

Article

Business Sustainability: How Does Tourism Compare?

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Abstract: This study aims to empirically compare the adoption of business sustainability amongst 291 randomly-selected tourism and non-tourism businesses in New South Wales, Australia. Tourism businesses were found to be more committed to environmentally-sustainable practices than other types of businesses with there being a clear correlation with their ability to learn and adapt. This contradicts criticisms in the literature that tourism businesses are slow adopters of sustainability. This study highlights the need for further research into why tourism businesses in New South Wales, Australia, are reporting higher levels of performance in terms of adopting environmental values than other businesses in contradiction to the general perception of tourism businesses in the literature.

Keywords: sustainability; tourism businesses; indicators; learning; adaptability

1. Introduction

Since the release of ‘Our Common Future’ in 1987 by the World Commission on Environment and Development (WCED), sustainable development has been firmly on the global agenda [1]. The sustainability paradigm has brought to the fore the notion of triple bottom line measurement and corporate social responsibility [2], resulting in heightened pressure on businesses to embed sustainability into their operations and planning [3].

The extent to which sustainability principles have been adopted by tourism businesses has rarely been compared with other types of businesses [4]. While sustainability has received considerable academic and government interest, the literature has repeatedly suggested that tourism businesses have been slow to adopt and implement the principles of sustainability into their operations [5,6]. Certainly, there are many drivers and challenges for businesses attempting to adopt sustainability, from management, policy, and legislation, to consumer demand and implementation costs [7–11]. Yet, Sharpley [2] and Butler [5] both argue that there are gaps between the ideals and the reality of tourism businesses actually developing and implementing sustainability principles in practice. Further, it has been noted that while some organisations adopt “green” values for economic returns, they are rarely truly “green” [12]. Therefore, this paper reports on a study that sought to empirically determine the relative performance of a random sample of tourism businesses vis-à-vis other types of businesses in terms of the extent to which sustainability principles are embedded in business practices. This study also explores the role of learning and adaptability in the adoption of sustainability principles.

2. Literature

Sustainability is a fundamental characteristic of a dynamic, evolving system. Businesses are becoming increasingly aware of environmental issues mainly driven by increasing environmentalism in society. The pressures from various stakeholders for businesses to include environmental issues into their corporate agenda are becoming rapidly more apparent. The pressure from government agencies and other legal bodies has also risen and, as such, businesses can no longer ignore the real and potential impact they are causing their immediate environment [3,13]. Several instruments have been suggested that aim to help firms in dealing with environmental issues. Best known are life cycle analysis (LCA), material flow modelling, and environmental stakeholder analysis. Mostly, however, instruments and analyses work in isolation and consider either environmental or economic issues, but rarely the two in unison. In the framework of environmental risk assessment, it is also important to be able to quantify, in monetary terms, any environmental harm inflicted by the firm's activities [3]. Thus, importance is also given to social and economic sustainability in business operations [14].

Corporate sustainability across the triple bottom line has seen many challenges to implementation. Previous studies have outlined the difficulties businesses face when balancing sustainability practices, often resulting in economic sustainability taking precedence [15,16]. Similarly, 'green' practices and accreditation have been associated with high expenses, further discouraging the correct adoption [15]. Nevertheless, Bansal [15] encourages businesses to facilitate the adoption by encompassing general principles of sustainable development into business practices. For instance, the study found that empowering and engaging employees and clients within sustainability initiatives increased the likelihood of businesses to embrace sustainable practices within all organisational activities [15].

Bansal [15] also argues that sustainability is a practice that must be measured to determine the effectiveness, and businesses should focus on developing better measures of sustainability. However, the notion of sustainability metrics to assess initiatives or approaches presents another challenge. An abundance of literature exists in this area, with an array of sustainability models and indicators existing across many industries and business contexts [16–18]. Currently, there is no agreed-upon set of indicators to measure sustainability across the triple bottom line. Future research needs to develop a concise set of sustainability indices for businesses.

