

**Scoring Environmental Credentials; A Case Study of the UK Conference and Meetings Venues**

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# Scoring Environmental Credentials; A Case Study of the UK Conference and Meetings Venues

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## **Scoring Environmental Credentials; A Case Study of the UK Conference and Meetings Venues**

### **Abstract**

This paper presents an investigation into frameworks used to conceptualise, monitor and compare corporate social responsibility (CSR). Presenting a new comparative framework that organises and communicates information detailing business performance on ten environmental policy initiatives (expressed by the acronym ‘GREENER’) using a CSR scale (expressed by the acronym ‘VENUE’). This GREENER VENUE framework fills reduces the gap in the CSR literature by accentuating discretionary practices, by exhibiting conceptual and psychometric properties enabling its application to broad and diverse contexts. Grounded in theory, the framework is practical, simple to implement, easily understandable and highly relatable. Applying the GREENER VENUE framework to data collected via a self-administered Internet questionnaire of the UK conference and meeting venues reveals the majority of such venues are classified as ‘Eager’.

**Keywords:** Corporate social responsibility; UK conference venues; UK Meeting venues; Environmental sustainability; Conceptual framework.

## Introduction

The application of corporate social responsibility (CSR) frameworks is nothing new. Although history suggests that markets have been and will continue to be reformed through an increasingly complex set of social and institutional initiatives (including government legislation), academic debates regarding the concepts and theories of CSR is a product of the 20<sup>th</sup> century. Widely acknowledged as the literary birth of CSR, Bowen's (1953) seminal contribution was grounded on the argument that businesses are not only responsible for the creation of goods and services designed specifically for trade and profit motives but also for the production of social goods (Wood, 2010). Conceptualisation, definition and redefinition of CSR continued unabated throughout subsequent decades.

A shift in thinking was evident in the 1980s: efforts to redefine and reconceptualise CSR gave way to greater emphasis on researching this domain (Carroll and Shabana, 2010; Frederick, 2008). This decade also saw an intense media-coverage of unrelated, globally significant, environmental disasters which stimulated the conscience of a generation. The Union Carbide gas leak at Bhopal in 1984, the Russian nuclear power plant explosion at Chernobyl in 1986 and the Exxon Valdez oil tanker spillage in 1989 all contributed to place corporate activity at the forefront of societal concerns. Concepts, principles and practices were transferred from literary page to society's conscience which stimulated much greater scrutiny of corporate environmental performance: financial institutions faced concerns over ethical investments (Harvey, 1995), food retailers were questioned over immoral sourcing (Maloni and Brown, 2006) and corporate activities (Sperling, 2010), and fuel suppliers' explorations were meticulously inspected (Amaeshi and Amao, 2009).

The tourism sector has not escaped intense CSR scrutiny. Indeed, academic concerns over the tourism sectors' negative environmental effects commenced in the 1960s (Holden, 2003; Saarinen, 2006). The pervasive nature of CSR has evolved from its initial focus on mass vacationing to an ever-widening range of tourism sub-domains. It is being increasingly recognised that conference tourism has a significant and negative impact on the wider environment (Mair and Jago, 2010). This is typified by pollution and externalities associated with the effects of cleaning products linked with overnight accommodation, the production of personalised paper-based materials, hauled food and beverage ingredients, electronic operation of conference facilities and delegate transportation. Conventional conferences are a very resource-demanding process with considerable environmental impacts (Hischier and Hilty, 2002).

There has been an increasing recognition of the environmental impacts of conference venues. In their study of an international conference, Hischier and Hilty (2002) identified that delegates travel accounted for 96.3% of the environmental impact of the conference, with printed material accounting for 2.9%. Subdividing travel identified that 96% of travel impacts stem from flights (58% long-haul; 19% middle distance; 17% short-haul). In a further study of public health conferences, Mohindra (2008) identified that such conferences tend to utilise the “three Rs: reduce, reuse and recycle” (p.269), including electronic promotion, in their endeavours to negate the conference’s environmental impact. This increasing recognition of the environmental impacts of conference venues coincided with demands to adopt CSR principles (Mohindra, 2008) and bring corporate behaviour up to a level where it is congruent with prevailing social norms, values and expectations of performance (Sethi, 1975). In doing so, CSR can be viewed as “a combination of environmental altruism, a need for market competitiveness and a medium to long term business

strategy" (Holden, 2009; p.380). With both the changing role of businesses, including that of conference venue's, within the global society, and consumers interest in CSR values, so the environmental side-effects of consumption and the implications for the moral responsibilities of such businesses have become relevant (Smith, Palazzo and Bhattacharya, 2010; Wettstein, 2010).

This generates the need for the establishment of a clearly-defined framework to guide individual conference venue's CSR performance; venues who elevate to and sustain a longer-term corporate behaviour standard that is in line with prevailing social norms, values and expectations will reap the rewards of repeat visitation (Nicolau, 2008), repeat choice and patronage by event organisers and site selection planners. Indeed, whether knowingly conscious of it, individuals have ethical standpoints that direct their decision-making (Macbeth 2005), and their subsequent actions (Holden, 2009).

As Font and Harris (2004) identify, CSR is a meaningful philosophy. The central tenet of CSR deals with the challenges between society and the economic process (Hiss, 2009). Therefore, CSR can be used strategically to deal with the stakeholders' demands (Falck and Hebich 2007). Such demands include making visitation decisions based on corporate environmental performance, conference delegates require reliable and easily understandable information of environmental performance. There has been a rapid growth in the demand for a conceptual framework that permits comparisons of CSR across conference venues (Marquez and Fombrun, 2005); this paper reduces the gap in the literature. It presents a theoretical development of a comparative framework that permits comparisons across conference venues and thereby informs delegates, event organisers or planners' decision-making processes. This effective framework offers businesses a means by which they can

score their own venues' environmental performance. The framework is simultaneously descriptive, evaluative and analytically useful as a method in assessing factors that are influential in improving environmental traits within CSR. A distinct advantage of the proposed framework is that it may also be utilised by other conference venue stakeholders, the wider tourism domain, and non-tourism domains.

This paper provides a background and motivation for the study. It continues by reviewing different frameworks that have hitherto been employed to conceptualise CSR. Having highlighted and justified the gap in the literature which needs to be filled, we propose a simple framework for CSR performance assessment. The application of a framework can illustrate its strength, thus data collection methods employed to apply and test this framework are discussed, followed by the results. Finally, discussion of the ease and validity of this framework for assessing CSR performance is provided along with conclusions.

### Assessing Discretionary Corporate Social Responsibility; A Review Of Conceptual Frameworks

Although there is increasing demand for CSR ratings, CSR is multi-dimensional (Bohdanowicz, Zientara and Novotna, 2011; Chen and Delmas, 2010; Jackson and Apostolakou, 2010; Tyteca, 1996) and thus the multiple metrics required for this task make measurement and assessment of CSR daunting. A broad range of economic, social and environmental issues must be explicitly considered when constructing an effective CSR rating.

Environmental performance indicators (EPIs) have been developed in response to the need for CSR measurement. EPIs are the quantification of interactions between

the environment and the business which provides information on environmental impacts, legislative compliance, stakeholder interactions and business processes (Chinander, 2001; Ilmitch *et al.*, 1998; Neely *et al.*, 1995; Veleva and Ellenbecker, 2000) and can take the form of environmental management or environmental condition indicators (Jasch, 2000). The former examines the actions undertaken (such as counting the number of environmental audits, the proportion of employees undertaking environmental training and the number of environmental incidents) to minimise the business's negative environmental impact. While the latter includes the business's impact on the environment (such as air or water quality). Regardless of whether they are management or condition environmental indicators, EPIs should be comparable, target-orientated, balanced, offer continuity, possess frequency and be comprehensible (Jasch, 2000).

Comparisons can be made between businesses regarding their environmental performances over time using EPIs. Moreover, they can be used to set internal goals, highlight potential areas where optimisation may occur and be used as an internal or external communications tool (Thoresen, 1999). EPIs form a part of an Environmental Performance Evaluation, which is an internal process and management tool designed to provide management with reliable and verifiable information (International Standard Business, 1998, online). It is essential that EPIs and Environmental Performance Evaluation are organised into a framework which permits clear observation on the achievement (or otherwise) of key environmental objectives (Ramos *et al.*, 2007).

