



The Green League

How businesses are reacting to the green agenda

A number of factors make the issue of energy use and management a key priority for the business community

The Government has set national targets to reduce the levels of CO2 emissions in the next 40 years. It expects organisations to play a contributory role in tackling the present CO2 levels to help establish a low carbon economy by the middle of this century.

It is also widely acknowledged that rising energy costs are steadily making up an increasingly significant part of an organisation's overall costs. With respected commentators predicting that high energy prices are here to stay, it makes good business sense to ensure that energy consumption and management is taken seriously if companies are to remain competitive.

Against this background, Siemens UK has undertaken research to assess just how the business community views its role and responsibilities in the area of energy use and management - as well as investigate the efforts that have been made by organisations to reduce consumption levels not only for their own good – but also to benefit national low carbon targets.

What are companies doing and what are they not doing? What information do they have to base important energy-related decisions? Which sectors are better placed than others? How is the issue being tackled from the boardroom down? How are internal resources such as energy managers being deployed both on a strategic and delivery level and how equipped are they?

These are all central questions to be asked of the business community on the road to a more energy efficient future.

Siemens put a series of questions to representatives from over 600 companies during September 2011. The job roles of those questioned covered senior management - including finance and board directors - as well as energy managers.

The organisation sample included large companies (those with over 10,000 employees), as well as SMEs and was designed to obtain a broad cross section of information, status and insight. Businesses and organisations represented

a wide spectrum of sectors, including manufacturing, such as automotive and food, retail, construction, the public sector, professional services, hospitality & leisure and transport.

To assess the findings, the responses have been broken down into categories that cover important topic areas when it comes to energy management. They are:

- **Knowledge and attitude**
- **Investment sentiment**
- **The role of the Energy Manager**
- **The impact of the CRC**
- **Current behaviours.**

The results provide a valuable snapshot – a Green League perhaps – of the current state of play in terms of business and organisation contribution to the green agenda, and help provide insight into how they are playing their part in the national journey towards a low carbon Britain.

We hope you find the findings of interest.

Siemens UK

Knowledge and attitudes

- **The majority of businesses (79%) claim they take energy management ‘seriously’. However, this is lower among energy managers (69%)**
- **70% of organisations view cost reduction as the primary reason to tackle energy management**
- **40% of organisations believe they are making good progress on tackling energy management**
- **Nearly half of organisations (46%) admit they don’t know their current CO2 emission levels**
- **22% of energy managers do not know what their organisation spends on energy each year**

79% of businesses claim they take energy management seriously, but it is lower among energy managers.



‘Do you know what your annual energy bill is as a percentage of your annual turnover?’

When assessing individual company and organisation knowledge and attitude to energy matters, understanding the current cost of energy to a business is important. It is therefore surprising to see that over a quarter (26%) of those that responded on behalf of their organisation did not know how much their annual energy bill was as a percentage of annual turnover. For respondents who claimed they did know what the annual energy bill was as a percentage of the annual turnover, nearly 30% stated the bill was up to 5% of their annual turnover, with between 6 and 10% of turnover cited as the second highest category at 13%. The level of ‘knowledge’ at board director level is strong with 73% of board directors acknowledging that they were aware of the cost of energy to their company, but over a fifth (22%) of energy managers across the sample admitted to being unaware of the figure.

From a sector viewpoint the industries with the highest level of knowledge in this area were automotive manufacturing and food manufacturers. In terms of company size, the largest proportion of businesses or organisations who did not know this crucial figure was those with over 10,000 employees – many of them likely to be major energy users - with 73% in this category stating ‘don’t know’. The best were those employing between 5,000 and 10,000 people.

‘When would you say that your organisation first started to take energy management seriously?’

When asked which year they first started taking energy management seriously, the most favoured response was 2008 - with just over 9% of companies saying this is when the topic became a reality for them. One in five (21%) of organisations said that their company has yet to ‘take energy management seriously’ – but the vast majority claimed that they did. While 17% of board directors admit their organisation has yet to take it seriously, this figure rises to 31% when energy managers are asked. There appears to be a difference of opinion based on roles within the business, showing it needs more board level buy in to get on the agenda.

‘What are your current CO2 emissions?’

Looking into more detail, companies were asked about their current level of CO2 emissions. There was an even split between companies who knew the figure and those that said they did not. Of those

that did, the most favoured response was between 0 – 500 tonnes, which accounted for 21% of answers from the respondents.

‘What is the motivation behind your energy management activities?’

