generally.



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Cordelle Sheldon, who has a background in change management and communication, will be working with new and existing schools on ISEG's unique 'Whole School' approach to energy, sustainability and efficiency. Cordelle has over 20 years of experience delivering business improvements across a wide range of corporate functions in both the public and private sector. In particular she has specialised in helping organisations communicate, implement and sustain new ways of working and maximising resource efficiency.



Ben Coulter (MIEMA CEnv) is working with ISEG to ensure our members are fully supported in complying with the Energy Savings Opportunity Scheme (ESOS), which we cover in this newsletter. Ben is our lead ESOS assessor and is an independent environmental consultant with 15 years' experience of energy auditing and assessment across a wide range of business sectors.

Latest News

Winners of the Ashden School Award for Sustainability St Faiths Preparatory School – set the standard

In our last newsletter we were able to report how Royal Hospital School had been awarded their Silver Carbon charter award – this time around we have very great pleasure in reporting the success of another of our Schools – St Faiths Preparatory School in Cambridge.

St Faiths have been awarded the Ashden Schools Award for Sustainability – this award has been bestowed upon the School as a result of their commitment to Sustainability and the drive of their Eco Committee consisting of a governor, pupils, staff and supported by parents.

The school's Sustainability Agenda has been set by Richard Brent who is Bursar at the school. He has driven this agenda since his arrival at the school in 2008; the key to Richards success, however, is the 'Whole School' approach that we cover on the next page of this newsletter.

This approach is wholeheartedly supported and encouraged by the Headmaster who sees Sustainability as part of the 'Culture of the School'.

The school has adopted fundamental principles for Energy Management such as installing an automated Energy Monitoring and Targeting (M&T) system. This measures energy consumption across the site and allows the School to identify areas of high consumption for investigation. It also allows the school to measure the effectiveness of various energy efficiency initiatives.

M&T is essential for any school wishing to understand and do something about their energy consumption. It is no coincidence that the schools that have invested in M&T are those that generally are the most successful in continually reducing their energy consumption.

In addition to this the school has developed a long term strategy for energy efficiency setting goals for energy reduction and allocating budgets for resource efficiency projects such as improved lighting, insulating valves and pumps, improved heating and hot water controls and the installation of renewable energy solutions, many of which have already been completed.



Energy Saving Opportunity Scheme (ESOS) - Are you ready?

ESOS is a legal requirement that all Independent Schools with more than 250 employees will have to comply with, by December 2015, along with thousands of other businesses and organisations in the UK. Failure to comply will result in hefty fines. It is not an optional scheme.

There are many consultants out there who will offer, at quite a hefty price, to ensure your compliance and it would be tempting to write that cheque knowing that it is one less thing that you, the school, has to worry about. However, there is another, more positive way of looking at ESOS.

What if the school used ESOS as the catalyst to examine its use of energy and

going forward make this part of what it does on a regular basis rather than as a one off exercise to become compliant in 2015?

ESOS has a number of phases - compliance in 2015 is just the first phase - it is an ongoing process and should be viewed as such.

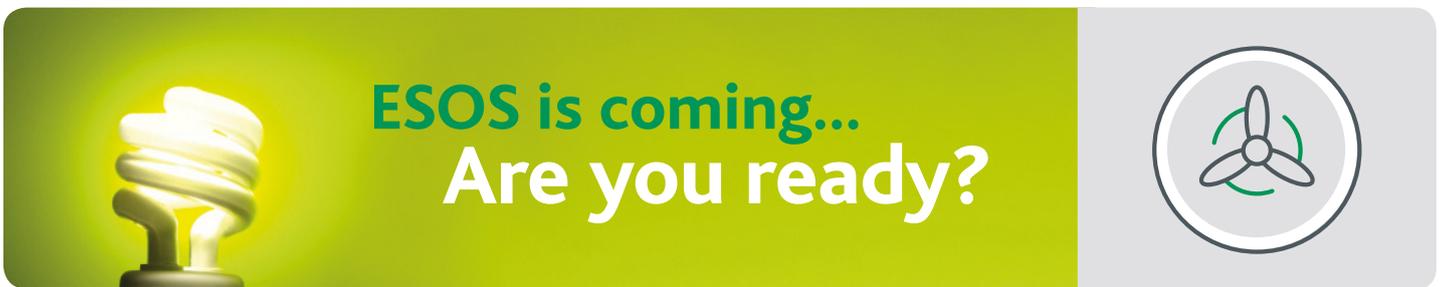
ISEG will help and support its member schools to become ESOS compliant and to adopt this new mind set so it becomes 'just the way you do things' - it is after all just doing what ISEG members already do - which makes it a very cost effective route to compliance.