### *Framework conceptualisation*

Bowen's (1953) work was forward thinking, but he did not propose a framework in which to construct his theory further and it was not until the 1970s that appropriate environmental assessment frameworks began to appear (Wood, 2010). Developments of his theory have been wide and varied but can, nevertheless, be classified into five distinct frameworks: i) conceptual, ii) process, iii) financial, iv) aggregate and v) reputation.

### *Conceptual frameworks*

Conceptual frameworks were the first to be constructed in the 1970s. Conceptual frameworks systematically organise concepts in order to bring focus through the use of 'word models' that often form the conceptual origin for subsequent theories (Mosby, 2008). Sethi (1975) and Carroll (1979) are two seminal examples of conceptual frameworks and although they have been extensively critiqued (Carroll and Shabana, 2010; Wartick and Cochran, 1985; Wood, 1991, 2010) they remain cornerstones of the conceptual framework literature within the CSR domain. 'Word models' permit comparisons over time and across industries, and can use social obligation, social responsibility and social responsiveness classifications (Sethi, 1975). This typology of corporate responses served as a conceptual framework for categorising the mode of corporate action without regard to their intentions or outcomes. However, although an effective evaluation metric of corporate performance must have an element of cultural and temporal specificity, where at the extreme the same activity could be considered socially responsible in one circumstance and socially irresponsible in another (Sethi, 1979), there should always be stability in the categorisation of corporate activities.

Carroll (1979) augmented Sethi's framework into a three dimensional model. The first dimension represents the areas of obligation that businesses have to society and encompass economic, legal, ethical and discretionary issues. Economic responsibilities are to consumers and investors. Legal responsibilities are to remain compliant with legislation. Ethical responsibilities are the unwritten values derived from society. Discretionary responsibilities go beyond economic and legal but are not expected of a business in an ethical sense; hence if a business does not undertake discretionary responsibilities it is not considered unethical (Ruf et al., 1998). These four categories are not intended as a continuum, and should not be considered as mutually exclusive. The second dimension covers issues of concern to society and may relate to the environment, consumerism, shareholders, discrimination, occupational safety and product safety. Carroll's most important contribution was his third dimension, often referred to as 'social responsiveness,' which includes strategies that businesses adopt in response to social issues. Responsiveness runs on two continuums from reactionary through to defence and from accommodation through to proactive.

These frameworks brought focus to the CSR debate and heavily contributed to the conceptual origin for subsequent theories. Although conceptualisations of CSR decreased in the 1980s, they did not cease. See, for example, Wartick and Cochran (1985). Instead theoretical and empirical research concerning the development of measurement frameworks focused on devising a 'process' framework which businesses can follow in order to measure where they are in terms of the process of adopting CSR (Mair and Jago, 2010; Maon *et al.*, 2009).

### *Process frameworks*

As conceptualisations developed so too did businesses begin to question how the principles of CSR could be adopted; unfortunately few models assisted this process (Prakash, 2000). The process models in existence permitted businesses to apply and move between purely descriptive to wholly explanatory CSR frameworks (Pearce, 2008); even though some process frameworks were general, others were sector-specific (Mair and Jago, 2010).

In their generalist model, Mair and Jago (2010) attempted to model the corporate greening process by incorporating both drivers for and barriers against the adoption of CSR along with the business context and the role of the media in terms of agenda setting. This framework details the day-to-day management activities (such as leadership, strategy, information, people and process) and ultimately places a business on the uptake continuum, between ‘Not at all’ and ‘Very green’. Mair and Jago favoured this generalist view of process adoption and argued that it leads to better understanding of the role of contextual factors and underlying dimensions. Further generalist models include the Australian Business Excellence Framework (Khoo and Tan, 2002).

Marshall *et al.* (2005) presented an industry-specific examination of the US wine industry and identified individual and institutional drivers for environmental change. Their individual drivers relate to Jago and Mair’s (2010) internal drivers, while their institutional drivers align with Jago and Mair’s external drivers. However, their model is not easily applied outside of the US wine industry as it lacked i) a clear process behind behavioural change from barrier to adoption and ii) generic drivers for behavioural change (such as image enhancement). Lynes & Dredge (2006) studied Scandinavian Airways and a further industry-specific four-part model was proposed

by Lynes and Andrachuk (2008) where the components were i) systems of influence, ii) motivations, iii) catalysts and iv) level of commitment. The application of the model to Scandinavian Airlines highlighted the importance of catalysts (such as cultural factors) behind the level of commitment to CSR. However, as with the model proposed by Marshall *et al.* (2005), Lynes and Andrachuk's (2008) model lacks information on barriers to adoption and thus unrealistically views the process without constraints on adoption.

### *Financial frameworks*

Financial frameworks assess performance in terms of the rise in *social* investment funds (Chen and Delmas, 2010). Note this is distinctly different from the assessment of purely financial performance, as undertaken by Orlitzky (2011). Although there has been a proliferation of businesses undertaking and publishing such CSR ratings, no international rating dominates (Marquez and Fombrum, 2005). The dominant North American ratings are published by Kinder, Lydenberg, Domini Research and Analytics (Waddock, 2003) and these ratings examine eight attributes of social activities for approximately 3000 publically traded US companies. These eight attributes are; community relations, employee relations, the environment, the product, treatment of women and minorities, military contracts, nuclear power, and South Africa. (Kinder, Lydenberg, Domini Research and Analytics, 2010; Turker, 2009). This rating index, with values going back to 1991, is amongst the most influential and its power should not be underestimated. For instance, in 2006, Kinder, Lydenberg, Domini Research and Analytics removed Coca-Cola Co. from its Broad Market Social Index on the basis of unease relating to the Coca-Cola's employment and

environmental practices in developing countries; based on this delisting, TIAA-CREF (the largest US-based retirement fund) sold approximately US\$50m worth of Coca-Cola Co. shares (Chatterji *et al.*, 2009).

Financial frameworks have helped academics, managers and financial stakeholders to conceptualise, adopt and invest, but few frameworks have focused on the ability to compare businesses outside of investment purposes. Thus there is a need to develop theoretically-based measures that can be used to perform inter-temporal evaluations and provide stakeholders with meaningful financial comparisons (Xie and Hayase, 2007).

#### *Aggregated frameworks*

The aim of aggregated comparison frameworks is to generate a form of rating, usually numeric, that accurately reflects the level of commitment to CSR exhibited by a business. Challenges to the creation of such a rating are many and well-documented (see, for example, Carroll, 1999; Graves and Waddock, 1994; Wokutch and McKinney, 1991) with the primary concern grounded on the multi-dimensional nature of CSR. Rowley and Berman (2000) state that any one-dimensional rating can neither truly represent the full breadth of CSR nor be utilised in a comparative manner.

A favoured alternative is to use a linear aggregation of various aspects of CSR when measuring the entire or sub-sets of CSR. Two principle types of aggregated methodologies exist: equal-weightings and weighted. Typically the former treats each CSR dimension under consideration equally and this is based on the assumption of equal importance of dimensions. The weighted approach assigns a weight to each CSR dimension under scrutiny and is based on the degree of relative importance. For

instance, Waddock and Graves (1997) identified employee relations (17%) as the principle concern to experts, jointly followed by product / liability (15%) and community (15%); by apportioning weight according to the level of perceived importance of each attribute an analyst can adjust the results to be in line with perceived reality.

However there are a number of strong concerns over the ability to select appropriate weightings to use in these rankings. In addition to concerns over whether the selection of the weighting can be justifiable given limited supporting evidence (Chen and Delmas, 2010) there appears to be no agreed, universal system of weighting or prioritising of CSR dimensions, and what is a concern for one stakeholder may not be a concern for another. Application of weightings can generate biased results (Delquie, 1997); sometimes this is understandable when, for example, the CSR concerns of today are better informed than they were previously. Nevertheless, for ease of comparison, different weightings of the same CSR dimension should not be employed by different ratings agencies and consensus should be reached on the relative importance of dimensions.