When assessing the motivation to look at energy issues, the overwhelming response by businesses was the wish to ‘reduce costs’. Over 70% stated this was their primary reason to tackle energy use. This was followed by ‘meeting regulatory requirements’ (41%) and to ‘ensure a good reputation’ (30%). These reasons had broad agreement across job titles with board directors, finance directors, senior managers and energy managers all citing cost reduction as the main motivation.

Of sector responses, the chemical and pharmaceutical manufacturing and transport sectors valued cost reduction most highly, while food and automotive manufacturing saw the clear merits in meeting regulatory commitments. Reputation meant most to the hospitality sector where the benefits from a positive public perception of being seen to tackle energy management were clear, with 42% saying this was important to them.

‘What best describes your company’s progress in relation to energy management?’

Finally, we asked about progress to date when tackling energy management. Nearly 40% admitted to making ‘good progress, but need to do more’. This was followed by an acknowledgement by 18% that they were planning activity in this area, but had yet to commence. Interestingly, over 7% of companies stated no interest in the area at all, saying ‘it wouldn’t bring any benefits for our business’, while 7.5% said they could not afford to invest in any energy management projects.

Investment sentiment

- **The main barrier to implementing energy management solutions was the need to focus on day-to-day business activities**
- **One in five organisations do not know how much they spend each year on managing their energy**
- **7% of businesses said they invested nothing**
- **70% of companies plan to invest in energy efficiency projects in the next three years, but 22% don't know how much**

Over 70% plan to invest in energy efficiency projects over the next three years.

'How much have you invested in energy efficiency projects in the past three years?'

Organisations were questioned on their investment strategies in the area of energy management over the last three years and a range of investment cost parameters were given. The lowest level of investment (£1 - £5,000) was the highest scoring, with just over a quarter of respondents (26.5%) indicating that this was the level they believed they had invested since 2008. One in five (21%) admitted to not knowing how much they had spent, while 7% said they had invested nothing at all. Significantly, only a small percentage of companies (5.3%) said they had invested over £500,000 in this period to address their energy costs.

Of those sectors that did invest, the highest percentage was undertaken by transport and logistics with 36% of organisations in this sector investing up to £5,000. Industrial manufacturers such as food, automotive, chemicals and pharmaceuticals appear to have invested the highest individual sums, with examples of both a food manufacturer and an automotive manufacturer each claiming to have invested between £2 and £5 million over the past three years in this area.

'How much do you plan to invest in energy efficiency projects in the next three years?'

Turning to future investment plans over the coming three years, the same pattern emerges. Over a quarter (25%) said they intended to invest up to £5,000, while a similar proportion (22%) stated they don't know what they plan to spend. Over 70% said they did plan to invest in energy efficiency projects over the next three years, with just over 7% of businesses saying they didn't plan to invest. Over 48% of finance directors questioned said they foresaw investment levels of up to £50,000, but 18% of board directors said they didn't know what the level of investment over the next three years was going to be.

Of the sectors which did not plan to spend anything, the highest rankings were the transport and construction industries, followed by the public sector. A lack of awareness of projected investment spend was most marked in large organisations, with representatives from 67% of businesses employing over 10,000 staff saying they 'don't know' the level of investment. Unsurprisingly, a significant proportion (43%) of small-sized companies (10 – 49 employees) predicted that they would seek to invest between £1 and £5,000 over the next three years – perhaps mindful of the need to carefully assess cost implications, especially in the current economic climate.

The primary barrier to energy management projects is a perceived lack of return on investment.



‘What are the main barriers to implementing energy efficiency solutions?’

When asked about the main barriers to implementing energy efficiency solutions, three key areas emerged. These were a need to ‘focus on day-to-day business’, a ‘perceived lack of return on investment (ROI)’ and ‘changing employee perceptions’. These were closely followed by ‘insufficient internal resources’. From a board level perspective, the primary barrier appears to be the ‘perceived lack of return on investment’, while energy managers cited the focus on day-to-day business as the main reason.

There was a marked change in response according to the size of the business. More than 35% of the smallest companies said they could see no barriers, a figure that dropped to just over 8% when the same question was posed to the largest organisations.

The role of the Energy Manager

- **One in ten managers spend up to 50% of their time dealing with energy-related issues**
- **94% of energy managers have no formal qualifications to help them perform their role**
- **Health and safety in the workplace is the other main area energy managers have to deal with**

A short series of questions were designed to look at the role and responsibilities of the energy manager, and were addressed to employees carrying the job title of 'Energy Manager' within an organisation.