The adoption of sustainability practices are widely embraced within a number of business structures and across industries. Sustainability is a concept that is increasingly embedded within large businesses; however, social pressure has led to greater adoption of sustainability practices within small-to-medium-sized enterprises (SMEs) [19,20]. In addition to social pressures, management values and attitudes drive sustainability adoption and the degree to which sustainability is incorporated within business operations [20–22].

It has been argued that learning and adaptability play a critical role in the adoption of sustainability and guide businesses towards effective sustainability outcomes [23]. That is, long-term sustainability will result not from movement along a smooth trajectory, but rather from continuous adaptation to changing conditions [19,23]. This is particularly evident within the tourism sector, as the adaptability of the sector enables tourism industries to be designed and implemented which provide a development pathway to environmental sustainability, such as through ecotourism ventures [24,25]. It has been found that these tourism sustainability clusters have influenced business processes across the industry [26]. While it is recognised that adaptability has encouraged the adoption of sustainability practices, it is unclear whether business learning and adaptability has influenced sustainability performance [24,26]. That is, research has found this relationship to exist at an industry level, but it is unclear of the role of learning and adaptability for sustainability performance for individual businesses. Research in the area of adaptive capacity has taken a capital approach to sustainability, suggesting that a system's ability to learn and adapt to achieve sustainable outcomes is dependent on the resources available [27]. Such research has not been conducted in the context of business sustainability. This calls for further research to determine if resource availability influences the adaptability of businesses and, ultimately, the adoption and performance of sustainable practices. Thus, Budeanu et al. [24] suggest a

need to consider sustainability practices in light of learning and adaptability when assessing business sustainability performance in future research.

Despite the seemingly broad adoption of sustainability within tourism, the sector continues to be seen as a slow adopter of sustainability, as well as being portrayed as a lower performing sector in terms of sustainable practices [2,5]. Previous research has suggested that an eco-façade exists within some tourism businesses, where 'green' labels have been used inappropriately or incorrectly for competitive advantage [5,28]. Although increased regulation and accreditation has assisted to address this issue, the voluntary adoption of sustainability in tourism businesses continues to perpetuate the misuse of labels [5]. The voluntary adoption has also contributed to the perceived lower performance of tourism businesses, as the outcomes of initiatives can vary, irrespective of the use of sustainability labels [29].

Moreover, the tourism sector is largely made up of SMEs and Font, Garay, and Jones [30] suggest that many of these businesses are involved in pro-sustainability actions. However, limited research has assessed the adoption of sustainability within these businesses, with research often focusing on accreditation schemes which are predominantly held by larger tourism businesses [31]. Font, Elgammal, and Lamond [32] also found that tourism businesses communicate only 30% of all sustainability actions practiced. This means that previous research assessing tourism business performance at face value does not represent true sustainability performance. To address this gap in knowledge, the present study aims to (1) compare sustainability performance between tourism and non-tourism businesses; and (2) explore the role of learning and agility/adaptability in business sustainability adoption and performance.

3. Method

A comprehensive and exhaustive Google Scholar keyword search was undertaken, using the search terms "business" and "sustainability" to identify previous studies that specifically sought to develop sustainability indicators for businesses. This search identified 88 research articles, reports and theses ranging from 1985 to 2012. Following the meta-analysis methodology by Lipsey and Wilson [33], the indicators from the 88 articles were collated and coded into an item pool to categorise the indicators as environmental (267 indicators), economic (418 indicators), and social (636 indicators). The list of indicators was reduced by removing repetitive or incoherent statements (see [34]), as well as improvements for readability and validity focused on improving grammar, conciseness, clarity, and relevance [35]. In other words, the statements were refined to ensure there was no duplication and that the indicators were clear and made sense in the context of the current study. No other adjustments were made to the final list, with all indicators at the time of the study being included. A final list of 66 environmental, 28 economic, and 36 social indicators were selected for inclusion in the business survey. Since this was still a very long list, it was decided that only one set of indicators (environmental, economic, or social) would be randomly presented to each respondent. Using a five-point Likert-type agreement scale (1 = strongly disagree and 5 = strong agree) respondents were asked to indicate the extent to which they agreed or disagreed with each indicator (the questionnaire is at Appendix A). Respondents were also asked questions about their business, including location, business structure, and size, length of trading, goods and/or services sold, whether they have participated in a sustainability program, and questions regarding the businesses' learning and adaptability.