Noting the benefits and concerns expressed of single and aggregated multiple-dimension frameworks, as well as weighted and non-weighted aggregated frameworks, many attempts have been made to forward comparative frameworks. An effort was made by Bragdon and Marlin (1972) who utilised the Council of Economic Priorities pollution index; this was strongly criticised because of its one-dimensional focus on environmental performance while lacking completely any form of wider social CSR aspect (Kedia and Kuntz, 1981). An effort by Freedman and Jaggi (1982) focused on financial report analysis and, although it is more objective than Bragdon and Marlin's (1972) as it included a wider range of environmental and social

dimensions, concerns were expressed over the trade off between quality and quantity with reports devoting a large proportion of text to non-specific statements rather than shorter statements of fact. This method of reporting is utilised by business to inform stakeholders of what they believed was happening, rather than actual activities (McGuire et al., 1988).

### *Reputation frameworks*

Early frameworks were subjective in nature, utilised reputational indices and dominated by the employment of a selection criteria chosen by and based around the skill-set most familiar to those individuals undertaking the assessment (Abbot and Monsen, 1979). More rigorous reputational frameworks have been developed, such as that undertaken by the *Fortune* journal (Chakravarthy, 1986; Dobson, 1989). Reputational frameworks are comprised of four social and four financial dimensions and have found acceptance in the literature. However, application of factor analysis to the ratings identified that financial factors accounted for greater variance than social factors; hence such results are the focus of criticism as it suggests *Fortune's* rating favours financial commitments over social concerns (Fryxell and Wang, 1994; McGuire et al., 1988).

The first attempt to evaluate the multidimensional nature of CSR is considered to be the work of Aupperle *et al.* (1985) and based on Carroll's (1979) constructs of CSR. Aupperle *et al.* (1985) constructed a forced-choice instrument that measured CSR business orientation rather than outcomes (Ruf *et al.*, 1998). Although it avoided the problems associated with reputational indices and an attempt had been made to measure the multiplicity of CSR, further refinements followed and

subsequently came the advent of the Balanced Scorecard. Spiller (2000) developed an Ethical Performance Scorecard, focusing on business' practices with reference to six principle stakeholders and 60 best practices. Numeric rating were assigned to each of the 60 best practices, by managers of 22 businesses, whereby two = major strength, one = strength, zero = no strength / concern, minus one = concern and minus two as major concern. Businesses could therefore be scored between 120 and -120.

### Summary

There is a plethora of frameworks to assess CSR. There is also considerable diversity in environmental indicator frameworks (Hodge, 1997; Ramos *et al.*, 2004) that has created difficulties in undertaking comparisons across businesses, domains and nations (Ramos *et al.*, 2007). Furthermore there appears to have been no obvious attempt to standardise EPIs within Environmental Performance Evaluation, with existing ratings and measures being somewhat arbitrary (Xie and Hayase, 2007). Moreover there are concerns over data sources and collection methods (Bennet and James, 1999; Epstein, 1996) that have blighted the ease of application of various frameworks and a lack of consensus on what, where and how to measure (Kolk and Mauser, 2002).

The acceptance and adoption of a singular dimension environmental policy should not be considered as a true indication of environmental commitment by a business. A better indication of the commitment to improving a business's environmental performance can be ascertained if the *contents* of the environmental policy are examined. Indeed, Elkington and Burke (1989) proposed a set of ten policy steps which may be adopted by a business in a bid to achieve environmental

excellence. These are i) develop and publish an environmental policy; ii) prepare an action plan; iii) arrange the business and staffing of the company; iv) allocate adequate resources; v) invest in environmental science and technology; vi) educate and train; vii) monitor, audit and report; viii) monitor the evolution of the green agenda; ix) contribute to environmental programmes; and x) help to build bridges between the various interest groups. Although there is no singular move towards identifying common dimensions of CSR in a formalised theoretical or systematic empirical way (Ilinitch *et al.*, 1998), the use of a conceptual framework that draws on Carroll (1979), Sethi (1975) and the ten steps to excellence (Elkington and Burke, 1989) can allow the progression towards a useful and practical conceptual framework. The next section presents a construction of such a framework.

### The Greener Venue Conceptual Framework

The conceptual framework developed below is multi-dimensional, non-weighted and focuses on Carroll's (1979) fourth area of obligation, that of discretionary in relation to the environment, which is one of Carroll's six issues of concern to society.

The framework is built around two axes: environmental factors are calibrated on the x-axis, [the measurement items](#), and a business's responses to each factor are calibrated on the y-axis, [the response scale](#). In terms of the latter, this framework draws on Carroll's four-point scale (Carroll's third dimension) which measures responsiveness (reactive, defence, accommodating, proactive). However, a single category of 'reaction' may be too restrictive as it also encompasses 'denial'; this category of reaction is therefore separated into Unmotivated and Eternal denial for developmental purposes here, and therefore we employ a scale with five categories:

Venerated, Eager, Nonchalant, Unmotivated, and Eternal denial (VENUE). Sethi's (1975) framework possessed stable categories and fixed class definitions; indeed he stated that any conceptual framework should contain these attributes. Our GREENER VENUE framework satisfies Sethi's fundamental requirements of a conceptual framework, with the definitions shown in Table 1.

(Insert Table 1 about here)

Though it appears arbitrary, the labelling of scores on the response scale to fit the acronym 'VENUE' is based on an improvement of previously proposed scoring mechanism (Carroll, 1979) but also on exploratory discussions with industry professionals as well as research colleagues in the early development of this study. The VENUE response scale is essentially an interval Likert scale, modified so that higher scores corresponded to more context-appropriate labels, rather than more common bi-polar agreement anchors. For example, the mid-point of the scale (labelled 'nonchalant') corresponds to a score of 1 on a scale with 3 as the highest value and -1 as the lowest, thereby distinguishing it from the familiar assumption of a 'neutral agreement' level. Additionally, it is arguable that such a labelling system confers mnemonic and semantically familiar advantages to industry users of the scale who may not find alternative scale responses such as 'agreement' or 'satisfaction' germane to the context. Finally, the 5-category classification described in the VENUE response scale adheres generally with recommended scale development guidelines in so far as object, attribute, and rater consistency is achieved and that five categories, or quintiles, of attribute discrimination is usually ideal (Rossiter, 2002, p. 323).

Based around Elkington and Burke's (1989) ten steps to establish a continuum of action, this framework proposes ten EPIs which may be contained within a business environmental policy. These being; Greening the boardroom room; Register of applicable environmental legislation; Environmental disclosure by business – annual reports; Educating staff with regards environmental impact; Need to adopt environmental review, environmental statement, environmental management system and environmental audit; Establish an environmental affairs department and Recycling, recovering and reusing

These EPIs are referred to by the acronym 'GREENER'. These EPIs satisfy Jasch's (2000) conditions that they should be comparable, target-orientated, balanced, offer continuity, possess frequency and be comprehensible. The five-point VENUE responsiveness scale will be used to gauge the GREENER discretionary indicators.

### Applications of the Greener Venue Framework

The empirical validity of a proposed conceptual framework can only be ascertained through application, testing and replication within and across different areas. While selection of an appropriate industry to test and illustrate the strength of this GREENER VENUE framework is based on the authors' knowledge of a particular sector, the framework may be equally valid for many other sectors. As an example, conference venues are not excluded from CSR criticism. The environmental impacts of this tourism sector incentivises the need to adopt CSR principles (Mohindra, 2008) and bring corporate behaviour up to a level where it is congruent with prevailing social norms, values and expectations of performance (Sethi, 1975). It is hoped that a useful, easily-understandable and readily available knowledge of

conference and meeting venue's CSR performance will incentivise and differentiate venues and reward better performers with repeat visitation (Nicolau, 2008), repeat choice and patronage by event organisers and site selection planners.

