

Current health and safety issues in the construction industry



Abstract

This journal is an accumulated and concise study into the discussion of the current problem with Health & Safety in the construction industry looking into the leading regulations which involves Health and Safety at the workplace. While scoping the general problems in the construction industry....

Introduction

The focus of this report is to critically appraise the statement considering the different environmental assessment methods that can be used. While researching into whether Health and Safety has been incorporated into these processes or how it can be implemented alongside the assessment methods, this will be completed by focusing on UK construction and the procedures most commonly used.

To ensure that buildings in construction add value to the client's portfolio, various credentials have to be demonstrated throughout the process. High Environmental credentials are vital to present the building in a positive way while allowing for direct comparison to other buildings. The leading environmental assessment methods are BREEAM and LEED. This is backed up as according to BSRIA (2009) with BREEAM being the leading assessment method in the UK (Richard McPartland, 2016). But are other smaller methods such as;

☂ SKA

☂ HQM

☛ CEEQUAL

☛ DREAM

The projects also must comply with the relevant Environmental Laws such as The Environmental Act 1995 whilst complying with a relevant EU and UK Law. Although such high environmental assessment methods will ensure that the project comply with all current Laws that are necessary.

The Health and Safety Regulations will vary depending on a case to case basis, some of the Laws used are Health & Safety at Work Act 1975, Working at Height Regulations 2005 and CDM15. With these laws being followed and being implemented on site it will in turn present a positive approach to Health and Safety on any project.

During this Report the Value of the building is interpreted as the estimated price which the building will transact in the market between a willing buyer and the seller. While also factoring in how the client is portrayed on the basis of their building.

While looking at what Buildings really adds value to a client's portfolio there seems to be an underlying answer which is ensuring that the building presents a positive image on client. Although finance has a great impact to deciding the outcome of the project, high environmental credentials and full compliance with Environmental Law is key to adding value. And while researching this there seems to be an underlying principle which is a positive Health & Safety approach which is implemented at different stages in Law and Environmental assessment processes. With Health & Safety incorporated

under post occupancy in the assessments, while in Law Health & Safety incorporated throughout.

Literature Review

Introduction

As more construction projects in the UK are increasing the importance of high environmental credentials to promote a positive approach on the Environment and promote a sustainable project, which in turn promotes a positive outlook on the client and the building which increases value. This is backed up by BSRIA (2009) which states that displaying green credentials is becoming vital to displaying that a company is keen on their building being green.

BREEAM and LEED are the leading processes for these Environmental assessments (BSRIA, 2009) which both follow the same basic principles of Global Warming, the Environment and Sustainability. While issuing measures to meet with such requirements as 1997 Kyoto Commitment. These methods cover the same issues;



Energy



Waste Generation



Materials

Environmental Credentials- BREEAM

In 2009 BSRIA did a comparison between BREEAM and LEED looking at the strength and weaknesses. This paper findings state that BREEAM has been <https://assignbuster.com/current-health-and-safety-issues-in-the-construction-industry/>

the leading assessment method in the UK building industry for nearly 20 years, findings are backed by (Richard McPartland, 2016) which states that BREEAM dominates the UK market. These findings suggest that in UK to ensure that High Environmental Credentials are required BREEAM is the preferred method. This is also backed up further by the document as it says that in the UK BREEAM is fixed in the system, this is due to many governing bodies requiring BREEAM ratings for all buildings as well as many local authorities

The paper also states that there should be no direct comparison between assessment methods like BREEAM and LEED, rather both should just co-exist and share ideas so direct comparisons between buildings can be made (BSRIA, 2009). This is supported by (Starrs and Burrows, 2010) which states both systems are learning from each other to improve each process.

Finally, one of the main reasons BREEAM is chosen is due to trained assessors who assess the evidence against the credit criteria and report it to the BRE, who in turn issues certificates (BSRIA, 2009).

Environmental Law

CIOB stated in their Carbon Action 2050 on the Environmental Legislation and Incentives in the UK. The aim of this paper is to display current laws that protect the environment and promote a sustainable agenda while applying to the UK construction Industry (Carbon Action 2050).

Laws that have been introduced to achieve this environmentally friendly approach are Climate Change Act (2008), CRC Energy Efficiency Schemes

and EIA – Environmental Impact Assessments (Carbon Action 2050) and with these laws in place such statements as the UK possibly adopting higher targets to avoid climate change (TSO, 2008) are now suitable targets for UK Government.

Health and Safety

In 2013 Reyes et al said that Sustainable development requires simultaneous development of four interconnected measurements; economic, social, environmental and technology (Reyes et al., 2013). Meanwhile IOSH (2015) take a slightly different approach of different measurements; Working Environment, Systems and People & Organisation. Which manages all the risks associated with all of the above and shows how they interlink within the H&S management.

There seems to be a trend that social aspects are the main driving point of sustainable development (Reyes et al., 2013). Which is backed by IOSH (2015) as states that safety management should embrace people and the working environment in the organisation, this if completed correctly will improve effectiveness of the site. Which in turn improves the H&S as when all on site partake in a positive approach and take responsibility for their own and other peoples H&S then accidents and near misses can be reduced dramatically.

