Article

Managing Change Toward Environmental Sustainability: A Conceptual Model in Small and Medium Enterprises

Organization & Environment
2018, Vol. 31(2) 152–177

DOI: 10.1177/1086026616689292
journals.sagepub.com/home/oae
SAGE

Retha Wiesner[1], Doren Chadee[2], and Peter Best[3]

Abstract

This article aims to develop a model for managing change toward environmental sustainability (ES) within small and medium enterprises (SMEs) by investigating the main ES change management actions evident from the ES journeys of SME ES champions. Using in-depth face-to-face interviews, the article draws from the ES change management experiences of a sample of 12 ES champions from the SME sector, as well as secondary organization–specific data. A multicase design was adopted to develop the proposed model. A thematic content analysis identified 10 main change management actions along with a number of associated actions. The findings provide an empirically developed ES change management model and practical managerial ES change management guidelines to SMEs embarking on an ES journey.

Keywords

environmental sustainability, business sustainability, sustainability, change management, triple bottom line, SMEs, small and medium enterprise, sustainable management, environmental sustainability change

For businesses, being environmentally sustainable refers to being profitable through well-planned, socially, and environmentally sensitive practices (Elkington, 2001). Environmental performance, as an objective of managing operations and services in organizations, could be the first step toward developing an environmentally sustainable strategy (de Burgos Jiménez & Céspedes Lorente, 2001). The bulk of prior research has focused mainly on the economic and financial aspects of environmental sustainability (ES) of predominantly large organizations (Benn, Dunphy, & Griffiths, 2006; Dunphy, Griffiths, & Benn, 2007; Epstein, 2008), while the process of how ES champions in small and medium enterprises (SMEs) manage change toward ES in SMEs remains largely unexplored (Brammer, Hoejmose, & Marchant, 2012).

What is missing in the SME literature is a holistic model of how SME ES champions manage change toward ES since most literature focusing on ES change management issues examine only

[1]University of Southern Queensland, Springfield, Queensland, Australia
[2]Deakin University, Melbourne, Victoria, Australia
[3]Central Queensland University, Brisbane, Queensland, Australia

Corresponding Author:
Retha Wiesner, Australian Centre for Sustainable Business and Development, University of Southern Queensland, USQ Springfield campus, Building A, Springfield, Queensland 4300, Australia.
Email: wiesner@usq.edu.au

distinct parts of managing change toward sustainability. This is further discussed in the next section. Also, missing from the SME literature are models of managing change toward ES that are derived from empirical data collected from within SMEs and not just prescriptive guidelines that have been generalized from models developed within large organizational contexts. The case for a model for managing change toward ES in SMEs is further discussed in the next section. These previous oversights are despite the fact that SMEs represent at least 80% of all global enterprises (Organisation for Economic Co-operation and Development, 2002), account for at least 70% of the world's production (O'Laoire & Welford, 1996), and cumulatively contribute more than one third of all pollution.

This article focuses on the micro firm level of analysis which has been particularly understated in sustainability research despite an increased awareness of the importance of generating behavioral change that will support and augment sustainability efforts at the public and business policy levels (Zollo, Cennamo, & Neumann, 2013). Additionally, even though the focus of this article is on ES, as a point of departure, we use a lens of change management within the context of SMEs, an area in dire need of examination as will be evident in the next section.

In order to change the traditional perception of environmental management as a source of costs, traditionally the sustainability literature argued for a win-win narrative, that is, that sustainability initiatives are only of value if they lead to a profit or competitive advantage (e.g., Bonini & Swartz, 2014). However, H. P. Walker, Seuring, Sarkis, and Klassen (2014) ask the question, "Are responsible business practices a worthwhile endeavor regardless of profits?" They note that there appears to be an upsurge of concern within society that profit is pursued at the expense of sustainability issues. Despite sentiments like this, there is still no consensus on the relationship between environmental performance and business performance (Albertini, 2013). For example, contrary to authors' putting forward the case for a correlation between ES and economic benefits, Aguilera-Caracuel and Ortiz-de-Mandojana (2013) argue that green innovations do not always translate into higher levels of financial performance. Therefore, even though the participants in the current study reported a range of economic sustainability outcomes, we recognize that pursuing an ES journey may not always necessarily be positive for individual firms making sustainable changes.

This article draws on the experiences of a selected group of ES champions in Australia and shows that by embarking on the ES journey, SMEs are introduced to much more efficient ways of doing business, cutting costs, and implementing novel methods of engaging staff. Apart from an enhanced image in the marketplace, employees become engaged and feel they have something of value to contribute.

An ES champion is defined as "firms that have taken the lead in reducing the environmental impact of their activities, usually at levels beyond regulatory compliance, and have achieved recognition as being 'green' compared with their competitors" (Runhaar, Tigchelaar, & Vermeulen, 2008). Using the Australian Bureau of Statistics classification, we define small businesses as having 20 or fewer employees, and medium size businesses as having between 21 and 200 employees (Australian Bureau of Statistics, 2001).

This study goes beyond a focus on mere ES "issues" in the SME sector by developing a model for ES change management in SMEs that is derived from empirical data in ES SME champions. In view of the discussion above and the discussion in the next section outlining the gaps in the literature, this article examines the following research question, "How do SME ES champions manage the process of change toward ES?" Learning from SME champions provide valuable insights into processes and practices that have worked successfully for these SMEs.

The Case for a Model on the Management of Change Toward Environmental Sustainability in SMEs

Moran and Brightman (2001, p. 111) define change management as: "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs

of external and internal customers." Keeping the general definition of change management in mind, the concept of ES change management in this article draws on aspects of Jabbour's (2010), and Simpson, Taylor, and Barker's (2004) work by defining it as: Managing the process of changes in technology and practices that affect the organization and in which the weighing of environmental factors in business decisions (such as process, product, service, and stakeholder development activities) plays a role.

The academic literature on ES from a change management perspective remains underdeveloped and is still in its infancy despite the fact that ES has been identified as an innovative and potentially transformational force that generates new products and processes which may challenge existing business practice (Blum-Kusterer & Hussain, 2001; Bos-Brouwers, 2010). ES change can be either radical (Rycroft & Kash, 2000) or incremental (Chadee, Wiesner, & Roxas, 2011). Furthermore, ES change is distinctive from other organizational changes because it usually (but not always) involves economic, social, and environmental change elements as an integral part of the overall change processes.

