

Are Employers Seeking Sustainability Literate Graduates?

**A Review of the Importance of Sustainability within the Graduate Recruitment Process in
the Built Environment**

Final Report

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Executive Summary

This study explores how far sustainability criteria have been adopted as part of the graduate recruitment process of multidisciplinary built environment organisations in the private sector who recruit built environment graduates, particularly those in surveying.

The impact of the built environment (BE), particularly in the environmental sphere, is well documented, with buildings accountable for some 50% of carbon emissions in the UK alone. Additionally, within developed countries, people spend almost 90% of their lives inside buildings (OECD, 2003) and, as such, they form the centre for both economic activity and contribute, positively or negatively, to well-being. As Lorenz *et al* (2008) recognise, ‘the contribution of buildings and of the property and construction sector to sustainable development could be immense.’ However, whilst it is widely recognised that sustainability has placed ‘new demands on the core competencies of surveying professionals’, education for sustainable development (ESD) has not always been high on the agenda of BE education (see for example, Forum for the Future, 1999; Sayce, Ellison & Lewis, 2005). But, as the sustainability agenda has begun to increasingly grip surveying organisations, HEIs, driven by a range of government bodies such as the Higher Education Funding Council for England (HEFCE) and similarly by professional bodies such as the Royal Institution of Chartered Surveyors (RICS); have sought to embed sustainable development across syllabi.

Using structured questionnaires and follow-up semi-structured telephone interviews, the project seeks to establish to what extent adoption of the sustainability agenda within Higher Education (HE) and BE organisations is being reflected in graduate knowledge and skill sets and, crucially, whether organisations recruiting surveying graduates are seeking sustainability literate graduates.

The report finds that the sustainability agenda is undeniably high on the agenda of BE organisations, with many displaying positive response to the issues through both policy, such as CSR, and organisational practices and behaviours. However, this wider recognition has filtered through in a somewhat varied and patchy manner to graduate recruitment processes and requirements. The results further show that, despite a large proportion of employers indicating a current requirement for graduates to be ‘sustainability literate’, in reality, it is given little priority when it comes to recruitment decision-making, with ‘soft’ skills, although central to ‘sustainability literacy’, prioritised over technical knowledge. What is clear from the results is that, whether or not organisations are seeking sustainability

literate graduates today, expectation and requirement from employers will increase and HEIs and the courses they provide must equip graduates with these skills in order to maintain employability.

From these findings, the report recommends further action from HE bodies, HEIs and industry in order to progress the situation as follows:

- The development of 'soft' skills should be integrated and embedded into ESD;
- Feedback and communication loops between industry and HE and vice versa should be strengthened and harnessed to their full potential; and
- The demand for 'sustainability literacy' throughout the wider spectrum of BE professions should be further researched.

Introduction

The relationship between the built environment (BE) and sustainability is one which has been extensively explored. As Lorenz *et al* (2008) recognise, ‘the contribution of buildings and of the property and construction sector to sustainable development could be immense.’ As such, its impact, particularly in the environmental sphere; is well documented with buildings accountable for some 50% of carbon emissions in the UK alone. Additionally, within developed countries, people spend almost 90% of their lives inside buildings (OECD, 2003) and, as a result, they form the centre for both economic activity and contribute, positively or negatively, to well-being. Despite being repeatedly criticised for being slow to respond to the sustainability agenda (see for example, Sayce *et al*, 2007), recognition is increasing throughout BE organisations, as evidenced by the rapid growth of environmental and Corporate Social Responsibility (CSR) policies. However, whilst it is widely recognised that sustainability has placed ‘new demands on the core competencies of surveying professionals’ (Wong *et al*, 2007); education for sustainable development (ESD) has not always been high on the agenda of BE education (see for example, Forum for the Future, 1999; Sayce, Ellison & Lewis, 2005). But, as the sustainability agenda has begun to increasingly grip surveying organisations, HEIs, driven by a range of government bodies such as the Higher Education Funding Council for England (HEFCE) and similarly by professional bodies such as the Royal Institution of Chartered Surveyors (RICS), have sought to embed sustainable development across syllabi. Whilst these moves lay the foundation for sustainability literate graduates, little evidence exists to confirm whether BE organisations demand sustainability literate graduates and, indeed, whether the skills possessed by these graduates satisfy the requirements of prospective employers.

Aim and Research Questions

The aim of the project is to inform the higher education (HE) community of the perceived relevance of the ESD agenda within built environment (BE) professions, in particular surveying; and to investigate how this feeds through to the recruitment criteria. HEIs may respond to the employers' wants by adapting the curricula according to the data provided, thus the feedback received from the sector may contribute to improved employability of graduates across a range of BE disciplines, from surveying to planning to architecture. The research is particularly timely, as the findings of the Leitch Report (2006) into skills development starts to feed through into industry and HE relationships.

At the start of the project in May 2008, a set of key questions was formulated which sought to expand on the pilot study (Sayce, Ellison and Lewis) conducted two years previously in a graduate recruitment market characterised by high demand. The key questions for this follow-on study were revised in light of the rapidly changing market conditions and are as follows:

- To what extent is CSR and sustainability important to BE organisations? Has the importance placed been restrained in the face of the recent economic downturn?
- What skills, knowledge and/or attributes do employers consider important when recruiting graduates? To what extent is sustainability part of the graduate recruitment criteria? And, perhaps more importantly, has the rise of sustainability up business agendas led to different knowledge base and skills being demanded?
- Are professionals satisfied with their graduate recruits and their level of sustainability-related knowledge and skills?
- Is there a gap between the skills that professionals want from their recruits, and the content of university curricula?

The findings of these questions will provide an interesting comparison to the pilot study exploring the prevalence of sustainability in graduate recruitment at a time when intake is particularly selective.

Methodology and Approach to Research

The methodology for the project included:

- Detailed review of relevant literature
- Structured questionnaire distributed to 50+ large-scale employers within the BE sector who offered structured training programmes
- Three semi-structured follow-up interviews

Pilot Study

A pilot study was conducted in 2008 to test the appropriateness of the methodology and the effectiveness of the questionnaire to extract the information sought. Nineteen questionnaires were returned (a response rate of 19%, satisfactory for a pilot study). Taking on board the feedback from these responses, as well as considering the changing national economic environment, a meticulously-structured questionnaire was designed.

Suspension of Questionnaire Distribution

Following on from the pilot in 2008, distribution of the finalised questionnaire was intentionally held back. The Research Team considered that the rapid change in the economic climate and employment markets, particularly of graduates, would have resulted in a depleted response rate, as it could have been deemed insensitive timing during a period in which many employers were conducting redundancy programmes. Additionally, any data collected during a time of great uncertainty for BE organisations may have led to biased, unreliable and invalid data. Accordingly, at a time when many organisations were concentrating on retaining staff, or worse, cutting back, rather than recruiting, it was thought appropriate and sensitive to suspend release until the economic turbulence had settled to some degree within the property market. The economic conditions also meant that some re-wording of the questions was required.

The economic and recruitment situation was followed closely by the Research Team via the reviewing of literature and it was deemed suitable to undertake distribution in summer 2009, by which time organisations would have had the opportunity to review their recruitment policies and most had concluded their staff reduction programmes.

Final Survey

The final survey, contained in Appendix 1, was designed to investigate the extent to which sustainability principles were embedded in the organisations' values, in the market in which they operate and whether organisations had perceived a need to up-skill the workforce in respect of sustainability knowledge, skills and understanding. With reference to upskilling, organisations were asked specifically if sustainability skills and knowledge are attributes that they seek in their graduate employees.

The survey consisted largely of Likert scale questions and closed rating scales in order to ensure clarity and ease for the respondent to manage. Open questions were used sparingly and only when rich data was required. The questionnaire was developed and distributed using the online questionnaire tool, Survey Monkey. After collection of the questionnaires, the data was inputted and analysed in the statistical software package SPSS. Significance tests were carried out and open-ended question responses were categorized and coded for analysis in the statistical package.