The survey was administered online using Survey Monkey to a sample of randomly-selected businesses from New South Wales, Australia (selected using systematic random sampling of the White Pages Business Directory) in late 2012. The business owners/managers of 7043 business listings were emailed invitations to participate in the survey. Only 19% (or 1193) opened the email that they were sent (primarily due to outdated email addresses), of which 24.4% (291) of those completed the survey. Given that the sample was busy business owners and managers, this was deemed a relatively good response rate for online survey tools [36]. For the environmental dimension, 94 responses were obtained, 96 for the economic dimension, and 101 for the social dimension. Splitting the

dimensions reduced the length of the survey for individual respondents, but meant that there were fewer responses, which limited the data analysis techniques available. Consequently, the data were analysed in STATA v.13 (StataCorp, College Station, TX, USA) using non-parametric Spearman's rank correlations, chi-square goodness of fit, and Wilcoxon-Mann-Whitney and Kruskal Wallis tests were used to determine if there were relationships between key variables and significant differences by tourism and non-tourism businesses. These tests are suitable under small sample sizes [37].

4. Results

4.1. Adoption of Sustainability

Most respondents reported that their business was a company (55%) that had been trading for over 15 years (47%). The businesses were generally small- to medium-sized and the vast majority had less than 20 employees (87%). About 32% of the respondents indicated that their business was tourism related. Approximately 41% indicated that they or their business had previously participated in a sustainability programme. An overview of the respondents are provided in Table 1. Tourism businesses tended to be retail trade, other services, health services, and accommodation and food services. Non-tourism businesses tended to be in construction, professional, and scientific services and retail trade. However, detailed breakdowns are not provided due to sample size issues.

Considering the economic indicators, tourism businesses only significantly differed from other types of businesses on a few indicators, specifically, they were found to have significantly better access to government grants (Prob > |z| = 0.003), but they were significantly less able to grow their market share (Prob > |z| = 0.015). Similarly, only one social indicator significantly differed between tourism and non-tourism businesses, with the results indicating that tourism businesses rated themselves as significantly better able to generate local employment opportunities than other businesses (Prob > |z| = 0.016).

However, the environmental indicators showed several differences between tourism and non-tourism businesses in terms of the environmental indicators. Specifically, the tourism businesses were significantly more capable of measuring the amount of water used for operations (Prob > |z| = 0.005), committed to reducing greenhouse gas emissions (Prob > |z| = 0.003), committed to reduce purchases of non-renewable materials, chemicals, and components (Prob > |z| = 0.023), committed to recycling its waste (Prob > |z| = 0.042), likely to have purchased solar panels (Prob > |z| = 0.009), likely to have a recycling program or strategy in place (Prob > |z| = 0.021), likely to be using energy efficient appliances (Prob > |z| = 0.010), likely to be using lighting, heating, air-conditioning, plant machinery, and vehicles responsibly (Prob > |z| = 0.022), and likely to be encouraging the use of public or shared transport by staff and customers (Prob > |z| = 0.035). Importantly, this shows that tourism rates itself more highly in terms of its environmental performance on a number of indicators than what other businesses do.

Table 1. Respondent overview.

Variables	Frequency	Percentage
<i>Sustainability dimensions</i>		
Economic	96	33%
Social	101	35%
Environmental	94	32%
<i>Broad NSW Remoteness Areas</i>		
Major City	94	32%
Inner Regional NSW	169	58%
Outer Regional/Remote NSW	27	9%

Table 1. Cont.