To scope the field and evaluate the gaps in previous literature, plus determine how this article could contribute to these gaps and demonstrate the need for an ES change management model in SMEs, a systematic review of journal articles concerning ES change in SMEs and the prevalence of ES change management models was undertaken. We focused on articles reporting empirical results because this enabled us to explore what is occurring in SMEs regarding ES change management from a practical and empirical perspective rather than purely a theoretical one. For example, we examined what themes are addressed in the literature regarding change management in SMEs; what frameworks/models have been empirically derived in the SME context; and to what extent do change management models/frameworks feature in the literature. An initial review included large organizational literature; however, it soon became clear that owing to the unique characteristics of SMEs, ES change management models developed for large organizations are not a good fit for SMEs (Palmer, Russell, & McIntosh, 2012). Concepts such as a sustainability department, a designated sustainability manager(s), and a separate budget for sustainability (indicating significant financial resources) prevalent in most large organizations are absent from most SMEs. Apart from limited resources and limited cash flows, SMEs are also characterized by fewer customers, a focus on immediate issues rather than long-term strategy, a flat structure and often high staff turnover compared with their larger counterparts (Hudson, Lean, & Smart, 2001; Hyvonen & Touminen, 2006). Furthermore, SMEs have to pay special attention to weighing up whether the generation of capabilities through proenvironmental behavior balances the resources required within a context of scarce resources (Martin-Tapia, Aragon-Correa, & Senise-Barrio, 2008). SMEs are more nimble and the strategic choices of the owner–manager and the choice of employing particular change management practices in the organization tend to be at greater discretion of the owner–manager. Another reason for excluding literature that targets large organizations is because our specific focus is on models derived from empirical data in SMEs or models tested in SMEs.

Similar to the approach by Parker, Redmond, and Simpson (2009), we used peer-reviewed journals because we believe their findings are of higher quality when compared with conference papers, reports, and nonreviewed journals. We searched for articles in the following online databases: Science Direct, Wiley, Sage, EBSCOhost, and Emerald using search terms relating to SMEs (e.g., SME, small business, small firm, etc.), and change management (e.g., change, change management, change leadership, change models, change frameworks), and the environment (e.g., environment, ES, corporate social responsibility). We ensured the currency of our review by using relatively recent studies (1999-2015). This method resulted in 33 journal articles employed in this review. We examined the empirical findings and summarized the articles according to eight categories (see Table 1).

Table 1. Literature Review to Scope the Field and Evaluate the Gaps in Previous Literature on Change Management Models.

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Agan, Acar, and Borodin (2013)	Drivers of ES (and their impact on firm performance	Survey (Quantitative)	500 Turkish manufacturing SMEs	No/No	The most influential driver affecting environmental processes is expected benefits with the most significant forces being soft performance expectations such as image, reputation, and brand.	No	*Journal of Cleaner Production*/ Science Direct
Aragon-Correa, Hurtado-Torres, Sharma, and Garcia-Morales (2008)	Environmental strategy and performance in small firms	Survey (Quantitative)	108 Spanish automotive repair sector SMEs	No/No	SMEs' strategies are associated with three organizational capabilities: shared vision, stakeholder management, and strategic proactivity.	No	*Journal of Environ Management*/ (Other)
Battisti and Perry (2011)	How environmental responsibility is understood and translated into practice.	Face-to-face interviews (Qualitative)	50 NZ SME owners	No/No	Practices pursued by small business owners are consistent with their understanding of environmental responsibility, perhaps due to accessibility to forms of environmental action is increasing.	No	*Corporate Social Responsibility and Environmental Management*/ Wiley
Blok, Wesselink, Studynka, and Kemp (2015)	Identification of predictive factors of proenvironmental behavior in the workplace.	Survey	411 Dutch university employees	Yes/No	Model tested: (Quantitative) then testing of model of factors affecting proenvironmental behavior in the workplace derived from the literature. Leadership support and exemplary proenvironmental behavior by leaders have a significant positive impact on employees' intention to act proenvironmentally.	No	*Journal of Cleaner Production*/ Science Direct
Bos-Brouwers (2010)	Innovation theory, sustainable development practice, and small business characteristics to examine factors that influence the translation of sustainable innovation within SMEs.	Interviews (Qualitative)	26 Dutch SMEs	No/No	Many sustainable innovations are directed at the improvement of technological processes (ecoefficiency) and to lower costs of production. These innovations can be seen as incremental. More insight into SME innovative characteristics and (e)valuation of sustainable innovation efforts provide opportunities to improve the sustainability performance of SMEs.	No	*Business Strategy and the Environment*/ Wiley

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Burke and Gaughran (2007)	Framework development for sustainability management in engineering SMEs	Qualitative (semistructured themed interviews with 1 employee from each SME)	6 Irish ISO 14001 certified engineering SMEs	Yes/No	Framework for sustainability management takes an incremental approach in moving from environmental management (using ISO 14001 as a foundation) to sustainability management. The study highlights the importance of environmental and sustainability awareness programs for top management.	?	*Robotics and Computer-Integrated Manufacturing*/ Science Direct
Castka, Balzarova, Bamber, and Sharp (2004)	Implementation of CSR agenda in SMEs demonstrating how the CSR agenda has been implemented using ISO 9001:2000	Case study (Quantitative)	1 U.K. SME operating a business system	No	SMEs need not fear the bureaucracy that CSR can bring if they integrate the agenda into their business system. The SME's focus was on both external (customer, strategic partners) and internal (employees) dimensions.	No	*Corporate Social Responsibility and Environmental Management*/ Wiley
Chan (2011)	Barriers to the adoption and implementation of EMS by small and medium-sized hotels	Survey (Quantitative)	48 Small/medium-sized Hong Kong hotels	No	Various factors hindering adoption of EMS by SME hotels: implementation and maintenance costs, lack of knowledge/ skills, lack of a sense of urgency, ambiguity of EMS standards, lack of qualified consultants, conflicting guidance.	No	*Journal of Hospitality and Tourism Research*/Sage
Friedman, Miles, and Adams (2000)	Examines SME responses to environmental pressures by evaluating a practical toolkit: The WWF/ NatWest Better Business Pack (BBP).	Interviews (Qualitative) grounded theory	35	Yes/No	Developers with environmental agendas may have unrealistic expectations of SMEs.	No	*Journal of Small Business Enterprise Development*/ Emerald
Halme and Korpela (2014)	Identification of resources needed by SMEs to enhance sustainable development and also motivations of entrepreneurs.	Multiple case interviews/ notes (Qualitative)	13 Nordic SMEs	No	SMEs can create responsible innovations with very different resource combinations, the most common being equity, research and development cooperation, networks, industry knowledge, and reputation. Business model innovation can be implemented even with scarce resources.	No	*Business Strategy and the Environment*/ EBSCOhost