The journal also states that sustainable development is a new discipline and especially when considering the construction industry so there for limited research has been established (Reyes et al., 2013). Which means that although sustainable development is key to ensuring H&S and in terms of <https://assignbuster.com/current-health-and-safety-issues-in-the-construction-industry/>

adding value to the project, there is still a large way to go in terms of effectiveness of Sustainable Development. Also ensures that with this constant improvement H&S is going to see benefits as the capacity to develop information increases.

H&S should be integrated thought out the entire project and life cycle as accidents can then be foreseen before they happen and also prevented, with this process having the greatest relevance in the initial phases. (Reyes et al., 2013) This being said currently H&S is only analysed alongside sustainability and not under one analysis.

Discussion

How does BREEAM add Value to Clients Portfolio?

While looking at the different environmental assessment methods, BREEAM has been focused on due to it being the leading method in the UK. This being said there are many elements in BREEAM that can be considered to add Value, one element is that BREEAM focuses on over 49 credit issues such as Materials, Pollution, Transport and Energy (Parker J, 2012). Which ensures that all aspects of the project are assessed to guarantee the highest quality overall finish.

Secondly BREEAM is considered the bench mark standard for promoting environmental awareness (Parker J, 2012), which is why it has seen Governments both Local and Central all-round the UK adopting BREEAM rating Very good as the minimum expectation for new buildings. This shows that to achieve the maximum value for the project BREEAM is a necessity in

many areas to ensure the building gains the most positive attention, which can lead to higher sale costs. Leading on from this there are reports that have been published by World Green Building Council (2013) which state that there is a percentage increase in sales prices for BREEAM rated buildings, up as high as 17% in 2012. Also shows and increase rental premiums compared to conventional building with an average percentage increase in 2013 of 19. 7% (Worldgbc. org, 2013), this is a clear indicator that BREEAM has a direct correlation with adding value to a build.

BREEAM can also add value to the client as if promoted correctly as can boost the clients PR as promoting high ratings in the assessments can put themselves at the forefront of the public sector in the chosen field (Parker J, 2012). From this clients are motivated to try and

Achieve maximum value for their build and look to differentiate themselves from others by striving for higher ratings and adding a unique selling point to their builds, which in turn adds value to the building and the client. This is backed by other such research which states that BREEAM- rated buildings increase a company's industry standing (Townley, 2017).

In terms of compliance with the law BREEAM goes above the requirements and concentrates on promoting exemplary environmental performance, while throughout addressing key elements such as; technology, sustainability and legislation (Greengage Environmental, 2017). Such laws that are meet during the process are;

☂ Environmental Act 1995

☂ Control of Pollution (England) 2001

☂ Water Resources Act 1991

How Health and Safety can be incorporated in Environmental Assessments (BREEAM)?

Currently there is no direct link between H&S and environmental assessments, backed by 2013 Reyes et al which says no assessment integrates H&S under a single tool. Although this is the current state there is progress being made linking H&S with the effects on sustainability in the construction industry which is one of BREEAM's main requirements. The research that is being conducted has linked the effects of worker accidents and fatalities on the financial aspects of the projects which is taken into account for safe/ sustainable construction (Reyes et al., 2013). This research is vital as not only does it encourage current construction projects to improve their H&S protocols to reduce accidents and fatalities, but also brings them question of why H&S isn't involved in environmental assessments to such companies as BREEAM.

Health and Safety could be incorporated under assessments of management as the importance of high H&S levels throughout all stages is vital. The assessments could be based on key activities and how they are organised, implemented and monitored throughout the life-cycle.

Considerate Construction Scheme (CCS) This scheme is used to help achieve required ratings to achieve BREEAM. Where BREEAM award credits for compliance with CCS, from 1 credit for compliance to 3 credits for

demonstrating an exemplary level of practice. With CCS considering H&S of high importance (Ccscheme. org. uk, n. d.).

(Hinze et al., 2013) State that to not account for the H&S of the workers essentially indicates that a holistic view is somewhat limited or incomplete. Therefore the environmental impacts and the H&S of construction should be unified to produce a more rounded advantage to the assessment methods.

Definition of sustainable construction is to present generation without compromising the future generation (Supplychainschool. co. uk, n. d.)

What systems and Regulations promote a positive approach to Health and Safety?

The construction industry has one of the highest accident rates in comparison with all other industries so this needed to be addressed.