Variables	Frequency	Percentage
<i>Business Structure</i>		
Sole trader	59	20%
Partnership	44	15%
Trust	21	7%
Company	160	55%
Other	7	2%
<i>Number of Employees</i>		
Non-employing	45	15%
1–4 employees	101	35%
5–19 employees	106	36%
20–199 employees	33	11%
More than 200 employees	6	2%
<i>How long the business has been trading</i>		
More than 15 years	136	47%
6–10 years	55	19%
2–5 years	50	17%
11–15 years	37	13%
Less than 2 years	12	4%
More than 15 years	136	47%
<i>Participated in a sustainability programme</i>	118	41%
<i>Tourism Related</i>		
Yes	93	32%
No	198	68%

4.2. The Role of Learning and Adaptability

Although tourism businesses considered themselves to perform poorly in terms of learning and adaptability, they, in fact, performed significantly higher than other types of businesses, particularly in terms of being able to adjust to changes ($\text{Prob} > |z| = 0.001$), learn from other organisations ($\text{Prob} > |z| = 0.018$), place a priority on research and development ($\text{Prob} > |z| = 0.028$), and have error tolerance ($\text{Prob} > |z| = 0.041$).

To further explore the role of learning and adaptability in terms of business sustainability, Spearman rank correlations were performed on the variables that significantly differed by tourism and other types of businesses. The results showed that three of the learning/adaptability variables (being adaptable and able to adjust to changes ($p < 0.001$), learning from other organisations ($p = 0.009$), and placing a priority on research and development ($p = 0.003$)) were strongly positively correlated with each other, but there was no correlation between these three variables and the error tolerance variable, indicating that error tolerance is likely not related to learning and adaptability, but that research and development likely is related. Two of the significant learning variables (being adaptable and able to adjust to changes ($p < 0.001$) and placing a priority on research and development ($p = 0.031$)) were positively correlated with the significant economic indicator of having access to government grants, possibly reflecting the businesses ability to scope for, and capitalise on, opportunities and have the background research available to support government grant applications. However, there was no positive correlation between the learning/adaptability variables and the significant social impact variable of generating employment.

For the environmental variables, none were positively correlated with the error tolerance variable (Table 2). However, aiming to reduce purchases of non-renewable materials, chemicals, and components, as well as encouraging the use of public or shared transport by staff and customers were significantly positively correlated with all three of the other learning/adaptability variables, indicating that these traits may influence the adoption of sustainability. Having purchased solar panels

was significantly positively correlated with the organisation being adaptable and able to adjust to changes, while using energy-efficient appliances was significantly correlated with the organisation placing a priority on research and development. The other environmental variables, being committed to reducing greenhouse gas emissions, using lighting, heating, air-conditioning, plant machinery, and vehicles responsibly, measuring the amount of water used for operations, recycling waste and having a recycling program or strategy, were significantly correlated with both the organisation being adaptable and able to adjust to changes, and placing a priority on research and development.

Table 2. Learning/adaptability and environmental variables that significantly differed by tourism and non-tourism businesses.

	Adaptable and Able to Adjust to Changes	Learns from Other Organisations	Places a Priority on Research/Development	Undertakes Experiments/Pilot Tests/Research When Starting New Projects
Aims to reduce purchases of non-renewable materials, chemicals and components	$r = 0.618, p < 0.01$	$r = 0.639, p < 0.01$	$r = 0.696, p < 0.01$	No sig. corr.
Encourages the use of public or shared transport by staff and customers	$r = 0.443, p = 0.013$	$r = 0.455, p = 0.01$	$r = 0.575, p < 0.01$	No sig. corr.
Has purchased solar panels	$r = 0.401, p = 0.025$	No sig. corr.	No sig. corr.	No sig. corr.
Is committed to reducing greenhouse gas emissions	$r = 0.526, p = 0.002$	No sig. corr.	$r = 0.526, p = 0.002$	No sig. corr.
Uses energy efficient appliances	No sig. corr.	No sig. corr.	$r=0.371, p=.04$	No sig. corr.
Uses lighting, heating, air-conditioning, plant machinery and vehicles responsibly	$r = 0.569, p < 0.01$	No sig. corr.	$r = 0.561, p < 0.01$	No sig. corr.
Can measure the amount of water used for operations	$r = 0.535, p = 0.002$	No sig. corr.	$r=0.395, p = 0.028$	No sig. corr.
Aims to recycle its waste	$r = 0.563, p < 0.01$	No sig. corr.	No sig. corr.	No sig. corr.
Has a recycling program or strategy in place	$r = 0.512, p = 0.003$	No sig. corr.	No sig. corr.	No sig. corr.