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Heras and Arana (2010)	Alternative models for environmental management in SMEs. Analysis: the Ekoscan model compared with the ISO 14001 model	(Mixed) Quantitative field work and interviews	262 ISO 14001 or Ekoscan SMEs	No	Only the drivers differ, since the perceived obstacles and benefits of adopting the respective models are similar. ISO 14001 SMEs place a higher degree of significance on motivation of an external nature than that of internal motivation.	No	*Journal of Cleaner Production*/ Science Direct
Hoogendoorn, Guerra, and van der Zwan (2015)	Drivers of environmental practices of SMEs, with two types of environmental practice being distinguished: processes and services.	Survey (Quantitative)	7,700 SMEs across 12 sectors in 36 countries	No	Different firm characteristics have dissimilar influences on both types of environmental practices as the type of customers served. SMEs active in tangible sectors and that receive financial support are more involved in environmental practice.	No	*Small Business Economics*/ Science Direct
Horisch, Johnson, and Schaltegger (2014)	Analyze how company size affects the degree of knowledge and application of sustainability management tools.	Surveys (Quantitative)	176 SME 152 Large companies (German)	No	Knowledge is identified as a key difference between SMEs and large companies and an important mediator to promote sustainable management.	No	*Business Strategy and the Environment*/ Wiley
Howarth and Fredericks (2012)	Consideration of different interpretations of SME-environment behavior (Focus for change on raising attention to environmental issues)	Case study (Qualitative)		No	If/when embracing the internal SME dimension and sense-making process, it is possible to conceive a landscape of SME-environment intervention and change. Recognition of this landscape is of use to interventionists involved in the facilitation of change.	No	*Management of Environment Quality: An International Journal*/ EBSCOhost
Johnson (2013)	Sustainability management and SMEs: manager's awareness and implementation of innovative tools	Web survey (Quantitative)	176 German SME managers	No	Awareness and implementation rates of most tools are relatively low, although the rate of implementation steadily increases with the rate of awareness.	No	*Corporate Social Responsibility and Environmental Management*/ Wiley

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Klewitz, Zeyen, and Hansen (2012)	Identification of the role of intermediaries in SMEs' pursuit of corporate sustainability	Interviews (Qualitative)	7 German SMEs who participated in "Ecoprofit" program	No	SMEs may need facilitation for ecoinnovation from different type of intermediaries (public and private) with different levels of support ranging from customized/individual to networks.	No	*European Journal of Innovation Management*/ Emerald
Lee (2009)	The process of green management adoption in SMEs	Case studies (Qualitative)	2 (South Korea)	No	Great potential for environmental improvements connected to the span of management practice	No	*Management Decision*/ Emerald
Lewis and Cassells (2010)	Barriers and drivers for environmental practice uptake in SMEs	Survey (Quantitative)	148 NZ manufacturing SMEs	No	Main drivers of implementation are cost reduction/financial benefits; responsibility to the community; personal commitment and compliance with legislation. Factors influencing the firms' decisions are customers, society at large, employees, and local government. Barriers include costs, time, lack of resources.	No	*International Journal of Business Studies—Special Edition*/Science Direct
Nejati, Amran, and Ahmad (2014)	The relationship between stakeholders' influence and environmental responsibility of MSMEs	Survey (Quantitative)	110 MSME owners	No	Only employees and customers significantly influenced environmental responsibility practices. Environmental responsibility results in financial improvements and better relations with employees.	No	*Management Decision*/Science Direct
Nulkar (2014)	Framework for improved SME environmental performance. Focus on the generic strategic planning process	Interviews/site visits/Annual reports/industry statistics (Mixed)	15 Indian SME owners	Yes/No	SME strategy team should: be trained in the strategic planning and implementation process; be empowered to make changes, set things right or make strategic decisions; be incentivized for milestones and results; prepare a plan and manage the process; identify key metrics before, during, and after the plan period; meet periodically and show results of previous periods.	No	*Procedia—Social and Behavioral Sciences*/Science Direct

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
O'Regan and Ghobadian (2005)	The role and impact of strategic orientation and environmental perceptions on innovation and supporting mechanisms in SMEs	Survey (Quantitative)	1,000 U.K. SMEs (electronics and engineering)	No	SMEs can be categorized as either prospectors or defenders. Firms tend to place a greater emphasis on innovation in turbulent operating environments.	No	*International Journal of Productivity and Performance Management*/ Emerald
Parry (2012)	The process through which microbusinesses "go green," and the evolution of environmental practices over time.	Comparative case studies (Qualitative)	6 U.K. (various sector) microbusinesses	No	There are three distinct stages that businesses pass through during the greening process: (a) exploration (cost savings, business legitimization, personal ethics, sustainability, formal environmental policies, external assistance); (b) substantiation (social capital and networking, publicity, branding); and (c) integration (competitive advantage, greater investment, external support)	No	*Business Ethics: A European Review*/Wiley
Perez-Sanchez, Barton, and Bower (2003)	Implementing EM in SMEs. Focus on proposed strategy implementation.	—	—	Yes/No	The proposed strategy addresses several important issues: lack of financial support, values of managers/owners through the long-term business strategy, technology and culture.	No	*Corporate Social Responsibility and Environmental Management*/ Wiley
Raar (2015)	ES issues in SMEs, concern for immediate stakeholders, industry group global warming	Survey (Quantitative)	360 Australian SMEs	No	SMEs are also aware that global warming will influence their activities. Any tailored approach to regulate or self-regulate ES in SMEs, should be industry and stakeholder driven.	No	*Journal of Small Business and Enterprise Development*/ Emerald
Rasi, Abdekhodaee, and Nagarajah (2012)	SME's environmental initiatives and the impact of stakeholders' involvement	Survey (Quantitative)	1,051 Malaysian SMEs	No	Vertical partners play the most critical roles in supporting ES practices based on product and process-based changes. Influence of internal stakeholders, for example, senior management is significant.	No	*Advanced Materials Research*/ EBSCOhost