A positive approach to health and safety is vital to adding value to the client's portfolio this is due to a poor health and safety culture in construction can lead to weaknesses and problems at the work place. Which in turn has a negative impact on the quality of the build, therefore a poor culture can result in unsafe and unproductive working environment (Iosh. co. uk, 2015). So promote a positive safety culture, construction sites must follow safe working practices that comply with such laws as;

☛ Health & Safety at Work Act 1975

☛ CDM15

☛ COSHH

<https://assignbuster.com/current-health-and-safety-issues-in-the-construction-industry/>

A common element which is followed throughout all best practises is the Willingness to learn from accidents etc. and the continual improvement to improve safety. (Iosh. co. uk, 2015)

Poor management has many financial implications for any business so one way of controlling the risks discussing issues with the workers and see what is already being done, then compare to the industry standards (Hse. gov. uk, 2013). From this risk assessments can concentrate on certain aspects e. g. Where the nature of the work changes frequently and project develops (Construction Sites)

<https://app.croneri.co.uk/feature-articles/role-managers-promoting-positive-health-and-safety-culture>

Conclusion

From reviewing all of the factors that need to be demonstrated to add value to the client's portfolio, there seems to be a defining answers for each element. That is proven by similar perspectives made by the different journals and webpages.

Has health and safety over the years improved and how?

How significant is Health and Safety ...?

Where is it implemented and considered?

References

<https://assignbuster.com/current-health-and-safety-issues-in-the-construction-industry/>

- Bsria. co. uk. (2009). *BREEAM or LEED – strengths and weaknesses of the two main environmental assessment methods* . [Online] Available at: <https://www.bsria.co.uk/news/article/breeam-or-leed-strengths-and-weaknesses-of-the-two-main-environmental-assessment-methods/> [Accessed 5 Nov. 2018].
- McPartland, R., McPartland, R., Carson, J., McPartland, R. and McPartland, R. (2016). *What is BREEAM?* [Online] NBS. Available at: <https://www.thenbs.com/knowledge/what-is-breeam> [Accessed 5 Nov. 2018].
- Starrs, M. and Burrows, V. (2010). *BREEAM v LEED* . [Online] Educnet. enpc. fr. Available at: https://educnet.enpc.fr/pluginfile.php/15200/mod_resource/content/0/breeamvsleed.pdf [Accessed 5 Nov. 2018].
- Carbonaction2050. com. (n. d.). Environmental Legislation and Incentives in the UK. [Online] Available at: <http://www.carbonaction2050.com/sites/carbonaction.cio1dev.com/files/document-attachment/4%20-%20Environmental%20Legislation%20and%20Incentives%20in%20the%20UK.pdf> [Accessed 6 Nov. 2018].
- Theccc. org. uk. (2008). Building a low-carbon economy. [Online] Available at: <https://www.theccc.org.uk/wp-content/uploads/2008/12/Building-a-low-carbon-economy-Committee-on-Climate-Change-2008.pdf> [Accessed 6 Nov. 2018].
- Iosh. co. uk. (2015). *Promoting a positive culture* . [Online] Available at: <https://www.iosh.co.uk/~media/Documents/Books%20and>

%20resources/Guidance%20and%20tools/Promoting%20a%20positive%20culture. pdf? la= en [Accessed 6 Nov. 2018].

- Reyes, J., San-José, J., Cuadrado, J. and Sancibrian, R. (2013). Health & Safety criteria for determining the sustainable value of construction projects. *Safety Science* , 62, pp. 221-232.
- Worldgbc. org. (2013). *THE BUSINESS CASE FOR GREEN BUILDING* . [Online] Available at: [https://www.worldgbc.org/sites/default/files/Business_Case_For_Green_Building_Report_WEB_2013-04-11-2. pdf](https://www.worldgbc.org/sites/default/files/Business_Case_For_Green_Building_Report_WEB_2013-04-11-2.pdf) [Accessed 7 Nov. 2018].
- Kaur, H. and Garg, P. (2018). Urban Sustainability Assessment Tools: A Review,. *Journal of Cleaner Production* .
- Parker, J. (2012). The Value of BREEAM. Bracknell: BSRIA
- Townley, K. (2017). *The benefits of BREEAM – GreenBuild Consult* . [Online] GreenBuild Consult. Available at: <https://greenbuildconsult.co.uk/the-benefits-of-breeam/> [Accessed 7 Nov. 2018].
- Greengage Environmental. (2017). *BREEAM 2018 – what is the opportunity? – Greengage Environmental Sustainability* . [Online] Available at: <http://www.greengage-env.com/breeam-2018/> [Accessed 7 Nov. 2018].
- Hinze, J., Godfrey, R. and Sullivan, J. (2013). Integration of Construction Worker Safety and Health in Assessment of Sustainable Construction. *Journal of Construction Engineering and Management*, 139(6), pp. 594-600.
- Supplychainschool. co. uk. (n. d.). *Sustainable Construction* . [Online] Available at: <https://www.supplychainschool.co>.

uk/uk/sustainability/construction/issues/sustainable-construction.aspx
[Accessed 7 Nov. 2018].

- Ccscheme.org.uk. (n. d.). *BREEAM, CSH and Ska ready for the new Code / ccscheme*. [Online] Available at: <https://www.ccscheme.org.uk/breeam-csh-and-ska-ready-for-the-new-code/> [Accessed 7 Nov. 2018].
- Hse.gov.uk. (2013). *Managing for health and safety*. [Online] Available at: <http://www.hse.gov.uk/pubns/priced/hsg65.pdf> [Accessed 7 Nov. 2018].