In line with the above, the proposed GREENER VENUE framework was previously tested in the context of the UK conference and meeting venues (Whitfield & Dioko, 2011; In press). In Whitfield & Dioko (2011), it was demonstrated that organizational size and type of venue influenced firms' overall CSR scores based on the GREENER VENUE framework, thus providing some degree of the proposed framework's discriminating ability for firms' CSR performance. In a follow up study, Whitfield & Dioko (In press) demonstrated that the significance of a summarized CSR measure based on the GREENER VENUE framework toward influencing a broad range of environmental best practices was robust, even after controlling for firms' possession of formal environmental accreditation. In these previous studies, however, firms' CSR performance calculated on the basis of the GREENER VENUE framework was reduced into a unitary and summarized measure. A single and aggregated CSR measure, however, provides less information on the relative importance of each determinant element toward influencing key environmental performance aspects. Because CSR in general and the GREENER VENUE in particular are built on recognizing the multidimensional causes and effects of socially responsible firm performance, studies should be designed to delineate the relative impact of each element in the framework, rather than aggregating or averaging all scores into a single index. Providing a more refined level of performance detail on each of the key elements of GREENER framework should facilitate greater and more effective CSR management and performance.

It is accepted that other frameworks exist. Such as The Green Hotel Initiative (GHI). This initiative is intended to show the market demand for hotels offering environmentally responsible services. The initiative focuses on education, and in particular educating those that purchase hotel services in order to establish a means for buyers to show their demand for environmentally conscious hotel services. In return, the initiative provides a means for hotels to communicate their environmental performance (Environmental Protection Agency, n.d.). Additionally, Scandinavian Sustainable Destination Index (SSDI) compares social and environmental performance between sixteen cities across five nations. The project, Commissioned by the ICCA Scandinavia Chapter has a varied range of industry participants including Destination Marketing Organizations, Convention Bureau, Venues and Event Agencies (Green Meeting Industry Council, n.d.). Comparing and contrasting our framework with the GHI shows that both have a supply side focus, however the GHI differs from GREENER VENUE framework in that also contains a demand side element. Additionally, the GHI focuses on educating the demanders, whilst our framework educates the venue. Additionally, the SSDI examines environmental factors , as does our framework, however the SSDI extends the framework to incorporate social performance.

This paper first reports on the CSR performance of UK conference and meeting venues on an application of the GREENER VENUE framework, to demonstrate the ease with which it can be applied and the informative details it yields to firms wishing to adopt a CSR assessment and monitor their performance thereon. Second, the paper investigates the relative influence of all 10 variables of the GREENER measure—considered simultaneously—towards enhancing firms' behaviour on an inventory of 18 well-known environmental best practices (or EBPIs)

(Mohindra 2008; Lee, Breiter and Choi, 2011). This second research objective improves on previous studies conducted on the proposed framework (Whitfield & Dioko, 2011, In press), which only utilized a summarized overall score of firms' CSR performance on the GREENER framework, thereby obscuring the extent with which different elements of the GREENER framework accounts for different individual elements contributing to overall firm CSR performance. Because the various elements embedded in the GREENER framework are designed to impel organizations towards better environmental practices and initiatives, it is reasonable to expect that the higher scores obtained should lead to higher and generally positive correlations with the 18 EBPIs, though the strength of influence as measured by the standardized beta coefficient obtained post-analysis for each bivariate relationship may vary or be null.

## Methodology

*Data collection.* Two principal methods of venue identification were utilised. Email addresses were obtained from the Venuefinder.com website (<http://www.venuefinder.com/>) and further internet based trawls were undertaken. The 1726 email addresses identified formed a sample of the overall UK conference venue population. A pilot survey was initiated emailing out the survey hyperlink to 20 randomly selected venues. Pilot respondents were not only asked to complete the survey but to email back any comments on structure, phraseology and/or presentation. Once pilot responses were reviewed, the questionnaire, a self-administered internet based survey (Google docs), was emailed to the remaining 1706 UK conference venues identified across the four venue classifications in May and June 2010. A total of 191 responses were obtained giving a response rate of 11.1%.

*Measures.* In addition to demographic and attribute-type questions (purpose-built, hotel, educational establishment or visitor attractions, conference space ( $m^2$ ), etc), the questionnaire requested the respondents to provide answers that referred to project's specific research questions, such as the year of implementation for each CSR policy, reasons for non-implementation, accreditation and environmental practices employed. The questionnaire sought information relevant to each of the 10 discretionary environmental indicators comprising the GREENER framework and which served as independent variables in subsequent analysis. Ratings employed a five-point Likert scale for ease of response anchored on the VENUE descriptors. An example of the response scale on which the scoring system is based is shown in Table 2.

(Insert Table 2 about here)

Table 2 shows that for the most environmentally comprehensive response, which equates to 'Venerated,' a score of three is assigned, and this value decreases by one for each response until the most environmentally inert response, that equating to 'Eternal Denial', is assigned a value of minus one. Once the completed questionnaire is submitted the bounds of the sum of the environmental values will be 30 and -10, which will correspond to businesses that are completely environmentally responsive and completely environmentally *unresponsive*, respectively; all values between these bounds are possible and plausible. Finally, the survey elicited information regarding venues' self-reported performance on each of the 18 EBPIs (Mohindra 2008; Lee, Breiter and Choi, 2011), evaluated using a 5-point response scale: 5—*Practice is fully*

*employed and effective in limiting/reducing emissions and/or creating waste, 1—*

*Practice not employed, no plans to introduce it.*

*Analytic approach.* To evaluate UK conference venues' CSR performance on the GREENER VENUE framework and the 18 EBPIs, baseline means and standard deviation for each indicator are reported and discussed. To investigate the impact of firms' score on the GREENER framework towards the 18 EBPIs, analysis involved modeling the former as predictor variables and the latter inputted as dependent variables, using partial least squares (PLS) regression, which allows for multiple independent variables (the 10 variables comprising the GREENER framework in this case) to predict multiple dependent variables (the 18 EBPIs) (Abdi, 2010). PLS has become widely used and recognized in general customer satisfaction research as well as identifying success factors in the marketing literature (Henseler, Ringle, & Sinkovics, 2009). It is also known to overcome problems of multicollinearity and model overfitting especially in models in which many correlated predictor variables are involved (Garthwaite, 1994; Gustafsson & Johnson, 2004).

The utility of PLS over traditional regression approaches lies in the way dependent variables are modeled via determination of their common structure with the predictors, from which parameter estimates are based (Abdi, 2010; Höskuldsson, 1988; Wold, Sjöström, & Eriksson, 2001). An alternative analytical technique would have been to use canonical correlation analysis (CCA), which maximizes the correlation between two sets of variables by minimizing the covariance between them (Fornell & Larcker, 1987). Fundamentally similar to the basic method of PLS, CCA facilitates data exploration purposes (de Bie, Cristianini, & Rosipal, 2005) and helps establish the relationship between two sets of variables via determination of their common components. However, since the aim of the present study is not only to

estimate the strength of relationships between variables but also to predict the impact of the GREENER framework elements onto specific environmental practices, PLS confers more sound and specific estimates when implemented as a regression model with multiple dependents (Garson, 2009).

Because the goal of this study is to determine the extent with which each element of the GREENER framework influences different individual firm performance items that together comprise a broad range of environmentally friendly best practices, analysis will focus on comparing the coefficients of each predictor derived by the PLS model for each element of the GREENER measure in accounting for the 18 EBPIs. From a managerial viewpoint, the level of predictive detail provided by the analysis should be much more instructive in allocating efforts toward managerial or organizational practices that may lead to overall effectiveness in firms' environmental and CSR performance. Rather than just relying on a single overall metric, PLS analysis generates more performance yardsticks along the lines of the GREENER framework. From a theoretical standpoint, the analysis enables a way to validate and assess the different items making up the proposed GREENER VENUE framework and the instrumentality of each toward organizational CSR performance. It should be emphasized that the proposed GREENER VENUE scoring system attempts to capture a firm's *discretionary environmental* CSR. The indicators are discretionary in the sense that they are undertaken voluntarily and because the venue decides whether or not to adopt them.