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Roy, Boiral, and Paille (2013)	The simultaneous pursuit of quality and environmental objectives.	Survey (Quantitative)	254 Canadian SMEs (ISO 9000 and/or ISO 14001)	No	Significant differences between SMEs holding both certifications and those holding only ISO 9000. Each group implemented different types of initiatives but correlate org performance.	No	*Business Process Management Journal*/Emerald
Schaper (2002)	Predictors of "green" business behavior (purchasing green products) among SMEs.	Survey (Quantitative)	154 West Australian pharmacies	No	A high level of "green" attitudes exist among owners, but no relationship was found between attitude nor demographics and actual environmental performance.	No	*International Small Business Journal*/ Sage
Seidel et al. (2009)	Overcoming barriers to ES benign manufacturing practices: strategic tools for SMEs	In-depth longitudinal case study (Qualitative)	1 NZ furniture manufacturing SME	No	There is currently no set path for companies to simply follow. SMEs can progress by developing stakeholder relationships and understanding of the requirements.	No	*Environmental Quality Management*/ Wiley
Stewart and Gapp (2014)	Investigates continual learning in an exemplary SME. Applied to Gapp and Fisher's (2008) model	Case study (Qualitative)	1 Australian SME	Yes/No	Reflective and cyclical learning within a participative environment allowed for the internalization of values, beliefs, actions, and sustainable management practices.	Yes	*Corporate Social Responsibility and Environmental Management*/ Wiley
Theyel and Hofmann (2012)	The adoption of sustainability practices by SME and stakeholder	Interviews (Qualitative)	296 U.S. SMEs	No	The majority of the firms are adopting sustainability practices. Stakeholders influence the adoption of sustainability practices, and firms with high adoption rates.	No	*Management Research Review*/Emerald
Uhlaner, Berent-Braun, Jeurissen, and de Wit (2012)	Predicting engagement in environmental management practices of Dutch SMEs	Telephone interviews (Qualitative)	689 Dutch SME owners or directors	No	Several endogenous factors (tangibility of the sector, firm size, innovative orientation, family influence, perceived financial benefits) predict SMEs' level of engagement in EM practices.	No	*Journal of Business Ethics*/Science Direct

(continued)

Table 1. (continued)

Author/s	Focus	Method	Sample	[a]Model/Change management model	Major conclusion	[b]ES Champ	Journal/Database
Walley and Stubbs (1999)	The role of ES champions in organizational greening. Using a context, process and content framework.	Case study (Qualitative)	1 Insurance/health care SME	Yes/No	Networking, sense of audience, and agenda translation are identified as significant aspects of the environmental champion's tactics in the greening process.	Yes	*Eco-Management and Auditing*/ Wiley
Williams and Schaefer (2013)	Managers' values and engagement with environmental and climate change issues. Focuses on measures implemented by managers, their motivations and understanding of climate change.	Interviews (Qualitative)	9 Environmentally proactive U.K. SME owner/ managers	No	Managers have a relatively good understanding of environmental issues in general and climate change in particular, although some expressed uncertainty about climate change science. The most notable motivation was personal values and beliefs. Environmentally engaged managers exhibited an internal locus of control.	Yes	*Business Strategy and the Environment*/ Wiley

Note. ES = environmental sustainability; SME = small and medium enterprise; CSR = corporate social responsibility; MSME = micro, small, and medium-sized enterprise; EM = environmental management.
[a]With regard to the column, "Model," we assigned a "yes" when a model was derived from empirical data but not specifically focused on change management. With regard to the (same) column "Change management model," we assigned a "yes" when the model was derived from empirical data and focused on micro internal firm change management of environmental sustainability and did not just represent a macro model of associated ES issues. [b]ES Champ: We indicated whether an environmental sustainability (ES) champion/s was a unit of analysis in the study.

It is evident from Table 1 that the key foci of 32 of the 33 articles included in the literature review center on themes peripheral to or are distinct parts of ES change management such as: drivers of ES, barriers to improving environmental performance, SME environmental strategy, strategy formation process, EMS adoption, how SMEs go green, motivating factors, strategic changes toward greener management, and translation of social and environmental issues into practice within SMEs. Seven of the articles developed models, but none of these specifically focused on a micro change management perspective, which is the focus of this article. For example, Blok, Wesselink, Studynka, and Kemp (2015) tested a model of factors affecting proenvironmental behavior; Burke and Gaughran (2007) developed a general framework (not a change management framework) to indicate steps in moving to sustainability management but focused only on engineering SMEs that are ISO14001 certified; Friedman, Miles, and Adams (2000) examined SME responses to environmental pressures by evaluating a specific practical toolkit; Nulkar (2014) presented a framework for improved SME environmental performance, but the focus is on generic strategic planning processes; the framework of Perez-Sanchez, Barton, and Bower (2003) describes and analyzes the parameters that interact in the implementation of environmental management tools; Stewart and Gapp's (2014) model focuses on continual learning in just one exemplary SME; and Walley and Stubbs (1999) focus on the role of ES champions in organizational greening in only one insurance/health care SME. The latter two models most closely align with the theme of internal ES change management and both employ "sustainability champion" as a unit of analysis, but both only focus on one SME case study. As per the other five models, these two studies only focus on a small selection of facets of internal organizational change management, with the exclusion of a wider range of internal micro ES change management themes and strategies. Unlike the model presented in this article, these models do not present a comprehensive model for the process of managing change toward ES that is specifically focused on the internal organizational focus of how SME ES champions manage change toward ES.

This points to two main gaps in the literature regarding ES change management models in SMEs. First, the current literature does not distinguish between the analytically distinct concept of internal "ES change management" of SMEs, for example, what SME managers/internal ES champions actually do in managing ES change, and how they do it when progressing ES changes in their firms. The literature focuses mainly on facets of ES change, but does not present a holistic ES change management model that SME managers responsible for managing ES change can use to progress the ES journey of their firms or change the behavior of staff within the firm. Neither is there an existing model developed from empirical data that SME researchers can use to guide their studies. What is evident in the literature is a focus on the processes by which organizations have moved toward supporting ES which reflects the current commitment of SMEs to ES and ES practices (e.g., Burke & Gaughran, 2007). However, lacking is the analysis of the micromanagement side of the ES change journey. It is thus evident from the literature review that this study fills a theoretical gap on ES change management in SMEs.

Since the focus of this article is on the development of an ES change management model and not only to present a systematic review the rest of the article elaborates on the methodology we employed in developing our model and the practical implications for other SMEs eager to start or progress their ES journeys.