'How much of your role is focused on energy management?'

Nearly half of energy managers (43%) said between 1 and 10% of their time was spent on energy management, with nearly 10% spending up to half their time on this activity. There was an even split by sector with energy managers across all industries saying in the majority of cases they spend up to 10% of their role focusing on energy. It was only in construction and professional services that a small sample of energy managers said they spent over 50% of their time on energy management activities.

sectors, as well as the hospitality industry, where 100% of all respondents in these industries said they did not hold any specific qualifications to help them. In this instance, size of company or organisation didn't appear to influence matters as the percentage of energy managers in both SMEs and large companies admitting to not holding formal qualifications was the same – 100%.

'Which other areas are you responsible for?'

In line with their overall roles and responsibilities, the primary areas that energy managers are also likely to be involved in are health and safety and facilities management. In some sectors, such as food manufacturing, chemical and pharmaceutical industrial manufacture and hospitality, health and safety seems to dominate activity. While facilities management took up a lot of time for energy managers within the professional services and transport sectors. Health and safety also dominates for energy managers in smaller organisations.

'Do you hold any specific qualifications to help you perform your role?'

The vast majority (94%) said they did not have any formal training or qualifications at all. Indeed, this was particularly evident in responses from some manufacturers, the construction and public

The Impact of the Carbon Reduction Commitment Energy Efficiency Scheme (CRC)

- **63% of companies have met all the CRC deadlines to date.**
- **Half of companies were ‘not worried’ about performing badly in the CRC league table, compared to their competitors**
- **A third of organisations admitted to not knowing the cost of the CRC to their business**

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‘Are you participating in the CRC scheme?’

Of the 600 companies and organisations polled, just over 26% said they were participating in the CRC. Others indicated they were either below the energy consumption threshold or they were covered by other regulations such as the Climate Change Agreement or the European Union Emissions Trading Scheme. Another 21% stated they did not know if they were participating or not. The sector with the largest number of CRC participants was food manufacturing and the least was in the chemical and pharmaceutical sector.

Unsurprisingly, larger organisations – with more than 5,000 employees – had the highest percentage of participants at 73%.

‘What do you estimate the cost of the CRC will be for your organisation?’

When asked about the impending cost of CRC to their organisations, over a quarter of companies estimated the cost to be between £50,000 and £100,000, and 32% couldn’t provide a figure. Two thirds of company finance directors didn’t know the cost, along with 17% of board directors and 52% of energy managers. The construction and transport sectors fared worst when revealing if they knew upcoming CRC costs, with both food manufacturers and automotive manufacturers seemingly best placed to understand the financial implications of the scheme to their organisations.

‘Are you worried about performing badly in the CRC league tables compared to your competitors?’

In terms of reputational damage of performing poorly in the CRC league table when compared to competitors, nearly half (48%) said they were not worried. Of those that were worried, 47% of board directors expressed concern.

‘Has your company met every CRC deadline date so far?’

As the CRC has been an ongoing process with significant milestones on the way, the organisations surveyed were asked about their progress in meeting deadlines. Of those in the CRC, 63% said they had met every deadline date so far. Of those that hadn’t, 16% said they were unable to do so because of a lack of sufficient guidance on the correct procedures and how to complete specific forms, or had difficulty collating relevant information, or simply lacked enough resources. A lack of resources appears to have been the biggest issue for the automotive sector, while the public sector cited problems in collating relevant information as its primary reason.

Of the organisations that have met every milestone to date, businesses with over 10,000 employees performed most strongly, compared to the smallest sized company (10-49 employees) which had the lowest percentage of companies that had managed to meet all deadline commitments in this area.

Current behaviours

- **Two thirds of businesses have undertaken a professional analysis to formulate an energy management strategy**
- **The automotive sector leads the way in gaining standard accreditation for energy management**
- **64% of organisations are actively working towards achieving internationally recognised standards for energy management**
- **Heating, ventilation, air conditioning and lighting were the favoured areas for companies to monitor their energy consumption**

‘Have you undertaken a professional analysis of your facility and processes to formulate an energy management strategy?’

With a strategic approach vital to managing energy effectively, companies were asked if they had undertaken a professional analysis to formulate an appropriate response. Nearly two thirds said they had taken this important step, but over 35% said they had not. The most active sectors in this area seem to be food and automotive manufacturers, followed by transport and chemicals and pharmaceutical manufacturing. The sectors with the most to do are the public sector and retail.