## Result

*Sample characteristics.* Data from a total of 191 UK conference venues were collected. Majority of the venues represented in the survey were small with 51.8% of the sample representing venues with sizes of 1,000 sq.m. or less, though medium (27.2%) as well as large venues (20.9%) were fairly represented. Most of the venues surveyed were hotels with conference facilities (47.6%). Of the 191 venues surveyed, 63.4% reported not having at least one type of environmental certification or accreditation. Table 3 summarizes the characteristics of the survey respondents comprising UK conference venues.

(Insert Table 3 about here)

*Distribution of venues on the GREENER VENUE framework.* Application of the GREENER VENUE scores to the conference venue data involves aggregating the overall CSR scores for individual venues ranged between minus eight and 30 resulting in the following frequency distribution: The classification with the largest proportion of venues is '*Eager*' with 68 venues (35.6%), whereby '*Organisations act in a proactive/progressive manner towards environmental issues.*' The '*Nonchalant*' category is the second most popular and accounts for 58 venues (30.4%). Defined as '*Acknowledging the corporate/environment interaction, the business changes internal attitudes / behaviour achieving the minimum to maintain a good image.*' Less than 7% of venues are approaching or are at '*Venerated*', while over twice as many venues (31 responses or 16.2%) are viewed as having an '*Unmotivated*' approach and 21 venues (11%) consider themselves to be in '*Eternal denial.*' Therefore, over a quarter (52 venues or 27.2%) of responding venues still have neither implemented some form of discretionary environmental policies and practices nor will they change their

behaviour towards implementing discretionary policies unless acted upon by an external force.

*Baseline descriptive data.* Venues' mean baseline data (performance scores) on the 10 measures of the GREENER VENUE framework as well as on each of the 18 EBPIs are reported in Table 4. In terms of adopting discretionary CSR as defined by the proposed framework, the sample of venues in general score highest in terms of recognizing the need for an environmental review (Mean=1.65, s.d.=1.46), an environmental statement (Mean=1.53, s.d.=1.49) and assuming some sort of policy for recycling, recover and reuse (Mean=1.45, s.d.=0.84). Examination of the means for the 18 environmental best practices, the UK venues reported highest performance means for providing recycling containers (Mean=4.54, s.d.=0.85), using china plates and cups (Mean=4.52, s.d.=1.09), usage of energy saving light bulbs (Mean=4.49, s.d.=0.87) and usage of recyclable paper (Mean=4.30, s.d.=1.17). Other best practices on which the UK venues scored high were sourcing local seasonal food and offering fair trade food or beverage. Performances of practices in which the UK venues were self-rated least included us of solar panels for venues (Mean=1.72, s.d.=1.08), offsetting CO<sub>2</sub> emissions from events (Mean=2.06, s.d.=1.40), adoption of heat reuse (Mean=2.07, s.d.=1.39) and heat recovery (Mean=2.10, s.d.=1.43) technologies, as well as evaluating attendees' view of greening options (Mean=2.66, s.d.=1.50). The preceding descriptive results suggest that UK venues are able to implement environmental best practices that do not require so much financial investments (e.g., providing recycling containers and usage of china plates or cups) and that can be easily implemented at the individual staff or departmental level, without requiring the involvement of many organizational leaders or departments. The following result

examines whether the above observations are somehow associated with the GREENER VENUE discretionary framework for CSR.

(Insert Table 4 about here)

*PLS regression results.* Results of the partial least squares regression analysis in which the 10 items measuring the GREENER VENUE framework were inputted as predictor variables and the 18 EBPIs inputted as dependent variables showed that two structure components were necessary to model the relationship between the predictor and dependent variables, with the  $Q^2$  (cumulative) = .156, an index measuring the model's goodness of fit and the predictive quality for two components the model finds significant in this case. Because an increase in cumulative  $Q^2$  signifies a need for additional components to enhance prediction, the higher the  $Q^2$ , the more stable a solution is indicated (Tenenhaus, Pagès, Ambroisine, & Guinot, 2005). The resultant low cumulative  $Q^2$  value for the two emergent components is not ideal. This is likely indicative of a low level of homogeneity in the responses of the different venues to the dependent and predictor variables. This of course can be addressed by splitting the analysis and generating a model for more homogenous sub-groups of the sample (Tenenhaus, Pagès, Ambroisine, & Guinot, 2005) but defeats the purpose of generalizing the results to the entire UK conference sector.

The cumulative  $R^2$  for X and Y is another metric in PLS indicative of the model's quality by measuring the total variance explained by the two-component model for the set of predictor variables (i.e., the GREENER framework) and the set of dependent variables (i.e., the 18 EBPIs), respectively, with higher values indicating greater explanatory power. The  $R^2$  for Y (the 18 EBPIs) is = 0.206 and therefore low, while the cumulative  $R^2$  for X (the GREENER framework) is = 0.697 and is

comparatively better. Though these figures are not ideal in terms of the overall model fit and suggests a re-examination of the composition of variables within the predictor and dependent sets in future studies, they do not discount the overall results (Chin, 1998). Indeed, the standardized coefficients estimated by the model, which are the effects of interest in this study because they pinpoint which elements of the predictors are relevant to the dependents generate revealing insights..

Table 5 reports the standardized coefficients estimated by the two-component model for each item on the GREENER framework towards predicting each of the 18 item inventory of environmental best practices (EBPIs). Examining the columns, results show that 15 out of the 18 items in the EBPI are, to varying extent, influenced by the different items of the GREENER framework. Of these 15 best practices, 4 had only 1 significant predictor in the GREENER framework. Three best practices, *usage of air conditioning within venue, usage of recyclable paper and providing recycling containers* were surprisingly not significantly predicted by any of the GREENER framework item. This outcome is interesting considering that neither formal nor discretionary measures such as that captured by the proposed framework seem to adequately account for variations in UK venues' performance of these three best practices. Because it is difficult to envisage organizations scoring high on the GREENER metric not to be adopting such environmental friendly measures, the opposite hypothesis whereby UK venues implement these three measures *independent of* their performance in the GREENER framework is more likely and consistent with the relatively above-than-average mean performance ratings for these three items earlier reported in Table 4. *Providing recycling containers*, for example, scored the highest overall among the 18 items in the EBP inventory practiced by UK venues

with *usage of recyclable paper*, not far behind as the fourth highest in the 18-item inventory.

(Insert Table 5 about here)

The various practices that are best accounted for by the GREENER framework items include *evaluating attendees view of greening options* (significantly predicted by 8 out of the 10 items in the GREENER framework) and *usage of energy saving light bulbs, usage of solar panels, offsetting of CO<sub>2</sub> emissions, assessing amount of generated waste and offering fair trade food or beverage*, all of which were significantly predicted by 7 out of 10 items in the GREENER framework. Other best practices influenced by the GREENER framework are the *electronic dissemination of conference documentation and reusing of plastic nametags* (each predicted by 6 out of 10 items).

The impact of the different items comprising the GREENER framework can be assessed by looking at the rows of Table 5 and the pattern of distribution of significant coefficients. The most influential items in the GREENER framework are *educating staff, recognizing the need for an environmental statement and the need for establishing an organizational EMS*, with each of these three items significantly predicting 9 of the 18-item environmental best practices inventory. Other items in the GREENER framework that exhibit strong influence over a broad range of environmental best practices are environmental disclosure of performance (significantly predicting 8 of the 18-item EBPIs), greening the boardroom with a named officer (7 of 18) and recognizing the need for environmental review (7 of 18). Among the 10 items in the GREENER framework, the two items that exhibit the least

degree of influencing environmental best practices are: having a register of environmental legislation, which accounts for only 3 out of the 18 EBPIs and, surprisingly, adopting a policy of recycle, recover and reuse, which is significantly associated with 4 out of the 18 EBPIs. This last point is intriguing because the preceding analysis suggests that organizations having a policy for recycling, reuse and recover (the last item in the GREENER framework; seen in the last row of Table 5) do not necessarily improve (nor worsen) their performance on recycling practices but instead find value in such policies for doing more on practices that tend to be costly. This can be noted in the non-significant relationship of this particular item in the GREENER framework towards best practices such as recycling paper, providing recyclable signs or containers; instead, results show that it is significantly associated with offsetting CO<sub>2</sub> emissions, use of heat reuse and recovery technology as well as sourcing local seasonal food.