The model outlined in this article addresses the process of how SME ES champions manage toward ES. This will assist in optimizing organizational change management capabilities for SMEs in relation to ES (an aspect absent in the SME literature), and this in turn will help SMEs meet increasing societal expectations in contributing positively toward improving the environment.

Method

Research Approach and Sampling

With the aim of identifying and understanding the main ES change management actions evident from the ES journeys of SME ES champions, this study utilized a multiple case design. A combination of purposive sampling (Higginbottom, 2004) or critical case sampling (Lindlof, 1995) was employed to select appropriate SMEs that would be included as cases in the study. Patton (2001, p. 236) describes purposive sampling as the process of selecting a small number of important cases—cases that are likely to "yield the most information and have the greatest impact on the development of knowledge."

Although sampling for one or more critical cases may not produce results that are broadly generalizable, it may allow researchers to develop logical generalizations from the rich evidence produced when studying a few cases. To identify critical cases, the research team identified the criteria that would make a case critical. Within the context of this study, potential participants had to be an SME in Queensland, Australia, that are an ES sustainability champion, hence had either won awards or have been publicly recognized for their ES achievements at the local or national levels.

A systematic approach was followed to select the study participants. A list of 30 SMEs that fit these criteria was compiled following a thorough Web search and recommendations from the State Government (Department of Environment and Heritage Protection), industry associations (such as the Chamber of Commerce and Industry Queensland and the Queensland Manufacturing Institute), and sustainability professionals including academics, business consultants, and senior government officials that work in the domain of ES. The 30 SMEs sourced represented 4 industries including Services (3 firms), Retail Trade (2 firms), Manufacturing (23 firms), and Primary Industry (2 firms). Following Baum's (2000) advice that a small sample size ranging between 12 and 20 is deemed acceptable when the aim is to study the topic of inquiry in depth and detail (Miles & Huberman, 1994; Patton, 2001), all Service, Retail Trade, and Primary Industry firms on the list were included and 4 firms were randomly selected from 23 manufacturing firms. Two of the latter declined participation in the study, hence two other firms were randomly selected from the remaining firms on the list. We felt confident that these cases would be information rich. Even though saturation was not the sole determinant of sample size, evidence of saturation occurred around the 11th interview with the same themes occurring within each interview data set. Burmeister and Aitken's (2012) argument that data saturation is not about the numbers per se, but about the depth of the data seems to be evident in our study. Table 2 summarizes the characteristics of the sample.

Data Collection

The data collection process comprised face-to-face interviews with CEOs of ES SME champions at their organization's premises over a 4-month period. In each organization, the CEO participated in the interview. Eight organizations also invited another senior manager (secondary interviewees) with specific responsibility for ES as part of their role in their organizations to participate in the interview. The CEOs invited these secondary interviewees owing to their knowledge of the ES journey in the firms and they filled in gaps in the interviews when the CEO could not fully account for the precise ES journey. No difference was detected in organizations with CEOs inviting secondary interviewees compared with those organizations without secondary interviewees. This may be due to the fact that the four CEOs interviewed in organizations without any secondary interviewees personally took on the responsibility for ES in their firms, possessed in-depth knowledge of their firm's ES journey, and felt confident of the information provided on their firm's ES journey. Each interview lasted approximately 90 minutes and were recorded with the

Table 2. Participant Characteristics (n = 12).

Company	Business type	Employee number (size)	Sector	Ownership structure
C1	Aquaculture	<20 (S)	Primary industry	International partnership
C2	Backpacker hostel	<20 (S)	Services	Private company
C3	Printing	<20 (S)	Services	Private company
C4	Nursery	<20 (S)	Retail trade	Private company
C5	Winery	<20 (S)	Manufacturing	Public company
C6	Fish breeders	<20 (S)	Primary industry	Partnership
C7	Wood processing	20-100 (M)	Manufacturing	Private company
C8	Accounting firm	20-100 (M)	Services	Partnership
C9	Wastewater systems	20-100 (M)	Manufacturing	Private company
C10	Electrical goods store	20-100 (M)	Retail trade	Partnership
C11	Building materials	20-100 (M)	Manufacturing	Private company
C12	Ginger factory	20-200 (M)	Manufacturing	Public company

permission of the participants and later transcribed by the researchers. A consistent approach was taken in each interview in which the questions were first directed to the CEO and then secondary interviewees filled in the gaps. Two interviewers participated in each interview.

Standard interview techniques and protocols were used to understand the complex ES change management themes and associated behavior of SME champions without limiting the field of inquiry (Fontana & Frey, 1994). The researchers also took the opportunity to deviate from the main open-ended questions to further probe issues that were deemed to be of particular relevance to SMEs, and issues that have not been previously addressed in the literature. The interviews started with an initial unstructured "grand tour" question (Spradley, 1979), "Can you please tell us about your ES journey?" followed by another open-ended question, "Please tell us more about how you have managed and are still managing ES change in your organization?" Four structured questions were then asked to delve deeper into the information already provided by the participating interviewees: (a) "Please tell us more about the process you followed in designing ES change in your organization at the start or prior to starting your journey?" (b) "Please tell us more about how you went about integrating ES into your business?" (c) "Please tell us how you implemented ES initiatives?" (d) "Please tell us more about the outcomes you have achieved as a result of implementing and managing ES change in your organization?" Since no specific ES change management model could be identified in the SME context, these four questions were based on an initial "loose" and "emergent" model underpinned by identified stages from existing change management models developed within large organizations that seemed reasonably applicable to SMEs (i.e., Dunphy et al., 2007; Kotter, 1995; Rigby & Tager, 2008) including ES design, internalization of ES, ES implementation, and ES evaluation.

Analysis

We conducted the analysis by way of a systematic combining approach (Dubois & Gadde, 2002). This means that the model, empirical fieldwork, and analysis evolve simultaneously. A thematic content analysis was conducted to identify, analyze, and report patterns (themes) within the data with regard to how SME managers manage change toward ES in their firms. According to Braun and Clarke (2006, p. 82), "A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set."