5. Discussion

Prior literature suggests that tourism businesses are slow adopters of sustainability [2,5], yet this is in contrast to other studies that suggest that tourism businesses tend to be highly engaged in pro-sustainability [30]. Problematically, many previous studies have tended to consider tourism in isolation, rather than undertaking cross-industry comparisons. Consequently, this study aimed to compare the sustainability of tourism businesses with other businesses and explore the role of learning and adaptability in the adoption of sustainability principles by assessing a random sample of businesses in New South Wales, Australia.

While limited by a relatively small sample size that influenced the types of data analysis performed, the results identified that tourism businesses had higher learning and adaptability characteristics compared with other businesses. Tourism businesses were found to be more committed to environmentally-sustainable practices than other types of businesses with there being a clear correlation with their ability to learn and adapt. This contradicts the criticisms noted previously that tourism businesses performed poorly with regards to sustainability [2,5]. In fact, this finding reinforces the fact that the tourism sector is dynamic, requiring frequent and fluid adaptation to align with changing consumer demands, external 'shocks' to the sector, and an ever-changing business

environment [24,25]. However, further research is required to assess the efficacy of such initiatives and respond to concerns over the legitimacy of sustainability initiatives [12].

Moreover, a key finding of the study was the positive relationship that was identified between adaptability and government grants, as well as sustainability adoption and government grants. Greater access and availability of resources, such as grants, were found to increase business learning and adaptability and sustainability adoption. This finding supports existing knowledge in the adaptive capacity literature, suggesting that available resources will contribute to the sustainability performance of the business [27]. Such findings have managerial and government implications, providing insight into how sustainability adoption and adaptability can be increased within tourism businesses to improve sustainability performance. In addition, the research points to a relationship between business learning and adaptability and the adoption of environmental sustainability. While the relationship is only supported through correlations, it delivers important insight into areas of future research that need to be capitalised upon. Determining if learning and adaptability are causally related to the adoption of environmental sustainability could significantly influence policy and planning, not only in tourism, but also other sectors.

6. Conclusions

This study contributes to the literature on the adoption of business sustainability, particularly how the tourism sector compares to other industries. While self-reporting business performance is a limitation of this study because respondents may have over-estimated their capabilities and strengths, this study highlights the need for further research into why tourism businesses in New South Wales, Australia are reporting higher levels of performance in terms of adopting environmental values than other businesses in contradiction to the general perception of tourism businesses in the literature. Moreover, indicators may incrementally be added or refined in the literature and, as such, the list of indicators should be updated in future research and assessed for relevance. This research also highlights the challenges faced by researchers in capturing responses from businesses from online surveys. Future research should seek to explore other methods that can best capture data around business sustainability adoption, such as big data methods.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Business Sustainability Survey

Section 1. About You and Your Organisation

1. Do you own or manage a business located in New South Wales? (Multiple Response)

- Own business.....
- Manage business.....
- Neither..... Go to Close

2. What is the New South Wales postcode(s) in which your business is located?

3. What is the business structure?

-Sole trader or sole proprietor
- Partnership.....
- Trust.....
-Company
- Other.....
- Don't Know.....

4. How long has the business been trading?

-Less than 2 years
- 2 to 5 years.....
- 6 to 10 years.....
-11 to 15 years
- More than 15 years.....
- Don't Know.....

5. How many employees does the business have?

- Non-employing
- 1 to 4 employees.....
- 5 to 19 employees.....
-20 to 199 employees
- More than 200 employees.....
- Don't Know.....