It is also a fabulous opportunity to get the whole school involved - it's got to be done anyway so let's make the most of it - helping

to spread resource efficiency awareness throughout the school and a new way of thinking about your approach to energy.

ISEG's aim is to help ensure full compliance with ESOS, and assist its members in gaining the maximum possible benefit from its related activities.

ISEG views ESOS not just as a legislative hurdle to be negotiated, but a springboard for long term improved energy efficiency and cost reduction across its member schools.



The Whole School Approach to Resource Efficiency

Cutting Energy and Water Usage, Reducing Waste - The Leys School developing a Culture of sustainability

Sustainability can be defined as - meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable Development - a solution (not a compromise) that achieves economic prosperity, social progress and environmental stewardship.

All businesses and organisations have to be sustainable in the modern world to safeguard long term prosperity and success.

ISEG firmly believes it is not just the preserve of Bursars, Business Managers and Estate Directors / Managers alone to deliver resource efficiency by cutting energy costs, water usage and reducing waste.

This view is strongly echoed by Nathan Keen of The Leys School Nathan says:

'We are working very hard with all facets of the School to develop a

'Culture of Sustainability' not just for the longevity and prosperity of the School but we also believe we have a responsibility to the pupils in helping them understand the need for us all to live sustainably'

By engaging with the whole school community we are finding that schools in ISEG are not only making reductions in their bills and energy consumption, they are beginning to look at the way they approach energy consumption generally across the whole school and everyone from staff, students and parents are getting involved.

Schools have set up teams with staff and pupils who have responsibility for different aspects of resource efficiency across the school; others compete against each other to suggest the best energy saving and waste reduction ideas.

ISEG encourages schools to look at the whole resource efficiency picture, rather than its constituent parts and supports member schools to build a **Whole School Approach** that will make a big difference.



Lighting - The right light, for the right task, in the right place.

The benefits to students and staff of efficient lighting on their well-being, ability to study and concentrate are many and well documented.

Electric lighting is a major source of energy consumption for schools but some careful thought can offer a significant opportunity to reduce energy usage. Investing in the new lighting technology along with professional lighting design can significantly reduce energy consumption.

But BE AWARE - there are many companies now selling energy efficient lighting with a plethora of LED lights and technologies coming onto the scene. Not all LEDs are the same and LEDs are not always the right solution.

These lighting issues were discussed in some detail by Jon Goody from MPS Energi (electrical contractors point of view) at our workshop at Ipswich School (see photo below)



Lighting expert Jamie Yates (who has worked in the lighting and LED industry for nearly 20 years) explained to us at our next workshop just before Christmas at Framlingham College about how the qualities of LEDs vary and their efficacy degrades over time.

Picture below of Jamie showing some pupils principles of lighting – 'the right light in the right place at the right time!!'



From ISEG's experience it's all very well having lighting that is guaranteed for 5 years – but if it goes wrong the guarantee is unlikely to cover the cost of access and labour to replace it – which will probably exceed the value of the lamps!!!

Another issue with lighting that ISEG comes across regularly is that companies selling the light solution often seek to just replace what is there without taking into account whether the light in that area is fit for purpose and in line with CIBSE guidelines.

It is essential that prior to any lighting project the lighting levels should be agreed with the installer and the lighting design needs to clearly demonstrate that the new system will deliver what is required. Following installation the light output should be checked with a Lux meter to ensure the actual light output meets the designed output.

In order to ensure that lighting is fit for purpose for our member schools ISEG have forged links with Jamie Yates from Trilux and have negotiated an ISEG discount on behalf of the members for their energy-efficient and sustainable lighting solutions.