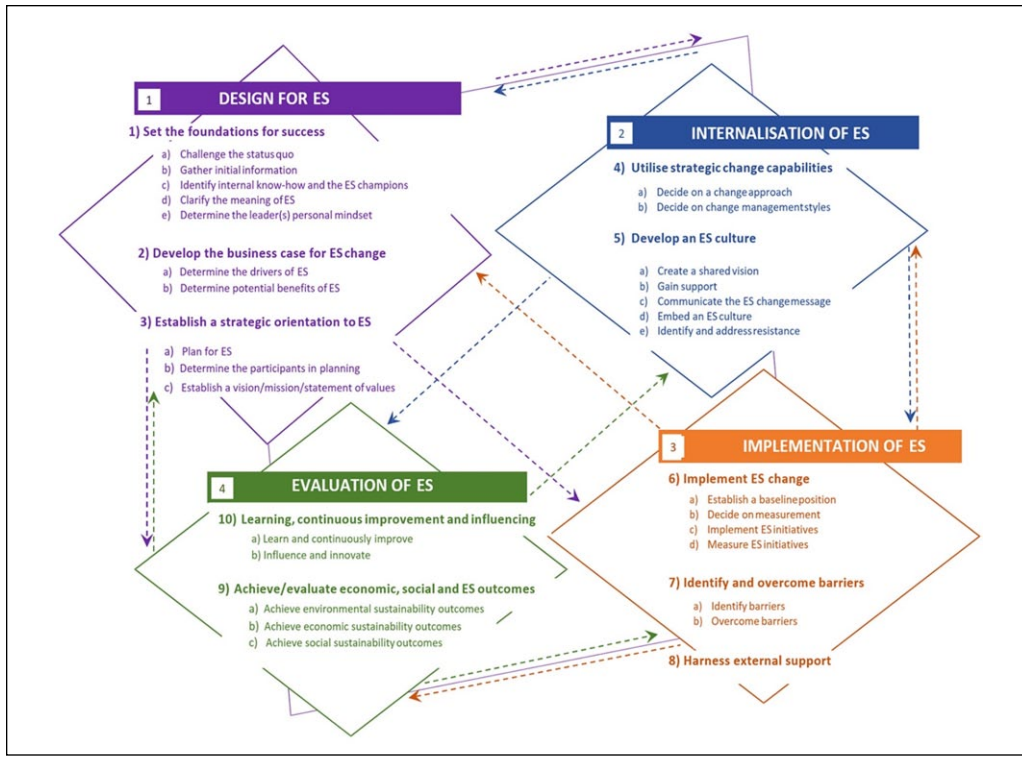

Figure 1. Managing change toward environmental sustainability in SMEs.
Note. ES = environmental sustainability; SME = small and medium enterprise.

Although we started with an initial structure of four themes developed from existing change management models (albeit developed in large organizations owing to an absence of SME models), these main change management themes were confirmed early on in the interviews. These include (a) design for ES, (b) internalization of ES, (c) implementation of ES, and (d) evaluation of ES outcomes. These main themes were then further explored through content analysis by generating codes using QSR International's NVivo 10 software, a qualitative data analysis tool that allows a researcher to help organize and analyze nonnumerical or unstructured data (Bazeley & Jackson, 2013).

Throughout the process of data collection and analysis, triangulation was used as a method to check and establish validity of the analysis by evaluating the research question from multiple perspectives (Patton, 2001). We used data triangulation by also considering secondary data sources such as company records, sustainability grant applications, and other publicly available data on the participants' websites to confirm claims made during the interviews. Investigator triangulation was also used in the data collection and evaluation of the data (Jonsen & Jehn, 2009). To enhance triangulation in the analysis, intense face-to-face interactions between two of the researchers took place throughout the interviews, constantly exchanging ideas about the emerging themes. The data and relevant themes were also separately reviewed by two of the researchers throughout the interview program to clarify differences in interpretation and identify recurring clusters of themes (Patton, 2001). This greatly assisted in deliberately seeking and organizing novel change management themes aimed at higher levels of coherence (Jonsen & Jehn, 2009). Once the model was developed, feedback was sought from three participants to ensure the model matched their reality. All three participants confirmed that it matched the reality of ES change management as they experienced it in their firms. The themes and subthemes that emerged from the data are summarized in Figure 1. The dotted lines in the Figure 1 indicate that it is not a linier model.

Table 3. Example of a Table Summarizing the Themes That Emerged From the Interview Data Regarding Change Approaches.

Themes	Examples of quotes in interviews
Radical	My partner says I never start small. We worked out what we wanted to do and built that. We started with about 40 tonne of fish and grew to 80 over about 3 years and then expanded internationally (C1)
Incremental	It was gradual. We started talking about it in staff meetings and then managed it from there. I think it also came out of a strategy day a couple of years ago. We also got a grant to make some changes such as the change of 24/7 air conditioning for the server which serviced the whole office. So we save about $3,000 a year in power (C8)
	I think initially it was a revelation to have come across what was a key driver or reason why the company went broke before. We had to go out to the staff and try and change attitudes with the staff. If you can't measure something, then you can't let them know how they are going. Then what started to bob up were things that were wasteful. We are making changes all the time because we are always looking for opportunities like our R&D projects which are happening now. Yes, you always need to keep abreast of technology (C7)
	We decided we wanted to be a zero discharge site. We set about a series of projects. We worked out particularly with the tourism side of things we could use the waste water to irrigate the site and use our credentials to demonstrate our environmental initiatives. We chose a small project and went bigger and yes, each project tends to be bigger than the previous one (C12)
	We haven't done anything radical at all here. Although one thing we do is that we have an evening speech where one of our staff speaks to all the new arrivals and one of those things they talk about is reducing your carbon footprint, use less water, use less electricity and advising them about recycling. We have a sign to express that ethos to reduce your impact, so it is about trying to get the message out (C2)
	We did some easy things first, like there was no economic investment with turning things off but we got about 9% improvement initially. So we used that for investment in low energy lighting etc. We keep giving staff figures about our usage so that they are in the know about what we are doing with reduction (C3)
	We had to learn how much nutrient was still in the water. It is a procedure but not written. Little bits at a time, for example, we started with fluorescent light bulbs, which was an outlay at the time but we have a saving now (C5)
	Like in sports, you have to get to first base first when you change something. I think mostly it is brought about by crisis. Hunter Lovens has a saying that "The only thing that likes change is a wet baby." I don't think this is necessarily true, people don't like to be changed but they don't mind change so much as long as they are part of it and can see an advantage. It is also about making systemic change rather than just change in the business (C11)
Both (radical and incremental)	I used a combination of systematic but some big changes for which I did a lot of research (C4)
	I think I used both an incremental and radical approach to change. I think evolutionary is better than revolution and will have a better impact. However, sometimes you need the shock and there were occasions of this when I first started because it just had to be. Consistency and repetition are important to cement the ideals, and people believe in it (C9)
	Probably depending on what it is, a little bit of incremental and a bit of radical but we probably don't use the hard hitting "this is the be all and end all" very often because that can end up in disappointment and deflated enthusiasm. We probably work with more of a cultural change where the key stakeholder as the ecochampion can permeate the message with me holding the occasional motivation session (C10)
	The change of the business to enable to recirculate water was a radical change. We had to learn new technology with the change from eels to fish species as well as the water recycling/ recirculating. This was a radical change initiated by a lot of trial and error. We now supply a completely different market (C6)
	We have weed control procedures in place now. This is something we have done incrementally (C6)

