by Ethan O'Brien, Leigh Hitchens and John Kyffin-Hughes

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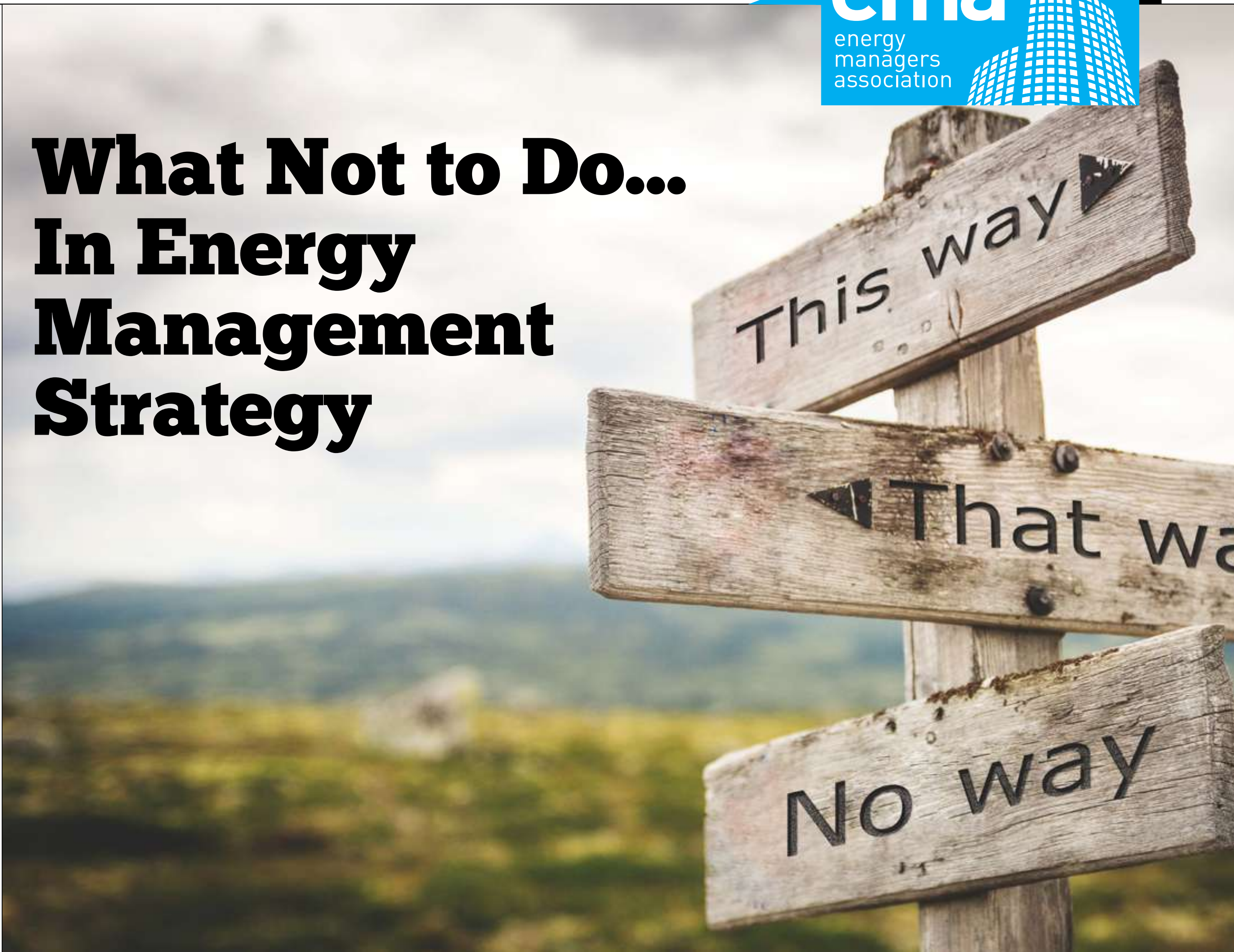
What Not to Do... In Energy Management Strategy



Energy management professionals usually define themselves as 'wearing many hats', which makes the profession interesting and dynamic but also requires an all-round knowledge and experience in key subjects. Whilst there is a plethora of information available out there in each topic, there are only so many hours in the day that can be devoted to reading and research.

The EMA is looking at key areas of energy management and asking those who focus on those areas at their organisations for their views and tips. In the last two issues, we tackled what not to do in energy procurement and waste management. In this issue, we turn our attention to energy management strategy.