Care was taken to ensure that the surveys were distributed directly to identified personnel within the respondent organisations. Persons believed to have the organisational overview and the capacity to indicate whether the sustainability agenda has affected service delivery and business practices overall, as well as possessing an insight into their organisations skills requirements, were thought to include people in a senior management role and the head of recruitment or those responsible for training. Consequently emails with an accompanying link to the online questionnaire were addressed directly to named people in these positions.

The sample BE organisations were chosen on the criteria of size and scope and the research focused on the largest organisations of their kind with a presence in the UK. The chosen criteria would suggest, firstly, that these organisations would have a regular intake of graduates from UK universities, and, secondly, that structured training opportunities to become fully qualified within the largest BE profession (Royal Institution of Chartered Surveyors (RICS)) would be provided. Although the firms approached mainly do offer structured training for other professions, such as Chartered Institute of Building (CIOB), Royal Town Planning Institute (RTPI) and Royal Institute of British Architects (RIBA), the questionnaire focused specifically on those who included RICS training, as that professional body had recently introduced a sustainability competency as a mandatory skill within its final assessment process.

The questionnaires were designed to highlight whether or not sustainability featured in the basic skills requirements of graduate employees and whether they were actively encouraged to develop their skills and knowledge in this field during the early stages of their career. Another factor of consideration was to include an equal number of target organisations with a focus on either construction-related services or real estate-related services, or a combination of both. The sample group was finally made up of almost equal numbers of real estate-focused practices and construction-focused practices. This selection was done deliberately to investigate differences between the two categories of organisations, and whether (as highlighted by the literature) the more construction-focused organisations would show a higher degree of awareness and active involvement.

In total, the questionnaire was distributed to 52 employers who, collectively, were estimated, in a normally operating market, to recruit in excess of 1,000 graduates each year. Despite the economic and recruitment circumstances, through the considered methodology and targeted distribution of the questionnaire, 22 responses were obtained, representing a heartening rate of 42%, particularly high for a study of this type.

Follow-up Interviews

The survey was followed up by three semi-structured telephone interviews with volunteer respondents. The findings from the survey analysis were further explored with the aim of obtaining some richer, in-depth qualitative data to support the analysis. The interviews, which lasted around 15 minutes, provided an opportunity to probe and investigate areas of interest that could not be thoroughly covered via the questionnaire.

Limitations

As detailed above, the rapid deterioration in the economic situation, and subsequent reduction in graduate recruitment particularly, presented significant difficulties for the study. Although the distribution of the questionnaire was suspended until market conditions had stabilised, this placed the project under time constraints and, due to this and the sensitive nature of the subject, the sample size was restricted, particularly in relation to follow-up interviews. A decision was made to focus the study on multidisciplinary BE private sector organisations offering a route to RICS qualification. It was considered that the wide range of professional groups supported by the RICS represented the broadest coverage of the BE industry through, for example, planning, property and construction. It was decided not to include architectural graduates seeking RIBA qualification due to the complex vocational and professional experience requirements.

Literature Review

What is Sustainability and Why is it Important to Built Environment Organisations?

Sustainability is not a new concept and its roots can be traced back many years, including to the rise of philanthropy during industrial revolution times. However, as a modern concept, it has its roots in seminal works, such as Carson's *Silent Spring* (1962) and Schumacher's *Small is Beautiful* (1973). More recently, the mainstreaming of sustainability as a triple-bottom-line (TBL) concept is commonly traced back to the Brundtland Report, *Our Common Future* (1987), which defined sustainable development as:

'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED, 1987)

Since then, the notion of sustainability has continued to evolve to describe an approach that addresses the social, economic and environmental challenges now facing the world and which can be implemented at global and/or local level.

The significance of the relationship between the built environment and sustainability considerations is increasingly well documented. The International Council for Innovation and Research in Building and Construction (CIB, 1999) clearly identified this significance with their *Agenda 21 on Sustainable Construction* report:

The pursuit of sustainable development throws the built environment and the construction industry into sharp relief. This sector of society is of such vital innate importance that most other industrial areas of the world society simply fade in comparison.

Established research shows that the built environment is responsible for 25-40% of total energy use and 30% of raw material use globally (UNEP, 2007; OECD, 2003). In the UK alone, buildings are accountable for some 50% of carbon emissions (see for example, Edwards, 1999; CCC, 2008). However, although sustainability as a concept includes both economic and social dimensions, much of the research levelled at the built environment focuses on its environmental impacts and, in particular, energy. As a result, those involved in BE professions now find themselves at the forefront of the sustainability debate. In response, many of the major professional bodies, such as the RICS, have taken significant steps to embed sustainability across their disciplines. Individual organisations have sought to embrace this changing business dynamic, with CSR policies becoming commonplace among those seeking to position themselves as responsible and responsive to sustainability

concerns. The potential for CSR to filter down into employee and recruitment practices was clearly supported through research by Business in the Community (2003), which found that not only can responsible practices empower employees to become advocates, but they can play a key part in the recruitment and retention of talent.

Wong *et al* (2007) recognise that this focus on sustainability has placed '*new demands on the core competencies of surveying professionals*' and across the BE, professionals are faced with the need to adapt and develop skills to meet new challenges. This need to adapt has been recognised throughout the built BE professions, with the Construction Industry Council (2004) revising its Common Learning Outcomes (CLO) for HE to include sustainable development within professional knowledge.

A great deal of literature has considered the potential 'skills gap' in those required to deliver sustainability within the BE. In particular, the Egan review of Skills (2004) highlighted a range of skills required and deemed inadequately displayed. More recently, the *Mind the Skills Gap* report, which specifically reviewed the skills needed for sustainable communities, found a significant shortage of suitably qualified professionals (Arup, 2007). The ability of the industry to meet the challenges and requirements of sustainability depends heavily on its ability to develop, attract and retain a suitably skilled workforce. A recent study carried out by Sayce *et al* (2008) found that, although graduates were technically well equipped, deficiencies were noted in relation to sustainability.

The Role of Higher Education (HE)

Alongside industry recognition, sustainability concerns have a strong influence within HE from both a policy and curriculum aspect. The strongest emphasis emanates from the UK government itself in its official sustainable development strategy, which highlights the need 'to make sustainability literacy a core competency for professional graduates' (HM Government, 2005). The *Higher Education 21 Project* (Forum for the Future, 1999) concluded that, whilst commitment to providing ESD was relatively strong, actual implementation through curricula and course programmes was disappointing. Since this report, the role of HE has become more central with the university and college sector marked by strong commitment to ESD as part of HEFCE's strategy (2005). The strategy promotes a holistic approach to ESD, emphasising that all graduates need to be 'sustainability literate' and challenges HEIs to consider the 5Cs: campus, curriculum, community, careers and competencies. The Higher Education Academy (2006) highlighted the benefits of graduates being 'sustainability literate', noting that such people will be:

‘Better placed to contribute to businesses who wish to respond to these issues. This may be through the development and implementation of policies for corporate social responsibility (CSR), promoting awareness of SD issues within organisations, or ultimately the delivery of both products and services that are resource efficient.’

A number of articles have sought to establish a definitional framework for the concept of ‘sustainability literacy’. In particular, Forum for the Future’s 2004 report identifies that the concept encompasses a range of ‘hard’ knowledge competencies and ‘soft’ interpersonal and decision-making skills. Additionally, the Sustainable Development Education Panel (SDEP) has challenged all professional bodies to place sustainability considerations at the heart of their course accreditation criteria (Pedran *et al*, 2000). Increased literature on incorporating sustainability through innovation in course curricula (see, for example, Roberts & Roberts, 2007) further highlights the increasing importance of this issue. The QAA Subject Benchmark (2008) specifically embeds sustainability into HE for BE. One of the most important reports calling for action at HE level is the Leitch Review of Skills (2006), which highlighted that, despite around 260,000 graduates entering work each year, the UK will fall behind competitors at degree level and above unless universities produce graduates with the skills that employers value. Despite this increasing focus, subsequent studies exploring sustainability in HE curricula have found actual implementation to be localised and ‘bubble up’, and very much a minority activity (see, for example, Dawe, Gant & Taylor, 2003).

