CONSTRUCTION WHITE PAPER

How management systems contribute to sustainable development in construction

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Introduction

In this increasingly competitive market for the construction industry, how do you secure long term future and ongoing success? There is no one answer to this dilemma. However, one solution is to develop your business in a sustainable way so that it is as efficient and effective as possible in delivering your products or services and satisfying, if not exceeding, your stakeholders’ expectations and needs. In doing this, you can ensure that your organisation is in the best position to differentiate itself from your competitors and respond successfully to tenders.

The construction industry is certainly facing some significant challenges. According to the HSE 2.2 million people work in Britain’s construction industry making it the country’s biggest industry. But it is also the most dangerous. In the last 25 years, over 2800 people have died from injuries they received as a result of construction work. In the period 2008/2009, 180 workers were killed in total – 53 of them from the construction industry. A further 132,000 other work related injuries and illnesses were reported in the same period.

The construction industry is also responsible for an estimated 120 million tonnes of construction, demolition and excavation waste each year – around one third of all waste in the UK. According to WRAP, more than 25 million tonnes is sent straight to landfill without any form of recovery or reuse.

So, whether you are a client, an architect, a planner, a building contractor or a manufacturer of building products, your activities are having some impact on society and the environment.

Sustainability lies at the heart of construction – the objectives being to create buildings that are healthier for occupants, people in the neighbourhood and the natural environment, use fewer resources and are cheaper to run. Indeed buildings are now being measured for their environmental performance under schemes such as the Code for Sustainable Homes (CfSH) or the BREEAM schemes.
To be sustainable, organisations need to address the following business needs:

- Improve resource efficiency (including electricity, fuel, gas, water and materials)
- Reduce operating costs (including energy bills, waste disposal costs, landfill tax)
- Improve quality of goods and services
- Improve regulatory compliance
- Reduce costly environmental and health and safety accidents and incidents
- Minimise risk of legislative breaches and associated fines and prosecutions
- Protect and enhance company reputation and brand image
- Meet increasingly demanding customer needs such as responsible sourcing of construction products, CFSH and BREEAM
- Retain good staff to keep recruitment and training costs down
- Increase productivity and profitability
- Increase competitive advantage through differentiation

The management systems solution

One approach to help you address these challenges and business needs is the adoption of management systems. Whilst many organisations will have some form of management system in place, there are a number of national and international standards that have been developed by experts and interested parties to provide a best practice framework for managing various elements of business operations such as quality, environmental performance and health and safety amongst others.

These standards are based on the Plan Do Check Act (PDCA) approach made popular by Deming in the 1950’s. PDCA puts processes into a continuous feedback loop so that those areas of the business that need improvement can be spotted and acted upon. Most management system standards will have a planning element which includes the requirement for a policy, objectives and programmes. The implementation element includes requirements addressing resource needs, training and competence, control of documents and records and operational controls. The check elements include requirements for monitoring and measuring performance of operational controls and processes to see if they are effective and requirements for corrective and preventive action where they are not. Finally, there are requirements for reviewing performance against policy and objectives and adjusting programmes to ensure continual improvement.
Standards for the construction industry

The national and international standards that will help construction organisations address their business needs include:

- **BS 25999** – Business continuity management system – to enable you to understand the risks to the continuity of your organisation and the potential impacts of events that can disrupt your ability to continue to supply your goods or services.

- **ISO 9001** – Quality management system – to ensure that the quality of service meets, if not exceeds customers’ expectations and so secure repeat business.

- **ISO 14001** – Environmental management system – which provides a framework to identify and manage the environmental impacts and applicable legislation and put processes and checks in place to minimise those environmental impacts. This standard will help you identify and conduct good waste management practices resulting in minimisation of waste; reduce waste disposal costs and other operating costs, improve legal compliance, and minimise the risk of accidents and environmental breaches and associated costs and fines.

Implementing ISO 14001 has heightened awareness of all the environmental aspects of ACO’s business, has standardised the approach to key responsibilities and has improved understanding of best practice. “By challenging everyone to consider how they approach their tasks within the company’s developing environmental framework, there has been a new level of creative thinking, a greater sense of shared responsibility and a closer, more open relationship with our suppliers and customers.” (ACO)

- **BS EN 16001** - Energy management system – which focuses specifically on energy use and management to identify and action opportunities for reductions in energy use. It can help you reduced your energy bills and your CO₂ emissions.

“Certification has proved an extremely valuable tool for us to demonstrate energy management best practice to our stakeholders,” says Mr Paul Kelly, Head of Marketing at Morgan Lovell. “We strongly believe that it will give us competitive advantage and help us secure and increase new business opportunities.” (Morgan Lovell)

- **BS OHSAS 18001** – Occupational health and safety management system - to identify and manage the hazards and risks and ensure the health and safety of people working for and on behalf of your organisation. This standard can help you reduce work related ill health, reduce accident and incident rates, increase productivity and lower operating costs. BS OHSAS 18001 certification with BSI is also recognised as meeting the stage 1 requirements of the PQQ process through BSI’s membership of the Safety Schemes in Procurement (SSIP) forum.