The above findings must be regarded tentative at most given the limitations arising from the lower-than-ideal fit levels of the model. To address this weakness follow up studies can be directed towards (a) replicating the study with larger sample sizes that minimizes heterogeneity, (b) fine-tuning or revising elements of either the GREENER framework variables or the EBPIs, or (c) utilizing field data collection not fully reliant on online survey methodology, measures that may afford better model fit. Despite these shortcomings, the coefficients predicted by the model do, however, indicate which of the GREENER framework is promising toward influencing a host of environmental best practices, which can then be examined in greater detail.

## Discussion

Taken as a whole and though limited to the extent of the UK conference venue sector, the above findings can be taken to lend support to the notion that a discretionary basis for enhancing environmental best practices by firms is not only feasible but also effective in influencing a broad range of environmentally friendly performance. Because the sample of UK venues included in the study were comprised of large, medium and small venues, catering to different types of events and majority of which not accredited with any form of environmental standards, the study's findings suggest that the huge impacts generated by the conference venue sector can be mitigated not only by mandatory or legislative measures but effectively by organizational, managerial and operational practices encapsulated in the proposed GREENER VENUE framework.

Even so, the study's findings reflect the complexity with which environmental practices by firms can be augmented. Most, though not all, items in the proposed framework proved to be consequential in influencing many favourable practices. In addition, the relationships are not necessarily straightforward as evidenced by the finding that adoption of a recycling policy by UK venues is not necessarily linked with recycling practices *per se* but with others that seem to require more commitment financially and organizationally in implementation. At a minimum, the study presented herein suggests that various organizational, managerial, or operational practices of a discretionary nature lead to favourable environmental practices and that more investigation delineating the relationship between different practices need to be conducted.

While previous studies investigating the nature of discretionary corporate social responsibility and its influence on environmental practices utilized the summated or indexed value of the GREENER VENUE framework (which effectively

is a multi-item scale), either as a dependent variable (Whitfield & Dioko, 2011) or an independent variable (Whitfield & Dioko, In press), doing so obscured which specific practices were most influential or had the most impact across a broad range of environmental best practices. In effect, this limits the possibilities for managerial and organizational intervention as well as theoretically refining the elements of the framework, which should evolve over time and across various contexts as environmental necessities and challenges demand.

For Peer Review

## References

- Abbott, W.F. & Monsen, R. 1979. On the Measurement of Corporate Social Responsibility: Self-reported Disclosure as a Method of Measuring Corporate Social Involvement. *Academy of Management Journal*, 22: 501-515.
- Abdi, H. 2010. Partial least squares regression and projection on latent structure regression (PLS Regression). *Wiley Interdisciplinary Reviews: Computational Statistics*, 2(1): 97-106.
- Amaeshi, K. & Amao, O.O. 2009. Corporate Social Responsibility in Transnational Spaces: Exploring Influences of Varieties of Capitalism on Expressions of Corporate Codes of Conduct in Nigeria. *Journal of Business Ethics* 86 (supplement 2): 225-239.
- Aupperle, K., Carroll, A.B., & Hatfield, J. 1985. An Empirical Examination of the Relationship Between Corporate Social Responsibility and Profitability. *Academy of Management Journal*, 28: 446-463.
- Bohdanowicz, P., Zientara, P & Novotna, E. 2011 International hotel chains and environmental protection: an analysis of Hilton's we care! programme (Europe, 2006–2008), *Journal of Sustainable Tourism*, 19:7, 797-816.
- Bennett M, & James P. 1999. *Sustainable Measures. Evaluation and Reporting of Environmental and Social Performance*. Greenleaf: Sheffield.
- Bowen, H. R. 1953. *Social Responsibilities of the Businessman*. New York: Harper&Row.
- Bragdon, J. H., & Marlin, J.A. 1972. Is Pollution Profitable? *Risk Management*, 19: 9-18.

Carroll, A. B. 1979. A three-dimensional conceptual model of corporate social performance.

*Academy of Management Review*, 4: 497-505.

Carroll, A.B.1999. Corporate Social Responsibility Evolution of a Definitional Construct. *Business and Society*, 38(3): 268-295.

Carroll, A.B. & Shabana, K.M. 2010. The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice, *International Journal of Management Reviews*, 12(1): 85 – 105.

Chakravarthy, B. 1986. Measuring Strategic Performance. *Strategic Management Journal*, 7: 437-458.

Chatterji, A., Levine, D. & Toffel, M.W. 2009. How Well Do Social Ratings Actually Measure Corporate Social Responsibility. *Journal of Economic and Management Strategy*, 18(1): 125-169.

Chen, C. & Delmas, M. 2010. Measuring Corporate Social Performance: an Efficiency Perspective, Production and Operations Management.

Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS quarterly*.

Chinander, K.R. 2001. Aligning accountability and awareness for environmental performance in operations. *Production and Operations Management*, 10 (3): 276.

de Bie, T., Cristianini, N., & Rosipal, R. (2005). Eigenproblems in pattern recognition. *Handbook of Geometric Computing*, 129-167.

Delquie, P. 1997. Bi-matching: A New Preference Assessment Method to reduce Compatibility Effects. *Management Science*, 43: 640-658.

Dobson, J. 1989. Corporate Reputation: A Free-market Solution to Unethical

- Behavior. *Business and Society*, 28: 1-5.
- Elkington J., Burke T. 1989. *The Green Capitalists*, Victor Gollancz, London.
- Environmental Protection Agency. N.d. Green Hotel Initiatives,  
<http://www.epa.gov/oppt/greenmeetings/pubs/initiatives.html>. Accessed 15-11-2012
- Epstein MJ. 1996. *Measuring Corporate Environmental Performance*. Irwin: Chicago, IL.
- Falck, O., & S. Hebllich 2007. Corporate Social Responsibility: Doing Well by Doing Good. *Business Horizons* 50(3): 247–254.
- Font, X., & C. Harris 2004. Rethinking Standards from Green to Sustainable. *Annals of Tourism Research* 31: 986–1007.
- Fornell, C., & Larcker, D. (1987). A second generation of multivariate analysis: Classification of methods and implications for marketing research. *Review of marketing*, 51, 407-450.
- Frederick, W.C. 2008. *Corporate social responsibility: deep roots, flourishing growth, promising future*. In Crane, A., McWilliams, A., Matten, D., Moon, J. & Siegel, D. (eds), *The Oxford Handbook of Corporate Social Responsibility*. Oxford: Oxford University Press: 522–531.
- Freedman, N., & Jaggi, B. 1982. Pollution Disclosures, Pollution Performance and Economic Performance. *The International Journal of Management Science*, 10: 167-176.
- Fryxell, G.E., & Wang, J. 1994. The Fortune Corporate 'Reputation' Index: Reputation For What? *Journal of Management*, 20: 1-14.
- Garson, G. D. (2009, April 24 2009). Partial Least Squares Regression (PLS) from Statnotes: Topics in Multivariate Analysis. Retrieved July 12, 2011, from

- <http://faculty.chass.ncsu.edu/garson/pa765/statnote.htm>
- Garthwaite, P. H. 1994. An Interpretation of Partial Least Squares. *Journal of the American Statistical Association*, 89(425): 122-127.
- Graves S. & Waddock S. 1994. Institutional Owners and Corporate Social Performance. *Academy of Management Journal*, 37(4): 1034-1046.
- Green Meeting Industry Council. n.d. Better Meetings through Destination Partnerships, <http://www.gmicglobal.org/?page=descdestpartners> Accessed 15<sup>th</sup> November 2012.
- Gustafsson, A., & Johnson, M. D. 2004. Determining Attribute Importance in a Service Satisfaction Model. *Journal of Service Research*, 7(2): 124-141.
- Harvey, B. 1995. Ethical banking: The Case of the Co-operative Bank, *Journal of Business Ethics*, 14(12): 1005-1013.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. 2009. New Challenges to International Marketing. *Advances in International Marketing*, 20: 277–319.
- Hischier, R., & Hilfy, L. 2002. Environmental Impacts of an International Conference. *Environmental Impact Assessment Review*. 22: 543–557.
- Hiss, S. 2009. From Implicit to Explicit Corporate Social Responsibility: Institutional Change as a Fight for Myths. *Business Ethics Quarterly*, 19(3): 433-451.
- Hodge, T. 1997. Toward a conceptual framework for assessing progress toward sustainability. *Social Indicators Research*, 40: 5–98.
- Holden, A. 2003. In Need of New Environmental Ethics for Tourism. *Annals of Tourism Research* 30: 92–108.
- Holden, A. 2009. The Environment-Tourism Nexus Influence of Market Ethics, *Annals of Tourism Research*, 36(3): 373–389.