Linking Sustainability, Employability and Recruitment

From an employability aspect, the relationship between sustainability in the industry – the demand side – and sustainability within HE – the supply side – is crucial. Employability is defined as:

A set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. (Enhancing Student Employability Co-ordination Team [ESECT, [2005](#)])

As Cade (2008) notes, the skills needs of the employers is the inevitable key driver in graduate employability, whilst Wong *et al* (2007) suggest that in order to produce ‘preferred’ graduates, HEIs need to understand the skills that graduates must possess to operate within the industry. As the Leitch Review highlighted, qualifications must reflect ‘economically valuable skills’. As such, with the increasing focus on sustainability and the ‘greening’ of the economy, sustainability skills look set to become essential for HE

qualifications. However, in order for this to occur, the Lambert Review (2003) recognises the need for feedback and collaboration loops between employers and universities through the Sector Skills Councils (SSC). However, the report identified that for employers to embrace the process, they will need tangible and direct evidence of an influence on university curricula.

As mentioned, a majority of BE professional bodies have sought to embed sustainability both in course curricula and competencies. The RICS, which will be investigated in this study, requires candidates to demonstrate understanding of sustainability through competency M009, which is tested through an Assessment of Professional Competence at the point of initial qualification. A study by Sponge (2004) into sustainability in the construction industry found that Continued Professional Development (CPD) training played a more influential role in equipping young professionals to address sustainability issues, with 50% rating coverage adequate or higher as opposed to 40% for academic education. However, it did find improvement in the coverage of sustainability at HE level over time. In the 36 to 65 age category, 42% stated that sustainability was not covered, while this figure fell to 14% in the 22 to 35 age group.

A number of studies have sought to establish whether the sustainability agenda, as experienced by employing organisations, is filtering down through to recruitment requirements, particularly of graduates. The pilot study, conducted by Sayce *et al* (2005), found that, although sustainability is becoming increasingly important for surveying practices, its impact on skill requirements was not significant and sustainability had yet to become an attribute required in graduate recruitment. Research by Cade (2008) for the Higher Education Academy found that over half of employers surveyed had at some time used social and environmental responsibility knowledge in their selection of graduate recruits. Research by Imperial College London and Engineers Against Poverty (2007) found that no company specifically referred to an understanding of sustainable development in job specifications for recruiting graduates and called for a stronger emphasis on sustainability issues within recruitment policies.

A study by the Centre for Biosciences for the HE Academy in 2005 found that the majority of respondents felt broad understanding of the concept of sustainability was quite or very important. In contrast, Archer & Davison (2008) found that employers prioritise 'soft' skills such as team-working and communication skills over technical knowledge or 'hard' skills, but this did not specifically address sustainability which, it can be argued, embraces both 'hard' skills such as knowledge of construction techniques and energy reduction measures

and 'soft' skills such as the need for inclusivity and social cohesion. A survey by Workforce.com found that 67% of managers would hire an applicant with strong soft skills, even if their technical skills were lacking (see Kearns, n.d.). Research by Branine (2008) found that the majority of organisations expected newly graduated professionals to have good transferable skills rather than excellent academic grades. The findings of the Archer & Davison study are not new, with studies as far back as the seminal 1995 report by the Association of Graduate Recruiters (ARG) finding 'soft' skills more important to employers. The important debate is whether sustainability constitutes 'soft' or 'hard' skills. Whilst the technical knowledge is recognised as a 'hard' skill, Salih (2006) advocates that 'soft' skills, such as communication and ethics/values, are an essential part of the blend of skills needed for sustainability. Moreover, research by Cade (2008) found that employers view sustainability literacy as much a 'soft' skill issue through individuals ethics and values, as a knowledge-based competency.

Conclusions

From the range of literature reviewed, it is apparent that the sustainable development agenda is firmly establishing itself as a key consideration for the BE professions. There is widespread recognition that sustainability will influence the skill set required of BE professionals, catalysing a need to up-skill in order to avoid the well-documented 'skills gap.' Literature also indicates that, although initially slow to react, HEIs are beginning to embed sustainability within course curricula, in order to ensure that graduates are being equipped with 'economically valuable skills' (Leitch, 2006). Whilst some articles have postulated a theoretical link between sustainability literacy and graduate employability, actual studies into whether sustainability is trickling down to recruitment requirements have painted a variable picture. The key debate which arose through literature is what 'hard' and 'soft' skills contribute to sustainability literacy.

In light of this existing literature, this study aims to extend the debate on the linkage between the sustainability and graduate employability by investigating whether employers within the BE and within the surveying profession specifically, are seeking sustainability literate graduates.

Findings

The Sample

The questionnaire was distributed to a total of 52 employers, with an overall response rate of 42%.

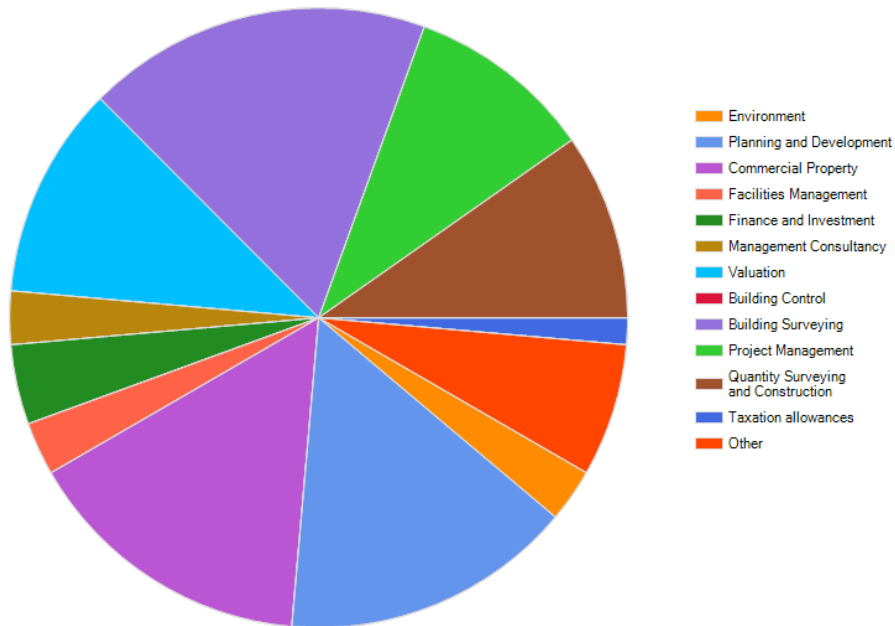
Distribution of the survey sought to achieve an even blend of large and slightly smaller private sector organisations and, as such, a variation of graduate intake sizes. In terms of graduate intake, the respondent organisations were relatively evenly split. The least populated were organisations with a graduate intake exceeding 20 annually (6%), while the others were split evenly amongst the remaining categories:

1 – 5 (annual intake)	28%
5 – 10	22%
10 – 15	22%
15 – 20	22%
20 +	6%

These graduate intake numbers relate to current practice in what is an atypical economic situation; most would have normally recruited numbers far in excess of these quoted above.

Although the study focuses on organisations offering a passage to RICS accreditation, the study sought to achieve a balance between those offering construction-related business lines and property-related business lines. The best proxy for this is the professional groups/routes supported by the organisation. The primary areas covered by respondents were Building Surveying (68%), Commercial Property (58%), Planning & Development (58%) and Valuation (42%). Overall, broad coverage across all RICS professional groups indicates a representative study.