As part of the Trilux package and at no extra cost, all lighting proposals will be presented with full lighting design which ensures that the lighting installed is fit for purpose and meets industry standards.

Trilux lighting has been installed in a number of schools across the region having been specified by various lighting engineers and independent consultants some of whom ISEG have spoken with directly to ascertain their views on Trilux which have all been positive.

If you have any lighting companies that you think ISEG should be talking to please let us know.

Royal Hospital School - installs site wide BMS

BMS is short for - Building Management System which is an automated control system that will facilitate the user to control pretty much anything that is connected to it from a central location – heating, hot water, lighting, air conditioning, ventilation etc etc.

Often BMS systems are installed in control panels in individual buildings with their own settings and are controlled locally.

RHS already had various BMS systems dotted around the estate which meant that the Estates Team had to visit each building with a BMS to adjust it or check all was working correctly.

However, over the course of the last 2 years the school has been working towards having the whole estate linked up so that there is one BMS system that controls all the buildings.

The concept of the BMS is automated control, it learns (based upon the parameters such as

internal temperatures that are set) when the heating needs to go on to get the building up to temperature by a certain time. By taking into account external air temperatures the system automatically optimises the boiler function to ensure it is operating in the most efficient way.

As we visit sites we so often see schools where the heating is on and the windows are open; this is not the fault of the occupiers of the rooms, but it is likely that the building's heating controls are just on time clocks with no weather compensation control. The heating will just come on and then go off at the same time every day until someone turns it off.

Often local TRV's (Thermostatic Radiator Valves) are installed across schools whilst these are better than nothing, their operation needs to be understood and the occupiers of rooms need to have a grasp of how they work.



All too regularly we find TRV's have been turned up to their maximum and left on resulting in overheated rooms which do not respond immediately to having the valves turned off causing frustration and windows being opened.

ISEG highly recommend the installation of heating controls in school buildings. These are fundamental to reducing wasted heat and energy which we are keen to help schools achieve.

What's next for ISEG?

→ New website coming soon – May 2015

As part of our growth we have developed a new website which will help Schools to access support from the ISEG team and share resource efficiency knowledge and experience between Schools.

We will be looking for input from our ISEG members and hope to publicise the work you are doing in your schools across our growing community.



→ Development of an ISEG Group specifically designed for smaller schools.

As we have developed ISEG much of our focus has been on the larger Independent Schools. We are conscious that many of the smaller schools may also wish to become part of the ISEG group. By pulling together with similar sized schools, as part of the ISEG community, smaller schools can also benefit from the adoption of waste and energy reduction strategies.

To that end we are in the process of setting up a group specifically for schools with 50 -250 pupils and an energy spend of £40,000 - £150,000 per annum.

If you would like to find out more about this group please don't hesitate to get in touch.

→ Energy Management Systems – Monitoring and Targeting

We are using Digital Energy as the ISEG platform for measuring Energy Consumption and the evidence pack for ESOS.

If you would like to find out more about setting up an Energy Monitoring and Targeting system speak to Julian Pennington to discuss the options.

'You can't manage what you don't measure'

ISEG have negotiated preferential rates with Digital Energy for members – the system can easily be expanded so start small and add to it as you save money.

Three of the schools in our group, Royal Hospital School, Bedford School and The Leys have already installed Energy Monitoring systems and have found this has had a very positive impact on their schools approach to energy efficiency and their ability to monitor what is used where, when and why.



→ Swimming Pool Covers

We have a number of schools who have asked for quotes for swimming pool covers – due to the multiple numbers of pools that need covers we have been able to set up negotiations directly with the swimming pool manufacturers with a view to negotiating discounts for the member schools

If you need a swimming pool cover and need to get the feasibility ready for next year's budget let us know and we will add it to our list and our on-going discussions with the manufacturers.

→ Growing ISEG

The more schools that join the group the stronger it becomes. We will have:-

- More knowledge, best practice and experience to share
- A greater ability to develop new and existing suppliers
- The ability to identify and trial new opportunities and technologies
- The power to represent the interests of Independent Schools at a political level

So if you are not a member but would like to find out more please get in touch

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