Ethan O'Brien, Group Energy Manager at Klöckner Pentaplast

When securing a commitment for an energy management strategy from senior management, you should never ever forget to start with the 'why'. Find out the intrinsic motivation your senior management stakeholders have to engage with energy, and go after it. What are those key drivers that shape unique position and vision of the organisation? Energy managers believe that from the boiler room to the boardroom, smarter use of energy benefits business at every level. Your job is to make the Executive Team believe it too.

When structuring an energy management strategy, you should never ever talk of energy efficiency as an end goal in itself.
The use of the term 'energy efficiency' is unenticing to most people most of the time. A focus on energy productivity is easier to conceptualise for many people. Communicate the myriad of strategic benefits from increased energy efficiency – not just energy or cost savings,

but also health, safety, well-being and all-round improvements in productivity. Build on historic success of the business by using the levers that are already integrated into how things are done.

When measuring your performance against targets, you should never ever rely purely on specific energy consumption (kWh / kg) to measure performance in a manufacturing environment. This performance indicator can be very misleading if there are big changes in production volumes. Acknowledge that performance cannot be measured using a single KPI, and look for a more holistic approach. Have the imagination and clarity to think and see things differently.

Leigh Hitchens, Managing Director at Coral Energy Limited

When securing a commitment for an energy management strategy from senior management, you should never over-estimate potential savings or shorten payback periods. Be realistic with what you are trying to achieve and back up proposals with scientific facts and figures, for example life-cycle cost analysis for new equipment installations.

When setting energy management goals, you should never overstretch targets. These should be honest and realistic, challenging but achievable otherwise expectations for delivery will likely be greater than can be achieved.

When identifying consumption patterns, you should always understand why the 'shape' is as it is. It is particularly important to understand why the patterns are showing what they are. For example, an increase in night consumption could be due to a malfunctioning piece of equipment, incorrect control settings or perhaps a new night shift introduction. It is key to understanding operational processes in detail.

When setting 'smart' targets, you should never rely solely on this methodology to achieve your goals. SMART goals should be specific and measurable so evaluation can be objective. However, if applying the same criteria to measure success or failure, it can motivate people in the wrong way, which can be problematic. Have back up target methodologies.

When developing a business case, you should never over-commit. A business case must be tailored specifically to the business and personnel that will be evaluating your proposals, likely to be senior or board level members. Do not seek the perfect ROI, ignore internal personnel costs, or believe you have finished when the case has been submitted. The business case should be an on-going roadmap or long-term plan for success requiring continual review and analysis to keep on track.

When structuring an energy management strategy, you should never assume you know all the answers.

What you should do is:

- Appoint an energy manager or outsourced energy management company to drive and support your strategy.
- Understand the issues; what are they, how can they be resolved.
- Plan and organise; create a plan and maintain a 'project' approach.
- Develop the strategy; plan accordingly but continually review and analyse progress and milestones.
- Involve stakeholders and relevant personnel.

Control, monitor and report on findings, feedback and progress.

When measuring your performance against targets, there are numerous key criteria that your KPIs should meet:

- KPIs should be intricately linked to not only performance but business impact i.e. company goals for energy.
- KPIs need to be quantifiable; if you are unable to easily reduce the number to a manageable number, there will be too much scope for variation and inconsistency.
- KPIs should relate to aspects of the business environment over which you have some control.

John Kyffin-Hughes, Low Carbon SMEs Business Engagement Manager at Aston University

I have been working in energy management for what seems quite a long time (approaching 20 years). Over this period, I consider myself fortunate to have had the opportunity to work for and influence a variety of organisations; supporting them to improve their energy management performance. Coventry City Council, the long since gone Peugeot Ryton Manufacturing site, and now numerous small and medium manufacturing companies, all number among the organisations I have helped.

Energy management has never been as important. Underpinning the step change in energy management necessitated by the journey to zero carbon should be a comprehensive and robust energy management strategy. Whether a public sector organisation, multinational

company or a small medium sized manufacturing company, an energy management strategy is nowadays essential to manage the business risks associated with increasing energy prices, security of supply and a changing energy landscape. However, developing and implementing an effective energy management strategy is not a given. I have witnessed and hopefully followed best practice, but now and then I have come across examples of poor practice, of what not to do and where results should have been so much better.

Therefore, I would like to share with you some of the errors to be avoided when embarking on developing, obtaining approval and delivering an effective energy management strategy. To make it somewhat more visual, I have likened the development and implementation of an effective energy management strategy to taking part in a 110m hurdles race. Hope you like my analogy and feel free to be creative and expand upon it.