Borras Construction sees certification to health and safety as key to its success. By engaging its staff, suppliers and subcontractors in the development of better processes, the company is developing its knowledge of risk and improving health and safety onsite. This, in turn, improves the service provided to their customers. (Borras Construction)

- **PAS 99** – Integrated management systems – this specification provides the framework to help you to bring two or more management systems into one holistic approach to management – making the management of these much easier and joined up. This will help you increase efficiency, productivity and ultimately profitability.

Working with BSI has given David McLean Contractors third party reassurance that applicable laws and regulations are continually observed and that the organisation’s social, environmental and financial risks are being addressed. (David McLean Contractors)

- **BES 6001** – Responsible sourcing of construction products. The standard will help you not only improve the management and impacts of your own activities but will help you better engage with and improve the performance of suppliers, meet customer needs and protect your reputation.
Benefits of using recognised standards

Using recognised national and international standards can bring a number of benefits to an organisation:

• As previously mentioned, standards represent best practice in management systems so this will save you time and effort in developing your own system.

• The standards provide the framework around which procedures need to be defined. The sheer act of process mapping can help you to eliminate redundant and duplicate processes leading to more efficient processes.

• Documented systems and processes also means that it is easier to make changes.

• Communication and training ensures that staff know what they should be doing. They feel happier and are more likely to be motivated and comply with procedures. Indeed staff may even come up with suggestions for improvements.

• Most standards have an element of self-check in them to ensure that you are doing what you say you do. This increases confidence that robust data is gathered on which to base important business decisions such as investments contributes to the production of Corporate, Social Responsibility Reports CSR or sustainability reports satisfying stakeholders needs.

• Having systems in place to monitor and measure controls also means that, where accidents, incidents or deviations do occur, you are able to spot them quicker, respond quicker and therefore be able to recover quicker with the impact on operations and cost being reduced.

• Many management system standards are written such that an organisation can be independently assessed and certified against them. This gives confidence to your customers and investors that you undertake your responsibilities seriously.

• Standards have international recognition, which enables products and services from one country to be accepted by other countries, meaning greater access to new markets and more opportunities for growth.
Demonstrating compliance through third party certification

Having implemented these best practice standards, most organisations will want to be able to demonstrate their good management practices to their stakeholders. Whilst you could self declare your compliance, which may satisfy internal management, it may not satisfy all your stakeholders. Most management system standards have been written such that they can be independently assessed and certified against by a third party with no user interest in the organisation – such as BSI.

Certification is an independent assessment of an organisation's implementation of a management system in accordance with an internationally agreed standard of best practice and comes with a number of benefits:

- Having a fresh set of eyes come and assess your system can help to stimulate new ideas and continually improve. The assessor can share good practice experience without compromising confidentiality.

- Having an independent assessor coming in can give the added boost to staff to comply with your procedures and processes. They are less likely to think they might be able to pull the wool over the eyes of an external assessor than an internal one and are more likely to comply if they think their certificate of registration might be jeopardised if they don’t.

- Where relevant, third party assessments can ensure that your system for identifying and ensuring compliance with legal compliance is effective, therefore helping you to minimise the risk of breaches and reduce the likelihood of fines.

- Certification can be a differentiator helping you to gain competitive advantage, retain your existing customer base and attract new ones.

- Having a certificate of registration can make it easier to complete and win tenders and reduce the number of second party audits. For example, more and more invitations to tender are asking for certified environmental management systems to be in place.

- The certificate of registration demonstrates your confidence in being open and transparent and this independence provides robustness and integrity to the assessment process adding credibility to any claims you are making.

- Having a certificate gives you the means to demonstrate with credibility to both internal and external stakeholders that you do have an effective management system in place that it continues to improve. This can enhance your reputation and make you more attractive to new investors and help you to retain existing ones.
Summary

The main objective within the construction supply chain - from material extraction to the final building client - is to make it better value. Standards provide a systematic framework to identify issues and put controls in place to manage and monitor organisational issues. Not only will your organisation be more efficient and profitable, but you will also improve your reputation for being a responsible organisation when it comes to people and the environment.

Whilst your organisation may be seeing a quieter period, you have time to review and improve your existing processes and procedures. Although implementing a management system will likely involve some initial costs, these investments will bring both short and long term cost savings and increase profitability. Simply reviewing your existing processes and practices can identify no or low cost efficiency savings and give you robust information on which to base investment decisions – to make the most of limited resources. Any changes to the ways of working can then be controlled and monitored to ensure they are effective. Finally, the review mechanism provides management with robust data on which to make further changes for continual improvement. Ultimately, management systems are about changing behaviours, hearts and minds to ensure long term success.

A full copy of the case studies mentioned in this article can be downloaded at [www.bsigroup.co.uk/improve](http://www.bsigroup.co.uk/improve).

Next steps

For more information on the standards mentioned in this paper or on the certification process and training courses, please contact our certification sales on 0845 080 9000.
The BSI certification mark can be used on your stationery, literature and vehicles when you have successfully achieved certification.