6. What is the main or primary good or service that the business produces or provides?

7. Does your business provide any goods/services to tourists or visitors to the region in which it is located?

- Yes..... Go to Q8
- No..... Go to Q9
- Don't Know..... Go to Q9

8. Does your business primarily supply goods/services to tourists or visitors to the region in which it is located (rather than to locals)?

- Yes
- No.....
- Don't Know.....

Your Organisation:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable	Don't Know
Encourages the use of public or shared transport by staff and customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aims to reduce risk of environmental accidents, spills and releases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aims to show concern for visual aspects of facilities and operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aims to train employees in environmental awareness, management and/or operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boycotts suppliers with an unfavourable environmental background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has an environment focused supplier program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a pollution prevention program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has implemented a regular maintenance schedule for plant and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has measurable targets for reducing water/energy use and/or waste production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has worked to ensure that employees, patrons, suppliers and the community are aware of its sustainability goals and actions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invests in environmental management and nature conservation measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Voluntarily contributes to an environmental scheme or organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Undertake environmental public disclosure and audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adheres to environmental laws and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a response plan in case of environmental accidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental Products and Marketing							
Produces or gains revenues from environmentally friendly products, services, recycled materials or alternative energy sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makes marketing claims based on environmental aspects or performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Considers changes in competitors' environmental strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Considers customers' environmental preferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has customer environmental education strategies e.g., communication of environmental programs, room information and management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invests more in environmental responsiveness than competitors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENERGY							
Can calculate its CO ₂ emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can measure the amount of energy used within key areas or departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has invested in cleaner technologies and more energy efficient systems (e.g., insulation, smart control systems and sensors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has reduced its energy consumption over the last year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has purchased solar panels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purchases "green" electricity from grid suppliers (if available)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has reduced the use of traditional fuels by substituting with less polluting energy sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is committed to reducing greenhouse gas emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitors and analyses the amount of energy used within the organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offsets its CO ₂ emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses energy efficient appliances (e.g., refrigerators, freezers, heaters, air-conditioners)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses energy efficient lighting (low energy light bulbs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses lighting, heating, air-conditioning, plant machinery and vehicles responsibly e.g., by only providing lighting where necessary, only using air-conditioning when necessary, using natural lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses renewable energy sources (e.g., solar, hydroelectric, wind, certain biofuels)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WATER							
Can measure the amount of water used for operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collects, stores and uses rainwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has installed low/dual flush toilets or waterless/low flow urinals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has installed low flow or flow restricted taps or shower fittings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has minimal irrigation landscaping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has used native plants in its landscaping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recycles grey water or treated wastewater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sweeps outside areas instead of washing them down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses water efficient appliances (e.g., washing machines, dishwashers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WASTE							
Aims to recycle its waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aims to sell waste products for revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can measure the amount of waste that is sent to landfill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Composts organic waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uses recycled products e.g., paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a recycling program or strategy in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAMPLE 2

13. Please rate the societal performance of your organisation in terms of the following:

Section 4. Sustainability Programme Assessment

17. Have you participated in any programmes or used any guidelines, platforms, certifications, training or workshops that were designed to improve your business’ economic, social or environmental performance?

-Yes Go to Q17
- No Go to Q18

18. Please specify which sustainability programmes, guidelines, platforms, certifications, training or workshops you have been involved with, used or adopted.

Section 5. Close

19. The optional comment box below is provided for you to offer any comments, additional information or suggestions in relation to business sustainability:

20. Would you like to enter into the competition for a \$500 prepaid credit card?

-Yes
-No

21. Would you like to receive an executive summary of this study’s key findings?

-Yes
-No

22. Would you be willing to participate in a follow-up interview?

-Yes
-No

23. If you answered ‘Yes’ to any of the previous three questions, please provide your preferred contact details:

Name:

Email Address:

Phone Number:

Thank you very much for your participation in this survey!

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