‘In what areas are you currently monitoring energy consumption levels?’

When asked what areas they were assessing in terms of energy consumption, heating, ventilation and air conditioning, along with lighting were the favoured choices. These were followed by transportation and production. Nearly a fifth said they did not know if they monitored energy consumption levels at all.

Of those not monitoring, 28% of energy managers said they did not know if their organisation undertook this crucial activity. In terms of company size, over a quarter of businesses employing up to 250 people do not undertake any monitoring at all - compared to just under 9% of organisations with workforces of 1,000 plus.

‘Is your organisation working towards or has it already achieved BS EN16001 or BS ISO 50001 – standards for energy management frameworks or systems?’

In terms of achieving standards, over 40% of the sample said they were working towards or had achieved BS EN16001, with another 23% of companies or organisations questioned stating they were working towards or had achieved BS ISO 50001 – the new international standard for energy management systems. Nearly one in five said they did not plan to implement either standard as they did not believe it would add value to their organisations. This belief was most marked in the responses of board directors, with 23% not seeing the value of standards.

The automotive sector had the highest proportion of companies that had worked to gain the standards, with 96% having done so. The lowest in these terms was the public sector with 51%.

Summary

While it is true that a lot of companies have and are continuing to address energy management issues (a fact this piece of research readily acknowledges) it is also important to highlight where improvements are needed.

The Siemens' Green League draws attention to a number of areas.

'Still much to do' – despite evidence of much good work by companies of all sizes across many sectors, it is clear that for a proportion of companies energy management issues still remain a low priority. With one in five admitting to not taking energy management 'seriously', more work needs to be undertaken to persuade such companies as to the commercial and reputational benefits to be derived even from small, low cost energy management initiatives.

'Joined-up thinking to counteract inconsistency of knowledge' – across any organisation there will be a number of people involved in strategic and practical responses to energy management issues. If company objectives and targets are to be realised, it is vital that important knowledge and information regarding energy management topics is cascaded in a uniform manner regardless of job level. In this way the respective contributions of the board director, finance director and energy manager can be better co-ordinated and company aims supported from a joined up perspective.

'Leadership vacuum?' – Senior management does not have an accurate picture of their organisation's energy consumption and its impact on the bottom line. Lacking information about their energy spend, CO2 emission levels, investment plans, or seeing no value in internationally recognised standards to support energy management efforts, paints a picture of disengagement with a subject that should be close to the hearts of those at the top of the management tree.

'Reputational risk' – the CRC will highlight the good and the bad when it comes to performance around CO2 emissions. With over 50% of

companies saying they have concerns about how they will fare when compared to their rivals, perhaps this will act as a catalyst for matters to improve?

'A lack of foresight' – with energy management strategies proven to benefit the company bottom line, as well as the environment as a whole, a number of surprising statistics emerge. Whether it is the 7% of companies who see no business benefit at all to energy management, or the 17% who will not bother to adopt any internationally recognised energy management standard, or even the 26% of organisations that believe they will see no ROI through energy management - their alternative views present challenges.

Energy management improves financial performance, has a positive impact upon reputation, meets the needs of a growing regulatory landscape, helps engage staff and will deliver commercial gain. Doing nothing can only encourage the opposite.

‘The good and the not so good.’



‘The Energy Manager’s role’ – energy managers are at the coalface in efforts to tackle energy consumption and manage it on behalf of businesses going forward. Perhaps the time has come to ‘professionalise’ such employees and seek to provide them with the training and qualifications needed to confront an ongoing issue that isn’t going to disappear any time soon. With 94% of energy managers saying they do not have any qualifications to support their role, perhaps it is right that organisations take responsibility to ensure time and resources are allocated to help reverse this situation?

‘The good and the not so good’ – while this research is a snapshot of attitude, knowledge and performance concerning energy-related matters across a spectrum of industries, nonetheless it is possible to indicate the stronger performing sectors and illuminate where improvements can be made.

As ever, there will be examples of good practice in all sectors, but based upon a summary of performance across the five key indicators highlighted in this report: knowledge & attitude, investment sentiment, the role of the energy manager, the impact of the CRC and current behaviours, a tentative Green League can be constructed.

Performance by sector

Good

Manufacturing generally, with both food and automotive industries as particular highlights

Middle Ranking

Construction, Retail, Public Sector, Transport & Logistics

Poor

Professional Services, Hospitality & Leisure