What routes to RICS qualification are supported within your organisation?



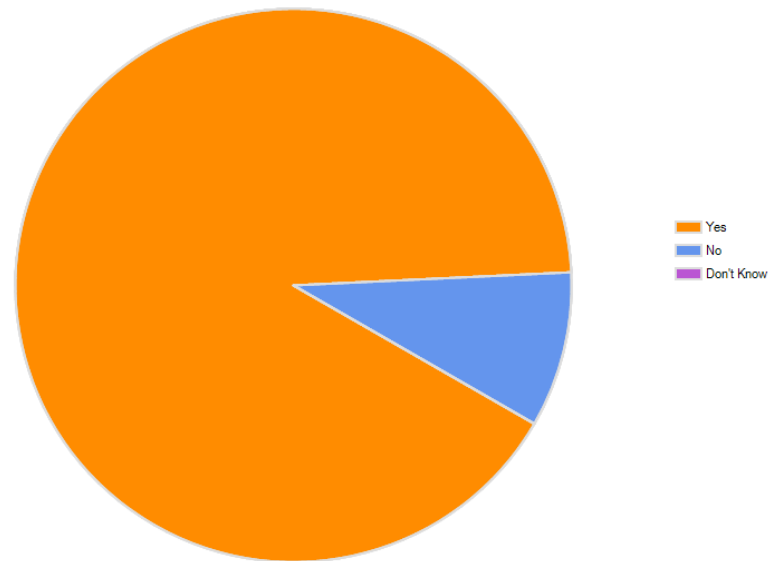
Within these organisations, the target individuals were primarily those involved in recruitment in order to ensure the best understanding of the graduate recruitment process was achieved in each case. Particularly in some smaller organisations where a separate recruitment contact could not be identified, the most appropriate person was selected, normally a director. Almost half of those who responded were involved specifically in recruitment, with around 20% involved in training and development. Twenty percent of respondents were senior management/partners, while others indicated positions such as human resources or general positions.

Is Sustainability Important to Built Environment Organisations?

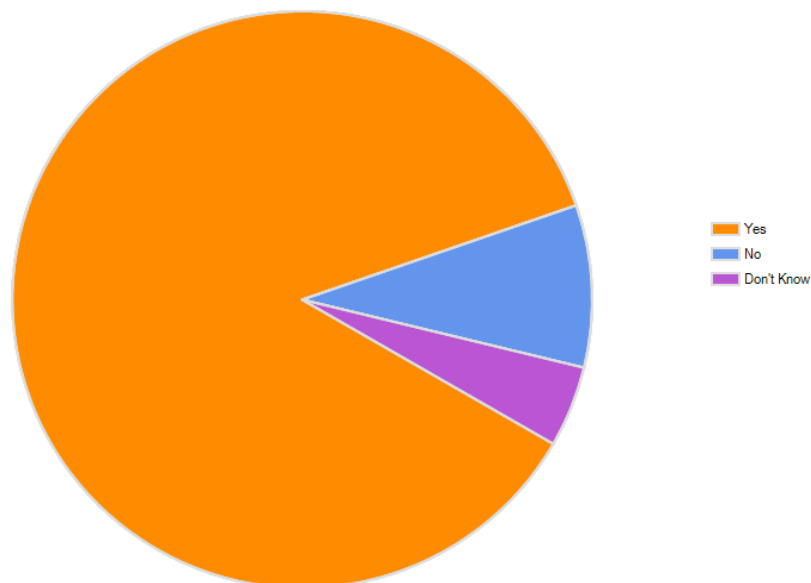
Central to understanding whether sustainability is indeed impacting upon graduate recruitment is the importance and prevalence of sustainability commitments within BE organisations. From a combination of responses, it is apparent that sustainability is playing an important role in BE organisations.

Nearly all employers (90%) had an environmental policy in place within their organisation and around 86% had developed a CSR policy. A similar amount (90%) of respondents indicated that, as a result of the sustainability agenda, the organisation had adopted or planned to adopt a dedicated sustainability policy and to report on performance.

Does your organisation have an environmental policy visible to people outside the organisation?

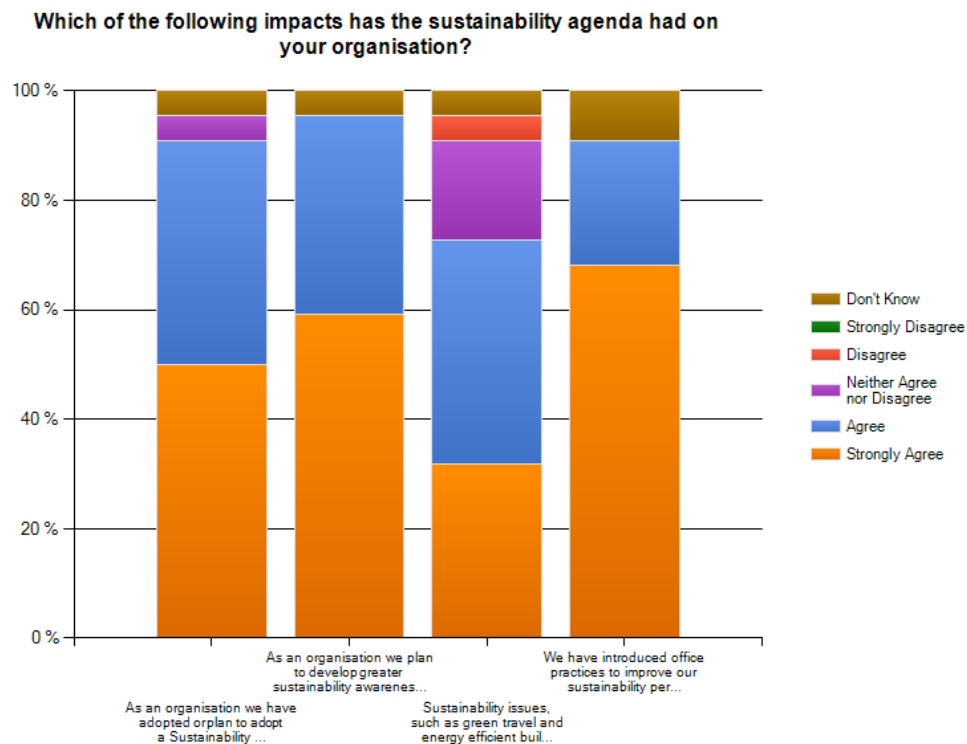


Does your organisation have a Corporate Social Responsibility (CSR) policy visible to people outside the organisation (e.g. on your website or through marketing literature)?



Results clearly demonstrate that sustainability is having a profound impact on organisational behaviours and practices. Around 95% of respondents agreed that their organisation attempted to encourage greater awareness and positive action from employees with regards to sustainability, with 57% strongly agreeing. Just over 70% of the organisations surveyed indicated that sustainability considerations influence their corporate accommodation strategy; however this is perhaps unsurprising given the BE focus of their operations. Additionally, almost all the organisations (91%) agreed that sustainability had

motivated change in office practices, driving waste reduction and energy efficiency, for example. However, these responses do not necessarily indicate action.



In terms of business, sustainability was perceived by most to have had a ‘reasonable effect’ on providing new business opportunities within BE organisations, with almost four fifths perceiving the effect to be 3 or above on the Likert scale (5 indicates a significant effect). However, only around one tenth felt this impact had been significant. In addition to this, it would appear that BE organisations view sustainability skills as effective in enhancing business competitiveness, with over 77% indicating 3 or above on the scale.