Results Pertaining to How SME ES Champions Manage Change Toward ES

This section outlines and discusses the resulting model presented in Figure 1. Considering that 29 tables were developed as part of the analysis and owing to restrictions on the length of this article, only one example of a typical table (Table 3) carried over from NVivo, identifying themes,

and associated "quotes," is presented below. This particular table presents the subthemes relevant to the main theme "utilizing strategic change capabilities" (that emerged from the data) as reflected by what change approaches were used in the introduction of ES initiatives. This particular main theme is integral to the "internalization" stage, further discussed in the section below. The specific themes and associated subthemes relevant to each of the four stages are also outlined and discussed below.

The Design Stage. The first stage, the design stage, refers to the point where the owner or CEO of the SME, or the ES change agent, initiates the need for the firm to embark on an ES journey, and sets the stage for ES change. The design stage comprises three main themes, namely, setting the foundations for ES, developing a business case, and adopting a strategic orientation for ES.

In the first theme, "setting the foundations of success," five subthemes were uncovered. The first subtheme was "challenging the status quo." A representative quote is for example, "We had to change because we identified that there was a market for that product and we also believed that we could do it better" (C1). This subtheme has been emphasized by several authors (Kotter, 1995; Kouzes & Posner, 1995). Similar to Stubbs and Cocklin's (2008) study in two large organizations, the personal views and values of CEO's in participating SMEs were also key to starting their organization's respective ES journeys (also see Williams & Schaefer, 2013).

Dunphy et al. (2007) highlight the importance of the second subtheme, "gathering initial information about current legal compliance issues and whether the organization is compliant with relevant government regulations."

Regarding the third subtheme, "clarifying the internal know-how about ES change, identifying who the ES leader(s) is and what the associated roles are" the findings indicate that someone needs to specifically take on the management and leadership responsibility of ES to champion the cause in SMEs. In one participant's words: "I think having someone that takes on the role of the eco-champion has been critical in our success even if this is not the primary role of this person" (C10). This ecochampion can be a person internal or external to the organization, but as SMEs do not always have the resources to appoint a qualified sustainability manager, often they need to rely on expertise from within the organization. This was evident in the participating SMEs, where this responsibility lay mainly with the CEO or other internal sustainability champions.

Pertaining to the fourth subtheme, "clarify meaning of environmental sustainability to the firm," it is clear that having clarity about what meaning resonates with the people in the firm, and the notion that ES presents opportunities, seems to be very important to reduce ambiguity and uncertainty and set direction (Sharma, 2000). Interestingly, not all participants warmed to the word "sustainability":

> I hate the term sustainability. It's pretty boring as it has come from economics and is a necessary condition. We are more about life, joy and growth, etc. The friend of William McDonough, the politician who wrote Cradle the Cradle said the following about sustainability, "Well what about if I said to you how's your relationship with your girlfriend and you said oh yeah it's sustainable." It's not quite what we are looking for. We do use the word sustainability, but it is more like a value, something that could be approached, the systemic change of not looking at money but looking at value, knowing it is our value guides us in what we do.

The final subtheme identified was the important role that the personal mind-set of ES champions plays in driving ES in their organizations. Milliken and Lant (1991) argue that the leader's attitudes act as a filter in the reinterpretation of real events, and add novel aspects to the decision to initiate change. Owing to the discretion that managers enjoy in their decision making, their attitudes become decisive in explaining organizational change (Adner & Helfat, 2003). A representative's comments:

> As far as sustainability, culturally we wanted to make a positive difference and I personally wanted to make a positive difference. I think everyone is motivated by something whether it is money, position or whatever it is, so for me it is I wanted to leave a legacy. (C10)

Although another participant was not necessarily passionate about ES, he still felt he wanted to do the right thing: "ES is not necessarily a passion of mine, but I think everyone cares about the planet to some degree and if it's commercially viable then it is sensible to do it" (C2).

The second change management theme identified for the design stage was "developing the business case for sustainability." The interview data confirmed previous research findings that even though numerous drivers could be distinguished, economic drivers, and benefits provide one of the strongest bases of the business case for sustainability (Tinsley & Pillai, 2006). It was evident that for the ES initiative to be successful, and in order to have the support of employees at all levels, a clear and convincing business case which highlights not only the social and environmental benefits but also the economic benefits, has to be developed and communicated to the organization's stakeholders. A representative quote from the data is as follows:

> Making the case to staff is important. The social responsibility side of things is there, but if you can actually make money doing it then you are really smiling, if you can set up alternative technology that saves you money. One example is where we had a salesman come up here in relation to heat pump technology that the government is subsidizing. Within one and a half years the installation would be paid off and then we'll be saving money on electricity.

The third main intervention theme was "establishing a strategic orientation to ES." The strategic orientation and approach to ES mainly manifested in a deliberate approach (planned, deliberate, and rational set of actions) to planning, although a few organizations also employed an emergent approach (a pattern in a stream of decisions and actions where the strategic relevance of the pattern is identified in retrospect) to planning (Hutter & Wiechmann, 2005). The former focuses on direction and control and getting desired things done, while the latter is based on the notion of strategic learning and adaptive behavior. It was evident that the deliberate approach to planning was more common. In the words of one participant: "I used a strategic plan to push environmental good. We usually look at better ways of managing what we have got. In 5 years we would be the best in Australia and probably in the top five internationally" (C1). The owner/CEO featured as the main player in the strategic process, with some involvement of senior managers and staff in the organization. This scenario is in line with a deliberate approach to strategy making (Wiesner & Millett, 2012).