- Höskuldsson, A. 1988. PLS Regression Methods. *Journal of Chemometrics*, 2(3): 211-228
- Ilinitch, A.Y., Soderstrom, N.S., & Thomas, T.E. 1998. Measuring corporate environmental performance. *Journal of Accounting and Public Policy* 17(4,5): 383.
- International Standard Business. 1998. *The ISO 14000 Environmental Management Series*. Available from <http://www.iema.net/ems/iso14001/iso14000>. Accessed 01 July 2010.
- Jackson, G. & Apostolakou, A. 2010. Corporate Social Responsibility in Western Europe: An Institutional Mirror or Substitute? *Journal of Business Ethics*, 94: 371–394.
- Jasch, C. 2000. Environmental Performance Evaluation and Indicators. *Journal of Cleaner Production* 8: 79–88
- Kedia, B.L., & Kuntz, E.C. 1981. *The Context of Social Performance: An Empirical Study of Texas Banks*. In L.E. Preston (Eds.), Research in Corporate Social Performance and Policy (Vol. 3). Greenwich, CT: JAI Press.
- Kolk, A. & Mauser, A. 2002. The Evolution of Environmental Management: from Stage Models to Performance Evaluation. *Business Strategy and the Environment*, 11: 14–31.
- Khoo, H.J. & Tan, K.C. 2002. Using the Australian Business Excellence Framework to Achieve Sustainable Business Excellence. *Corporate Social Responsibility and Environmental Management*, 9: 196-205.
- Kinder, Lydenberg, Domini Research & Analytics. 2010. *Kinder, Lydenberg, Domini Research and Analytics* <http://www.kld.com>. Accessed; 17<sup>th</sup> September 2010.

Lee, J., Breiter, D & Coi Y. 2011. *Quality of a Green Destination as Perceived by Convention Attendees: The Relationship between Greening and Competitiveness.* Available from [http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1321&context=grad\\_conf\\_hospitality&sei-redir=1#search=%22environmentally+friendly+practices+at+conference+venues%22](http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1321&context=grad_conf_hospitality&sei-redir=1#search=%22environmentally+friendly+practices+at+conference+venues%22) Accessed 23rd April 2011.

Lynes J.K. & Dredge, D. 2006 Going Green: Motivations for Environmental Commitment in the Airline Industry. A Case Study of Scandinavian Airlines, *Journal of Sustainable Tourism*, 14:2, 116-138

Lynes, J.K., & M. Andrachuk. 2008. Motivations for Corporate Social and Environmental Responsibility: A Case Study of Scandinavian Airlines. *Journal of International Management*, 14: 377–390.

Mair, J., & Jago, L. 2010. The Development of a Conceptual Model of Greening in the Business Events Tourism Sector. *Journal of Sustainable Tourism*. 18(1): 77–94.

Maloni, M.J. & Brown, M.E. 2006. Corporate Social Responsibility in the Supply Chain: An Application in the Food Industry. *Journal of Business Ethics*, 68(1): 35-52.

Maon, F., Lindgreen, A. & Swaen, V. 2009. *Designing and Implementing Corporate Social Responsibility: An Integrative Framework Grounded in Theory and Practice*, 87: 71-89.

Marquez, A & Fombrun, C. 2005. Measuring Corporate Social Responsibility. *Corporate Reputation Review*, 7(4): 304-308.

- Marshall, R.S., Cordano, M., & Silverman, M. 2005. Exploring individual and institutional drivers of proactive environmentalism in the US wine industry. *Business Strategy and the Environment*, 14(2): 92-109
- Macbeth, J. 2005. Towards an Ethics Platform for Tourism. *Annals of Tourism Research* 32: 962–984.
- McGuire, J.B., Sundgren, A., & Schneeweis, T. 1988. Corporate Social Responsibility and Business Financial Performance, *Academy of Management Journal*, 31: 854-872.
- Mohindra, K.S. 2008 Greening public health conferences: educating ourselves. *Health Education*, 108(4): 269-271
- Mosby, 2008 *Mosby's Medical Dictionary*. Elsevier, Oxford, UK.
- Neely, A., Gregory, M., Platts, K. 1995 Performance measurement system design: a literature review and research agenda. *International Journal of Operations and Production Management*, 15(4): 80–116.
- Nicolau, J. 2008 Corporate Social Responsibility: Worth-Creating Activities. *Annals of Tourism Research*, 35(4): 990-1006.
- Orlitzky, M. 2011. Institutional Logics in the Study of Organizations: The Social Construction of the Relationship between Corporate Social and Financial Performance. *Business Ethics Quarterly*, 21(3): 409-444.
- Pearce, D.G. 2008 A needs-functions model of tourism distribution. *Annals of Tourism Research*, 35(1): 148-168
- Prakash, A. 2000 *Greening the business: The politics of corporate environmentalism*. Cambridge: Cambridge University Press.

- Ramos, T.B., Caeiro, S., Melo, J.J. 2004 Environmental indicator frameworks to design and assess environmental monitoring programs. *Impact Assessment and Project Appraisal*, 22:47–62.
- Ramos, T.B., Alves, I., Subtil, R., Melo, J.J. 2007. Environmental Performance Policy Indicators for the Public Sector: The Case of the Defence Sector. *Journal of Environmental Management*, 82:410–432.
- Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19(4), 305-335.
- Rowley, T. & Berman, S. 2000 A Brand New Brand of Corporate Social Performance. *Business and Society*, 39(4): 397-418.
- Ruf, B., Muralidhar, K. & Paul, K 1998 The Development of a Systematic, Aggregate Measure of Corporate Social Performance. *Journal of Management*, 24(1): 119-133.
- Saarinen, J. 2006 Traditions of Sustainability in Tourism Studies. *Annals of Tourism Research*, 33(4): 1121–1140.
- Sethi, S. P. 1975 Dimensions of Corporate Social Performance: An Analytic Framework. *California Management Review*, 17: 58-64.
- Sethi, S.P. 1979 A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Academy of Management Review*, 4: 63–74.
- Smith, C. N., Palazzo, G and Bhattacharya, C. B. 2010. Marketing's Consequences: Stakeholder Marketing and Supply Chain Corporate Social Responsibility Issues. *Business Ethics Quarterly*, 20(4): 617-641.

- Sperling, D. 2010. Food Law, Ethics, and Food Safety Regulation: Roles, Justifications, and Expected Limits. *Journal of Agricultural and Environmental Ethics*, 23: 267–278.
- Spiller, R. 2000. Ethical Business and Investment: A Model for Business and Society, *Journal of Business Ethics*, 48: 149-160.
- Tenenhaus, M., Pagès, J., Ambroisine, L., & Guinot, C. 2005. PLS methodology to study relationships between hedonic judgements and product characteristics. *Food Quality and Preference*, 16(4): 315-325.
- Thoresen, J. 1999. Environmental performance evaluation – a tool for industrial improvement. *Journal of Cleaner Production*, 7: 365–370.
- Tytcia, D. 1996. On the measurement of the Environmental Performance of Organisations – A Literature Review and a Productive Efficiency Perspective. *Journal of Environmental Management*, 46: 281-308.
- Turker, D. 2009. Measuring Corporate Social Responsibility: A Scale Development Study. *Journal of Business Ethics*, 85: 411–427.
- Veleva, V., Ellenbecker, M. 2000. A Proposal for Measuring Business Sustainability: Addressing Shortcomings in Existing Frameworks. *Greener Management International*, 31: 101–119.
- Waddock, S. 2003. Myths and Realities of Social Investing. *Organisation and Environment*, 16: 369-380.
- Waddock, S. & Graves, S. 1997. Quality of management and Quality of Stakeholder Relations: Are They Synonymous? *Business and Society*, 18(4): 303-319.
- Wartick, S.L. & Cochran, P.L. 1985. The Evolution of the Corporate Social Performance Model. *Academy of Management Review*, 10: 758–769.