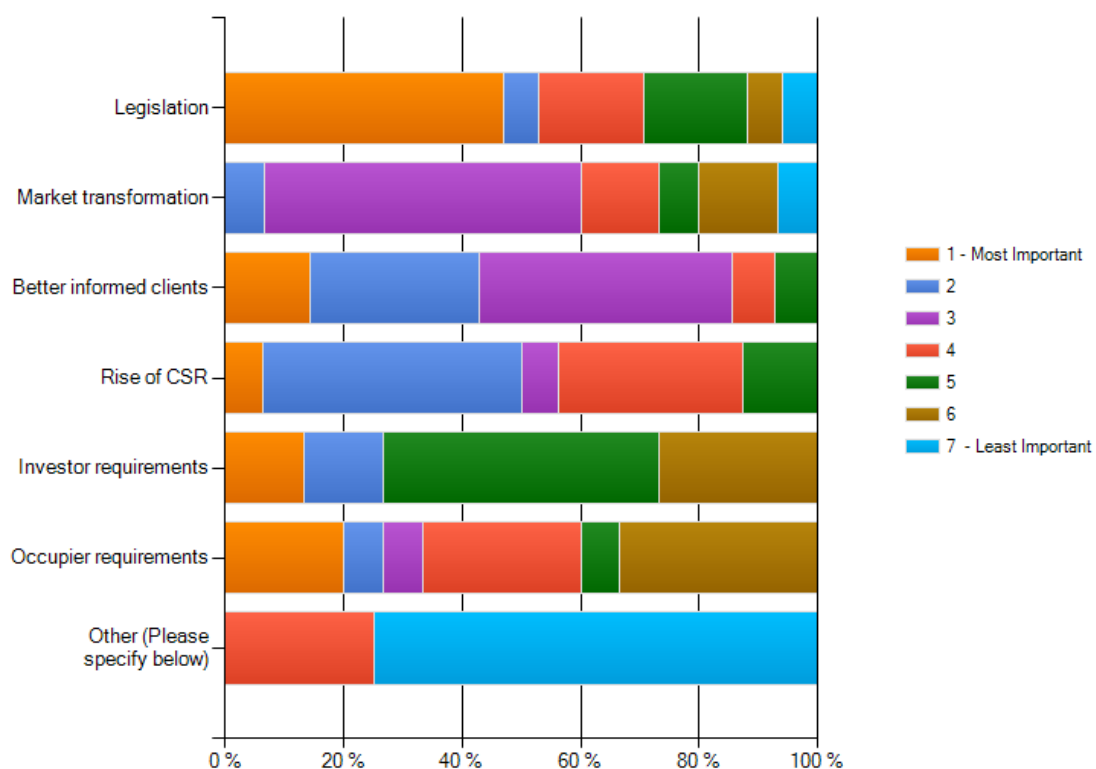
The questionnaire sought to examine the influences and drivers towards sustainability perceived by the respondent organisations. Whilst the small sample size means results are not conclusive, it is indicative of the pressures on sustainability within the market place. Whilst legislation was deemed most important by 47% of respondents, better informed clients was given, on average, highest importance (2.64). Interestingly, for organisations which require graduates to have knowledge of sustainability now, better informed clients were by far the most important driver to incorporate sustainability (average score. 2.29), while for those which intended to require knowledge within five years, legislation was the most influential driver (average score. 1.00). This suggests that, whilst some organisations are seeing sustainability as a way to ‘get ahead of the game’ and gain competitive

advantage, others are simply content with regulatory compliance as and when developments arise.

Mean average importance of drivers

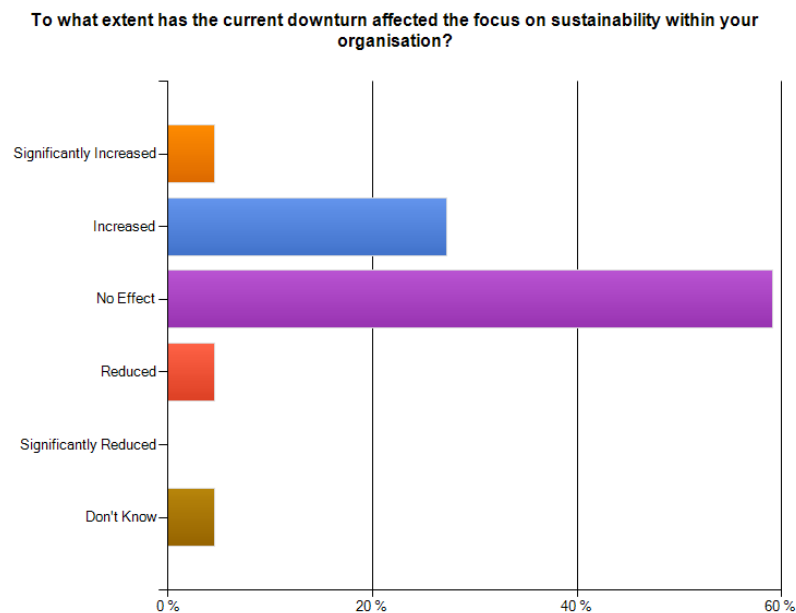
Legislation	2.94
Market transformation	3.87
Better informed clients	2.64
Rise of CSR	3.00
Investor requirements	4.33
Occupier requirements	3.93

What do you consider to be the main drivers for your organisation to take sustainability into consideration in the advice and services that you offer?



One of the major concerns during the economic downturn is the potential inhibition placed on sustainability as organisations seek to drive efficiency and cost-savings. Results from the study show that the downturn has either had no effect on the importance of sustainability

(57%) or has increased the organisations focus on sustainability (33%). Only one respondent indicated that it had reduced its importance.



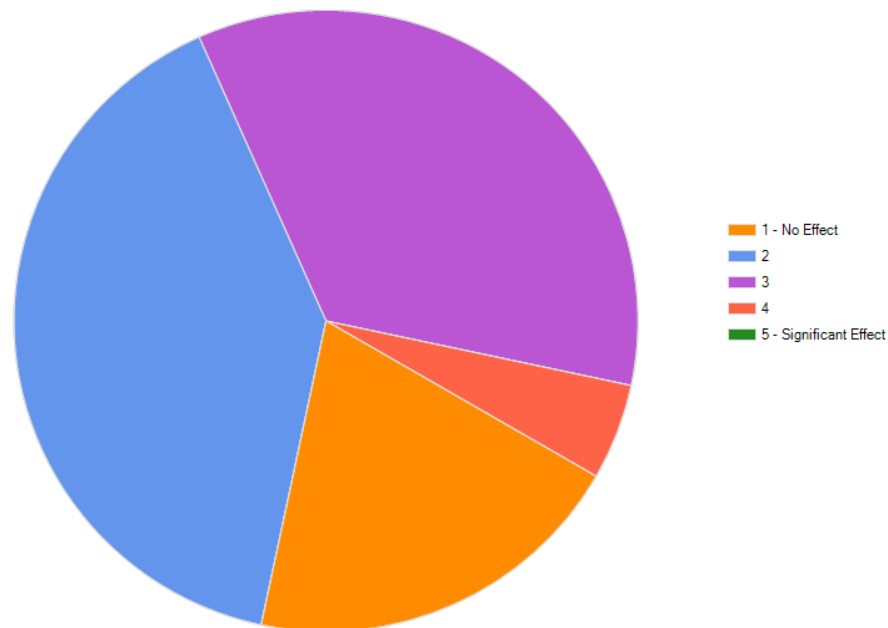
Sustainability is clearly having a profound impact on BE organisations in terms of business operations, organisational practices and policies and, ultimately, success and competitiveness. The level of commitment displayed suggests that sustainability will form an increasingly integral part of BE organisations in the future. Promisingly, the economic downturn has, by and large, not constrained the move, and focus on sustainability, in some cases, has actually fuelled commitment.

Sustainability and Skills

Whilst it is apparent that sustainability is of high and increasing importance to BE organisations, a key aspect of this study was to explore whether this has filtered down into the skill set required by prospective employers.