When securing a commitment for an energy management strategy from senior management, you should never ever assume that senior managers will be supportive of the energy management strategy and are experts in energy management. Not doing your homework as to how energy management complements the objectives of the business and contributes to minimising business risks; coupled with offering a vague idea of the resources, costs and benefits of the strategy is a sure-fire way of losing credibility and failing to gain senior management commitment.

However, even if you have done your homework thoroughly, if the strategy is overly technical and in a language that non experts find baffling, then expect some puzzled senior managers and a tough time getting the energy management strategy signed off.

Race analogy: Did not do your pre-season training and you start the race sluggishly then crash into the first hurdle. Race over.

When setting energy management goals, you should never ever ignore the principles of good energy management or the opinions of colleagues.

There is no need to reinvent the wheel, ISO 50001 provides a best practice framework for energy management; a simple gap analysis will identify your areas of weakness. Setting inappropriate goals that either do not reflect your organisation's level of ambition or are so ambitious that they are seen as totally unrealistic by colleagues will soon start to undermine the credibility of the strategy. Usually this scenario occurs when setting goals in isolation and not involving colleagues.

Race analogy: Missing a key element of running a good race like having no running shoes and finding out each hurdle is over 2m in height.

When identifying consumption patterns, you should never ever assume all data is good quality data. In computer science, there is a maxim Garbage in, Garbage out. Poor quality data leads to poor quality analysis and poor quality decisions. When analysing energy data, which gives unusual consumption patterns, always question the veracity of the data first before reaching any conclusions. Ask yourself, has the person supplying the data changed? Are meters working correctly? Are the metrics chosen to normalise consumption against meaningful?

Race analogy: Told race start time is 3pm in London when it is actually 2pm in Birmingham.

When setting 'smart' targets, you should never ever forget that SMART stands for Specific, Measurable, Attributable, Realistic, Time bound. Ignore one of these attributes at your peril. Usually 'A' in SMART is given as standing for 'Achievable'; personally, I prefer 'Attributable' to establish ownership of a target. Also, never assume past performance is a good basis for setting new targets. Past performance is history. Evidencing where you have come from will give you an appreciation of the progress made but new targets should reflect current and expected future circumstances.

Race analogy: Running the race backwards and not looking towards the finish line.

When developing a business case, you should never ever ignore whole life costing. Initial project costs are important, but a business case needs to reflect financial and business benefits accumulated over the whole life of the project. Maintenance and energy consumption being the most common items that can swing a business case.

Race analogy: Having the power to move the finish line and height of the hurdles but not using it.

When structuring an energy management strategy, you should never ever fail to clearly communicate what is expected from all those that have a role to play in delivering the energy management strategy and never ever fail to include governance arrangements in the energy management structure. Avoid energy issues becoming the sole responsibility of the energy manager. The energy management strategy needs to be a strategy for whole organisation which everyone can relate to and understands their contribution.

Race analogy: Running with ankle weights and carrying a fellow competitor.

When formulating an implementation plan, you should never ever assign more than one person the responsibility to complete a task, assume other department's resources are at your disposal and set deadlines other departments without consultation.

Completion of a set task in the implementation plan task may well be joint effort between a number of colleagues and departments but the responsibility for delivering the task should be assigned to an individual or single department. Formulating the implementation plan needs to be a collaborative effort, involving those departments that will be required to contribute. Working in collaboration with key partners will engender support for the implementation plan making it more likely to be delivered.

Race analogy: Race delayed because the two race adjudicators are busy adjudicating another event. Race ends in a photographic finish but the adjudicators cannot agree on who has won. It takes many hours of wrangling before the race result are given.

When measuring your performance against targets, you should never ever leave collation and analysis of performance data until the very last minute, just before you need to report on your progress. It is not very helpful finding out that the organisation is way off meeting its 2-year climate change reduction target with only 2 months to go.

Race analogy: Checking your race equipment 10 minutes before the start of the race to find out you have left your shorts behind.

When reviewing the energy management strategy, you should never ever accept a quick 5-minute informal chat with the senior manager given responsibility to champion energy while they are having lunch as a substitute for a formal meeting involving the entire senior management team.

A review provides the opportunity to reflect on past performance, learn from successes and failures, adapt to changing circumstances, engage with senior managers, and provides a forum to where the organisation can demonstrate leadership. Another tip, never assume that the review board has read your review report before having the review meeting.

Race analogy: You have run a good race, but you know the next one will be more testing and that you still can improve. You seek feedback on how you should prepare from your nutritionist, performance coach, physiotherapist and physiologist, but all are unavailable apart from the physiotherapist's assistant.