- Wettstein, F. 2010. For Better or For Worse: Corporate Responsibility Beyond "Do No Harm". *Business Ethics Quarterly*, 20(2): 275-283.
- Whitfield, J. E. 2005. *An Analysis and Critique of an Evolving Conference Industry within the UK From Post War to the Present Day*. PhD thesis. Dorset, UK: Bournemouth University.
- Whitfield, J. E., & Dioko, L. (2011). Discretionary Corporate Social Responsibility: Introducing the GREENER VENUE. *International Journal of Event and Festival Management*, 2(2): 170-183.
- Whitfield, J. E., & Dioko, L. (In press). Measuring and Examining the Relevance of Discretionary Corporate Social Responsibility in Tourism: Some Preliminary Evidence From The UK Conference Sector. *Journal of Travel Research*.
- Wokutch, R.E. & McKinney, E.W. 1991. *Behavioral and Perceptual Measures of Corporate Social Performance*. In J.E. Post (Ed.) Research in Corporate Social Performance and Policy. Vol 12 JAI Press, Greenwich, CT: 309-330.
- Wold, S., Sjöström, M., & Eriksson, L. (2001). PLS-regression: a basic tool of chemometrics. *Chemometrics and Intelligent Laboratory Systems*, 58(2): 109-130.
- Wood, D.J. 1991 Corporate social performance revisited. *Academy of Management Review*, 16: 691-718.
- Wood, D.J. 2010 Measuring Corporate Social Performance: A Review. *International Journal of Management Review*. 12(1): 50-84.
- Xie, S. & Hayase, K. 2007 Corporate Environmental Performance Evaluation: A Measurement Model and a New Concept. *Business Strategy and the Environment*, 16: 148-168.

**Table 1: Conceptual framework classifications and definitions**

Classification	Definition
Venerated	Those business achieving the highest standards
Eager	Business act in a proactive manner towards environmental issues
Nonchalant	Acknowledging the corporate/environment interaction, the business changes internal attitudes/behaviour achieving the minimum to maintain a good image
Unmotivated	Acknowledging the corporate/environment interaction, but internally business is unwilling/unable to change, unless acted on by external force
Eternal denial	Company denies the need for policy, with no plans to introduce environmentally friendly processes.

**Table 2: A sample question***Does the venue have a separate department responsible for environmental issues?*

Response	Classification	Score
Full time environmental department in place	Venerated	3
Senior management holds environmental responsibilities	Eager	2
Manager holds environmental responsibilities	Nonchalant	1
Position not created, plans to do so	Unmotivated	0
Position not created, no plans to do so	Eternal denial	-1

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Table 3; Characteristics of survey respondents and venues represent in the study

		N	%
Size of venue	Small ( <i>1000 sq.m. or less</i> )	99	51.8
	Medium ( <i>1001 sq.m. to 4000</i> )	52	27.2
	Large ( <i>4001 sq.m. or more</i> )	40	20.9
Type of venue	Hotel with conference facilities	91	47.6
	Visitor attraction with conference facilities	40	20.9
	Educational establishment with conference facilities	35	18.3
	Purpose built conference facilities	25	13.1
Possess at least one type of environmental accreditation	No	121	63.4
	Yes	70	36.6

Table 4

*Baseline means and standard deviation for the set of predictor and dependent variables*

		Mean	S.D.
Greener venue framework score (5-point interval scale from +3 to -1), N=191	G-Greening boardroom with named officer	.72	1.28
	R-Register of environmental legislation	.59	1.45
	E-Environmental disclosure of performance	.63	1.32
	E-Educating staff	1.12	1.16
	N- Environmental review	1.65	1.46
	N- Environmental statement	1.53	1.49
	N-Established EMS	1.18	1.50
	N-Environmental auditing	1.19	1.47
	E-Establish department for environmental affairs	.61	1.16
	R-Recycle, recover and reuse	1.45	.84
		Mean	S.D.
Environmental Best Practices Inventory (EBPI) (scale of 1 to 5), N=191, and sorted from highest to lowest means)	1. Provide recycling containers (for paper, glass)?	4.54	0.85
	2. Use china plates / cups?	4.52	1.09
	3. Do you use energy saving light bulbs?	4.49	0.87
	4. Use recyclable paper?	4.30	1.17
	5. Source local seasonal food?	4.06	1.23
	6. Offer Fair trade food / beverages?	4.01	1.36
	7. Use recyclable signs?	3.91	1.56
	8. Electronic dissemination of conference documentation?	3.88	1.43
	9. Reuse plastic nametags?	3.78	1.56
	10. Do you use air conditioning within the venue?	3.67	1.53
	11. Assess the amount of waste generated?	3.26	1.53
	12. Avoid individual packages for condiments (e.g. sugar)?	3.25	1.57
	13. Arrange food-composting options?	2.73	1.54
	14. Evaluate attendees' view of greening options?	2.66	1.50
	15. Heat recovery technology?	2.10	1.43
	16. Heat reuse technology?	2.07	1.39
	17. Offset CO2 emissions arising from conferences	2.06	1.40
	18. Does your venue use solar panels?	1.72	1.08

Table 5; Standardized coefficients generated by PLS regression analysis.

(\* denote  $p < .05$  while blank cells denote non-significant coefficients. Columns are sorted to make significant coefficients adjacent to each other and to ease interpretation.)

		Dependent variables: 18 Environmental Best Practices Inventory (Mohindra 2008; Lee, Breiter and Choi, 2011)																
		Use air con within venue	Use recyclable paper	Provide recycling containers	Use recyclable signs	Offer fairtrade food	E-dissemination of conference documentation	Reuse plastic name tags	Assess amount of waste generated	Evaluate attendees' view of greening options	Use energy saving light bulbs	Use solar panels	Offset CO2 emissions	Use china plates/cups	Arrange food composting options	Avoid individual packages for condiments	Use heat recovery technology	Source local seasonal food
Independent variables:	10 items comprising GREENER framework																	
G-Greening boardroom with named officer																		
R-Register of environmental legislation																		
E-Environmental disclosure of performance																		
E-Educating staff																		
N- Environmental review																		
N- Environmental statement																		
N-Established EMS																		
N-Environmental auditing																		
E-Establish department for environmental affairs																		
R-Recycle, recover and reuse																		
		0.06 *	0.06 *	0.05 *	0.10 *	0.10 *	0.07 *	0.08 *	0.06 *	0.04 *	0.04 *	0.04 *	0.06 *	0.06 *	0.03 *	0.55 *	0.56 *	0.29 *
	0.05 *	0.06 *	0.05 *	0.04 *	0.08 *	0.08 *	0.06 *	0.07 *	0.05 *	0.04 *	0.05 *	0.06 *	0.06 *	0.06 *	0.03 *			
		0.06 *	0.05 *	0.04 *	0.08 *	0.08 *	0.07 *	0.08 *	0.07 *	0.03 *								
			0.07 *	0.07 *	0.06 *	0.07 *	0.08 *	0.07 *	0.03 *									
				0.07 *	0.05 *	0.04 *	0.09 *	0.10 *	0.06 *	0.05 *	0.06 *	0.06 *	0.06 *					
					0.06 *	0.05 *	0.04 *	0.10 *	0.10 *	0.05 *	0.05 *	0.07 *	0.06 *					
						0.06 *	0.06 *	0.05 *	0.08 *	0.06 *	0.05 *	0.07 *	0.06 *					
							0.10 *	0.10 *	0.05 *	0.05 *	0.08 *	0.16 *						