Perhaps the most important finding of the study is that almost two thirds of employing organisations felt that sustainability had brought about little or no change in the skills they required, suggesting traditional 'soft' skills, such as communication and team-working, remain more important to BE employers. Not a single respondent indicated that the agenda had significantly changed the skills they require.

To what extent has the sustainability agenda affected your business in terms of changing skill requirements?



Despite this, it was recognised by respondents that knowledge and skills in the area of sustainability are lacking. Sixty-three percent of employers indicated that they had identified a need for CPD training on the subject. This echoes the findings of other studies which indicate that CPD plays a more influential role in educating on sustainability issues, lessening the need for graduates to possess knowledge as a fundamental skill. One interviewee commented that *‘a significant part of graduates’ CPD is devoted to improving understanding of sustainable development, particularly its impacts on the property industry.’* Additionally, a training and development manager noted that *‘CPD and in-house training play a key role in graduate development in the field of sustainability, it helps us mould the basic knowledge into skills specific to the organisation and their role.’* The impact of action from professional bodies was apparent with almost 85% of those surveyed perceiving a greater need to incorporate sustainability within CPD since the introduction of the sustainability competency (M009) within the RICS Assessment of Professional Competence. It should be noted that the timing of this introduction coincided with much media attention beginning to be focused on environmental impacts on the built environment. Respondents who had identified that sustainability had affected skills requirements to a higher extent were more likely to have developed CPD within the area.

Has your organisation identified a need for CPD in the area of sustainability?
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	To what extent has the sustainability agenda affected your business in terms of changing skill requirements?					
	1 – No Effect	2	3	4	5 – Significant Effect	Totals
Yes	25%	50%	86%	100%	0%	60%
No	75%	38%	0%	0%	0%	30%
Don't Know	0%	12%	14%	0%	0%	10%

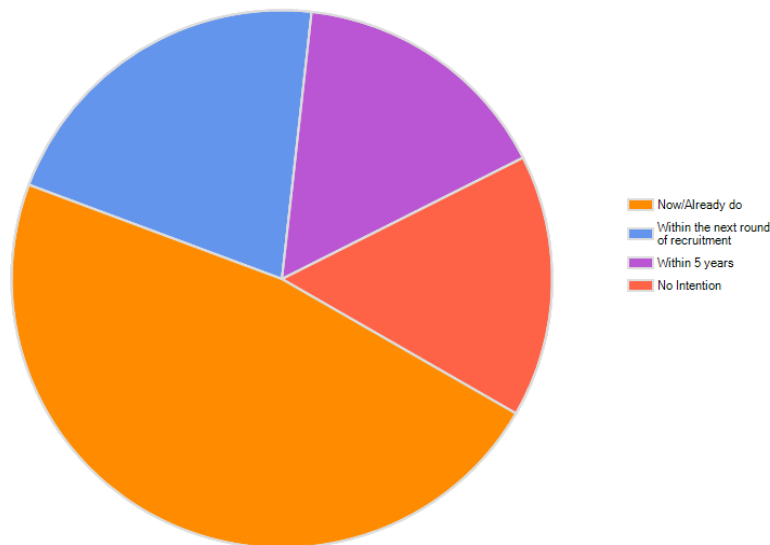
The findings suggest that, as yet, employers have yet to perceive a noticeable change in the skill set needed in response to the rise of the sustainability agenda. Organisations that have identified a changing skill requirement are more likely to have prepared for up-skilling through the development of CPD programmes in the area of sustainability. The large number of organisations who perceive a need for sustainability is a clear indication that skills of graduates do not match requirements at entry.

Sustainability in Graduate Recruitment

The main question behind this study is establishing whether the sustainability agenda within the wider organisation is affecting the staff recruitment policies and processes, particularly in relation to graduates.

The role of sustainability within the graduate recruitment process appeared to be varied amongst employers. Around 47% of respondents indicated that they already require graduates to have knowledge and appreciation of sustainability. A further 22% indicated that this would occur within the next round of recruitment. Perhaps most interestingly, 17% of respondents currently had no intention to require graduates to have sustainability knowledge.

When you recruit, do/will you require graduates to have knowledge of sustainability?

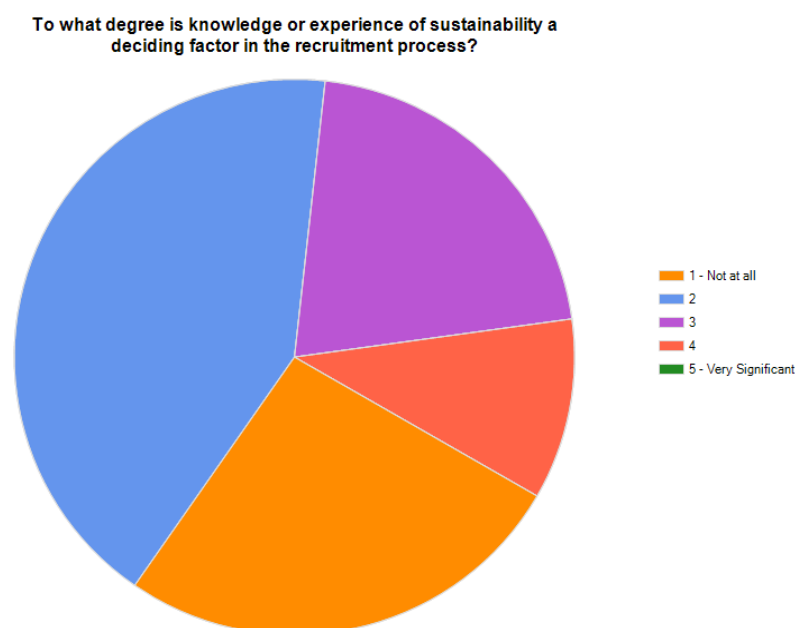


The filtering down effect is clear: organisations that have a CSR policy in place are more likely to require knowledge now or within the next round of recruitment (71%) than those without such a policy who all indicated that the need for ‘sustainability literate’ graduates would prevail within five years. There was no differentiation to be made in relation to graduate intake size.

The study also sought to discover the type of sustainability knowledge sought by employers. In line with common perception, organisations more regularly addressed and explored graduates’ knowledge of the environmental aspects of sustainability as part of the recruitment process (90%) as compared to 77% and 70%, respectively, who consider economic and social concerns. Over three quarters of respondents indicated that they look for general sustainability knowledge and skills in graduates as opposed to industry specific. Organisations with a smaller graduate intake (between one and five annually) and, by implication, with more niche practices, are more likely to require industry-specific knowledge. This theory was supported by interview comments. A recruitment manager from a large multidisciplinary firm commented that *‘the expectation now is that graduates have an appreciation of sustainability’*. In contrast, a senior partner in a small surveying practice noted that their smaller intake meant they required a more in-depth understanding of sustainability from their graduate recruits. With regards to method of assessment, interviews were used by all of the respondents to assess graduates’ knowledge of sustainability; however, some respondents also used specific methods such as tests (12%) or

case study exercises (12%). As such, the need for 'soft' skills will impact on graduates' ability to portray technical sustainability knowledge and remain a priority.

More indicative of whether employers are seeking sustainability literate graduates is the emphasis or weight given to such knowledge and skills in the recruitment process. Although employers indicated it is required, no respondent actually viewed it as a very significant deciding factor in the recruitment process. Almost 30% indicated that it was '*not at all*' a deciding factor, with 40% rating it as a 2 on the Likert scale (5 = very significant). These results suggest, once again, that the need for graduates to demonstrate traditional skills is the priority for employers, with sustainability literacy remaining a '*nice to have*' rather than a '*must have*'. This issue was clarified through the follow-up interviews, with participants questioned as to the attributes most highly sought in graduates. Responses included: '*skills within the traditional property spectrum remain top of the agenda*' and '*transferable skills such as team-working, communication and analytical skills are important factors in recruitment.*' Whilst these skills arguably form part of sustainability literacy, it would appear that actual technical knowledge of the subject area is of somewhat lower priority.



Cross tabulation analysis shows that, despite little differentiation, sustainability is of lower priority to those recruiting graduates to Valuation and Commercial Property roles than for construction roles. In explanation, it could be argued other technical skills, such as numeracy, and soft skills, such as interpersonal skills, remain the key requirements for those operating within real estate brokerage and appraisal as there has been far less legislative imperative in these fields than in that of building technology and construction. Interview

comments supported these findings with a training and development manager noting *'because of our focus on regeneration, sustainability issues are relevant across our work lines...I suppose sustainability knowledge is more important for us than other consultancies and firms. It depends on the needs of the business.'*

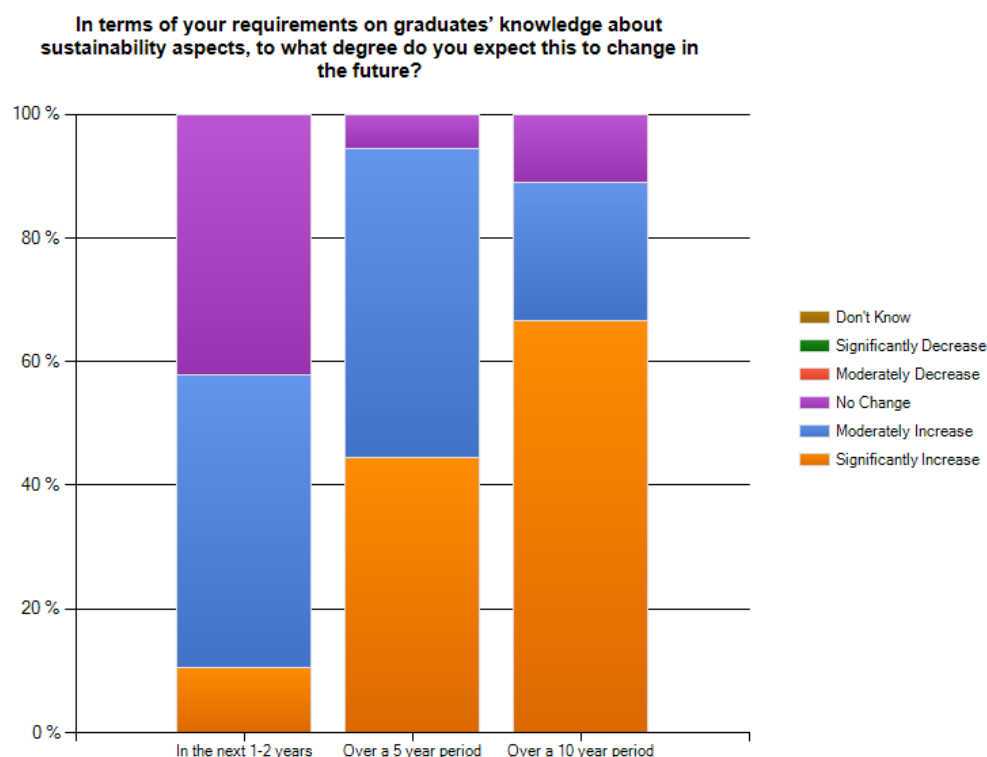
What professional groups/routes to RICS qualification are supported within your organisation?					
	To what degree is knowledge or experience of sustainability a deciding factor in the recruitment process?				
	1 – Not at all	2	3	4	Mean Significance
Environment	0%	50%	0%	50%	3
Planning & Development	20%	50%	10%	20%	2.3
Commercial Property	30%	50%	0%	20%	2.1
Facilities Management	0%	50%	0%	50%	3
Finance & Investment	0%	33%	0%	67%	3.3
Management Consultancy	0%	0%	100%	0%	3
Valuation	37%	50%	0%	13%	1.9
Building Surveying	25%	41%	17%	17%	2.3
Project Management	0%	33%	50%	17%	2.8
Quantity Surveying & Construction	0%	33%	50%	17%	2.8

* Very significant category omitted as all 0%

There was evidence that employers' expectations of sustainability knowledge were, to some extent, dependent on the area of practice to which graduates were recruited, with 40% of respondents so indicating. The importance of embedding sustainability within all university curricula was identified, with over 60% of organisations noting that they expected a similar level of knowledge of sustainability issues from non-cognate graduates as those who studied an industry-related degree.

Whilst results suggest that organisations are not currently focused on graduates sustainability-related knowledge, all organisations expect knowledge and related skills to increase in the future. Respondents' expectations over a 1-2, 5 and 10 year period were surveyed and show that sustainability skills are likely to form an increasingly integral part of the skill set required of graduates in the future. The table below shows the responses.

	Significantly Increase	Moderately Increase	No Change	Moderately Decrease	Significantly Decrease	Don't Know
In the next 1 – 2 years	12%	44%	44%	0%	0%	0%
Over a 5 year period	41%	53%	6%	0%	0%	0%
Over a 10 year period	65%	24%	11%	0%	0%	0%



Overall, the findings indicate that, for a considerable proportion of BE companies, the sustainability agenda from within the wider organisation is clearly beginning to trickle down

into recruitment processes and requirements, particularly for that of graduates. Apart from slight variations dependent on graduate intake size and professional group, it would appear that there is general homogeneity on the matter. However, both direct and indirect evidence suggests that sustainability literacy remains a 'nice to have' rather than a 'must have' in graduates.

Conclusions

Sustainability is undeniably high on the agenda of BE professions as many seek to capitalise on the opportunities for competitive advantage and avoid the pitfalls presented by legislative developments and changing demand. Many organisations have responded positively to the agenda, both through policies such as CSR and organisational best practice.

However, whilst the impact on the wider operations of BE businesses has been significant for all, the trickle through into skills and recruitment has been patchy and somewhat muted. Despite a large proportion of organisations identifying an existing requirement for graduates to be ‘sustainability literate’, its weight and priority level when it comes to recruitment decisions is limited at best.

Professional group/route had a slight impact on the requirement for sustainability among the sample; however, for most roles, traditional skills remain of higher priority, perhaps not surprisingly in a difficult economic climate when training budgets are constrained. Dissecting the meaning of ‘sustainability literacy’ within the BE recruitment context suggests that employers continue to place more emphasis on the interrelated ‘soft’ skills as opposed to an underlying technical knowledge of sustainability. For now, the majority of employers are content with graduates demonstrating a general knowledge of sustainability, and when read in conjunction with results regarding CPD, this would suggest that organisations use in-house training to mould graduates based on organisational values and practices on sustainability.

The implication of these findings for course curricula and the HE sector is complex. Whilst it is increasingly essential that a general appreciation and understanding of the concept and values of sustainable development must be embedded within course content, in depth technical knowledge should perhaps be saved for specifically sustainability-focused courses. Instead, graduates should be exposed to teaching and learning methods which enable the development and implementation of soft skills –in conjunction with the development of personal values which relate to sustainability. Although this study focused on BE graduates and specifically those with a surveying background, the findings regarding non-cognate graduates implies that curricula across the board needs to be responsive to sustainable development.

Consensus was found on one particular issue. Whether or not organisations are seeking sustainability literate graduates today, there is no doubt that expectations and

requirements will continue to increase in the future, with sustainability knowledge establishing itself alongside traditional skills as a ‘must have’ for not just built environment, but all, graduates of the future.

Recommendations

Arising from the findings of the study, it is clear that, although extensively explored, debate still exists as to the skill set implied by sustainability literacy and the extent to which sustainability is required of BE graduates. As such, there are a number of recommendations which are central to ensuring that, not only is the link between graduate employability and sustainability better understood, but also that the education provided by HEIs on the subject of sustainability is aligned with skills valued by employers. These are:

Embedding ‘Soft’ Skills into Sustainable Development Education

With both results and literature indicating that employers place higher priority on ‘soft’ skills, it is essential from an employability perspective that graduates possess these desirable attributes. Additionally, definitions of ‘sustainability literacy’ perceive not only a technical knowledge-based competency, but also the important role that these soft skills play. As such, **it is recommended that HEIs implement education for sustainability in a way which integrates ‘soft’ skill development.** To achieve this, course content, curricula and the teaching and learning methods employed should introduce sustainable development into criteria in a way that encourages active participation from, and engagement of, students. **It is recommended that educators employ active strategies, such as scenario and problem-based learning (PBL), field work/site visit and, importantly, e-learning.** Additionally, HEIs could promote the development of ‘soft’ skills and appreciation of sustainability through organising and running ‘live projects’ with a range of actual clients and in ways that help them appreciate and respect the complementary roles of other BE professionals so that a holistic approach to sustainable development is fostered. **It is recommended that HE bodies lead research into the use of live project offices with a view to a wider roll out in HEIs.**

Reinforce Feedback Loops between Employers and HEIs

Although the skills with which graduates are equipped by HE are generally viewed as suitable, research findings and pockets of literature still identify disjuncture between industry requirements and the content provided at degree level. In order to align curricula with employer demand and ensure that HEIs produce ‘preferred’ graduates, **it is recommended that existing feedback and communication loops between industry and HE**

are strengthened and capitalised upon and, where necessary, new ones developed. Additionally, with CPD and in-house training playing such a significant role in shaping not only graduates' but all employees' knowledge of sustainability, it is essential that opportunities are sought to complement existing knowledge. Therefore, **it is recommended that CPD and in-house training programmes are designed to harmonise with and build upon the content and knowledge gained through HE.**

Understanding Demand for Sustainability Literacy throughout the Built Environment Professions

Whilst this study covers a wide range of BE service lines through its focus on the RICS, in order to fully explore the sustainability trends within the BE industry and to establish whether a demand does exist explicitly for 'sustainability literate' graduates, it is essential to explore these findings within a wider constituency. Many other professions within the BE, in particular architecture (RIBA) and planning (RTPI), express a strong focus on sustainable development. Due to the complexities and variations in relation to vocational and professional requirements, it would be useful to keep the studies distinct to maintain clarity of response. **It is recommended that further studies are conducted into the matter in other specific professions within the industry.**

Appendix 1- Online Survey

Sustainability Skills in Surveying Graduates

Sustainability within your Organisation

Sustainable development aims to provide a share of resources and access to opportunities for current and future generations. It integrates environmental, economic and social benefits - a triple bottom line. Many aspects of sustainable development are strongly connected with the built environment, especially as buildings contribute 50% of carbon emissions.

By conducting this survey, we intend to measure the perceived importance of sustainability to organisations employing surveying graduates and establish whether it has filtered through to organisations' recruitment policy and to the skill set that surveying graduates are required to possess.

We very much appreciate your participation in this study which will help us generate important insights to help inform those involved in the education and training of surveying professionals.

1. Please indicate to which sector your organisation belongs

- ☐ Private Sector
- ☐ Public Sector
- ☐ Charity
- ☐ Other

Please specify

2. Please indicate your position in the organisation

- ☐ Senior Management
- ☐ Recruitment
- ☐ Training & Development
- ☐ Other

Please specify

3. Does your organisation have a Corporate Social Responsibility (CSR) policy visible to people outside the organisation (e.g. on your website or through marketing literature)?

- ☐ Yes
- ☐ No
- ☐ Don't Know

4. Does your organisation have an environmental policy visible to people outside the organisation?

- ☐ Yes
- ☐ No
- ☐ Don't Know

5. Which of the following impacts has the sustainability agenda had on your organisation?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
As an organisation we have adopted or plan to adopt a Sustainability Policy and report on performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As an organisation we plan to develop greater sustainability awareness and positive action among our employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainability issues, such as green travel and energy efficient buildings are now part of our corporate accomodation strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We have introduced office practices to improve our sustainability performance (e.g. waste reduction targets; energy efficiency programmes; fair trade purchasing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. To what extent has the current downturn affected the focus on sustainability within your organisation?

- ☐ Significantly Increased
- ☐ Increased
- ☐ No Effect
- ☐ Reduced
- ☐ Significantly Reduced
- ☐ Don't Know

Sustainability and Skill Requirements

7. To what extent has the sustainability agenda affected your business in terms of changing skill requirements?

- ☐ 1 - No Effect
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 - Significant Effect

8. Has your organisation identified a need for CPD in the area of sustainability?

- ☐ Yes
- ☐ No
- ☐ Don't Know

9. The RICS requires all APC candidates to prove competency in sustainability. What effect do you perceive the Sustainability Competency has had on the need to incorporate sustainability within CPD?

- ☐ 1 - No Effect
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 - Significant Effect

10. What do you consider to be the main drivers for your organisation to take sustainability into consideration in the advice and services that you offer?

	1 - Most Important	2	3	4	5	6	7 - Least Important
Legislation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market transformation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better informed clients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rise of CSR	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investor requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Occupier requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

11. To what extent have knowledge and skills related to sustainability enhanced the competitiveness of your business?

- ☐ 1 - No Effect
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 - Significant Effect

12. To what extent has the sustainability agenda provided new business opportunities to your organisation?

- ☐ 1 - No Effect
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 - Significant Effect

Graduate Recruitment

It is acknowledged that recruitment within the surveying profession and of graduates in particular is at an extremely low level and a sensitive subject. All information will be treated in the strictest confidence and analysed anonymously.

13. Prior to the current economic downturn, on average, how many graduate surveyors were recruited annually?

- ☐ 1-5
☐ 5-10
☐ 10-15
☐ 15-20
☐ 20+

14. What routes to RICS qualification are supported within your organisation?

- ☐ Environment
☐ Planning and Development
☐ Commercial Property
☐ Facilities Management
☐ Finance and Investment
☐ Management Consultancy
☐ Valuation
☐ Building Control
☐ Building Surveying
☐ Project Management
☐ Quantity Surveying and Construction
☐ Taxation allowances
☐ Other

Please specify

15. When you recruit, do/will you require graduates to have knowledge of sustainability?

- ☐ Now/Already do
☐ Within the next round of recruitment
☐ Within 5 years
☐ No Intention

16. What aspects of sustainability are/would be explored in the recruitment process?

- ☐ Economic
☐ Social
☐ Environmental

17. Do you look for:

- ☐ General knowledge of sustainability
- ☐ Industry specific knowledge

18. How do you assess graduates' knowledge of sustainability?

- ☐ Interview
- ☐ Assessment Test
- ☐ Case Study Exercises
- ☐ Other

Please specify

19. To what degree is knowledge or experience of sustainability a deciding factor in the recruitment process?

- ☐ 1 - Not at all
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 - Very Significant

20. Are your expectations regarding graduates' understanding of sustainability dependent on the area of surveying practice to which they are recruited?

- ☐ Yes
- ☐ No
- ☐ Don't Know

21. Are the expectations regarding graduates' understanding of sustainability the same for graduates with a surveying degree and for those with a non-cognate degree?

- ☐ Yes
- ☐ No
- ☐ Don't Know

22. In terms of your requirements on graduates' knowledge about sustainability aspects, to what degree do you expect this to change in the future?

	Significantly Increase	Moderately Increase	No Change	Moderately Decrease	Significantly Decrease	Don't Know
In the next 1-2 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over a 5 year period	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over a 10 year period	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank You

Thank you for taking the time to complete this questionnaire, your participation is valued.

All responses will be treated with the strictest confidence and analysed anonymously.

23. As part of the study, the Research Team will be conducting a number of follow up interviews.

Would you be willing to participate in these follow up interviews

- ☐ Yes (please email your details to b.clements@kingston.ac.uk)
- ☐ No

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