Another key feature of this approach is the production of a vision statement and/or mission statement (Barnes, 2002). Together with a written plan, such statements could form the foundation for the structuring of an in-depth set of objectives for all functional areas of the business (Mintzberg, 1994). The majority of participating organizations had also developed a written vision and/or mission statement which served as a constant reminder of the organization's overall strategic vision where ES was an integral component. The following quote illustrates this aspect:

> The vision of the nursery is to lead the way in environmentally sustainable production and landscapes with plants that perform for you. This vision combined with an ideal climate, careful management, and eco-efficient strategies to achieve long-term sustainability, has enabled the business to flourish and introduce many new products to the market. (C4)

The Internalization Stage. The second stage in ES change management of SMEs is where the CEO/ES assumes the role of a change agent in internalizing ES in the organization by firmly establishing an ES culture and utilizing all internal capabilities. This internalization of ES into the organization has two main underlying themes. The first, "utilizing strategic change capabilities," suggests

that most participating SMEs use an incremental approach to change involving a step-by-step movement toward an organizational ideal where management fine-tune current operations to meet future goals (Walker, Armenakis, & Bernerth, 2007). For example,

> We started changing gradually. We started talking about it in staff meetings and then managed it from there. It came out of a strategy day a couple of years ago. Now it's just something we do. We went through a type of staged process like measurement and looking for changes and carrying out those changes. (C8)

Radical change was utilized by only one participating organization which entailed reorientations in the way the organization operates with regard to ES (Dunphy et al., 2007; Reger, Gustafson, DeMarie, & Mullane, 1994), for example,

> The change of the business to enable to recirculate water was a radical change. We had to learn new technology with the change from eels to fish species as well as the water recycling/recirculating. This was a radical change initiated by a lot of trial and error. We now supply a completely different market. We needed to have a number of good markets that are not over-supplied that are high value. (C12)

It could be inferred that the organizations utilizing a radical approach did so because they knew exactly where they wanted to go and that the organization needed to change direction in relation to its core business. By contrast, the majority of organizations used an incremental approach because change was an evolving process, and the ES journey is a continuous journey where learning was involved, and a staged approach allowed for the evaluation of progress. The other participants used a mixed approach.

"Change management styles" also emerged as being important. It was clear from the interview data revealed that the majority of participating organizations utilized a combination of top-down and participative management styles in the implementation of ES change. The dominant ES change management approach used by SME participants is consistent with the change management literature which suggests that organizations should ideally involve employees from all levels in the change process, and strategic thinking at multiple organizational levels is proposed as essential in creating and sustaining competitive advantage (de Wit & Meyer, 2005; Johnson, Scholes, & Whittington, 2005). One participant described this as follows:

> We have involved staff in the early part of our journey when we had to have a full audit of the business done. There was a lot of resistance because they couldn't see why we were doing this as they couldn't see five years down the track. Whereas I could see the benefit for the business and the community. Probably at the 12-month mark, where we could do some assessment, then the staff really got quite excited about what was happening and the resistance fell over naturally. (C10)

The second subintervention theme in the internalization of ES into the organization, "developing an ES culture," involved the creation of a shared vision by clearly communicating this vision to the entire organization. SMEs used a number of formal and informal communication strategies to communicate the ES vision, including engaging staff who wanted to be involved, allowing staff to see ES in action, staff training, incorporating ES into the staff's enterprise agreements and employing a sustainability coach to engage staff. One participant described his tactics as follows:

> We started off with a factory-wide target and then we found that for people to contribute to that target in their own way we then had to break that down into areas of responsibility. We were able to isolate those areas of responsibility and influence and now they see targets on the wall being hit by each group of people.

These approaches are in line with Jackson (1997) and Hamel and Prahalad (1994) that clear and honest answers need to be provided to the what, why, and how questions in managing change.

An important theme in developing an ES culture involved gaining support for and identifying resistance to the ES initiatives (Graetz, 2000; Jackson, 1997; Useem & Kochan, 1992). The positive benefits of employee participation and engagement have been clearly highlighted by the majority of interviewees by giving employees a say in the introduction of new ES change initiatives so that "they do not see themselves excluded from a project driven externally by management." Furthermore, by relating the ES initiative to the system of rewards, recognition, training, and staff development, staff were less likely to resist change and embrace ES as an integral part of their jobs. Half of the interviewees indicated that they did not experience any resistance to ES change, while the remaining SMEs experienced mild and low levels of resistance at different stages. The implicit assumption in much of the literature that "organizations will voluntarily become greener" is misleading and it is essential to take steps to address resistance before it becomes destructive (Newton & Harte, 1997). Participating organizations dealt with resistance to ES in a number of ways, including perseverance, demonstrating the benefit for the business and community, backing staff recommendations up with financial resources, using the problem as part of the solution, informing and explaining the need for change to staff, and selecting the right people.

Another theme involves embedding ES culture into the organization. Culture is structured into three levels (Schein, 2010) namely artefacts, espoused values, and basic assumptions which range from the very tangible manifestations to the deeply embedded, unconscious basic assumptions. Artefacts include visible structures and processes as well as observed behavior which are difficult to decipher. Cultural artefacts emerging from the interview data included taking the message to the wider community, engaging staff in the monitoring of ES, and sharing the organization's public recognition for ES with staff and their partners. Espoused belief and values have to do with goals, ideals, values, and aspirations (Schein, 2010). Basic underlying assumptions, due to their implicit nature, are the most difficult to change (Stone, 2006). Espoused values and basic assumptions emerging from the interviews include staff sensing a feeling of pride, constant improvement and meeting targets, embedding the "meaning" of ES in the firm's culture, and staff commitment. In one participant's words: "Communication is essential. Having a picture of where we want to go, what the direction is, and allowing people to see it in action and stating why we need to do things—reasons and rationale" (C9).

The overall participative approach that the ES SME champions in the sample have taken in engaging their staff and internalizing a culture of ES has ensured that their employees' efforts are directed toward the sustainability goals of the organization. This is in line with the approach by Egri and Hornal (2002), Ramus and Steger (2000), and Milliman and Clair (1995) who have shown that a strategic environmental approach, integrated with sound people management, improve organizational performance perceptions.

The ES Implementation Stage. The implementation stage is where the ES change agent assumes the role of facilitator, deals with potential barriers, and addresses resourcing constraints by identifying, accessing, and integrating external support to ensure successful implementation. The implementation stage comprises three main themes. The first which relates to the "measurement and implementation of ES initiatives" (see Figure 1) consists of several underlying subthemes. These include (a) the establishment of the baseline position through measuring and benchmarking of resource use (water, energy, raw materials, waste), carbon and emission intensity of their products and services; (b) assessment of different types of measurements appropriate for their particular activities; (c) implementation of a range of ES initiatives and changes ranging from realizing efficiency gains to implementing systems, technologies, and processes to reduce water, energy, raw materials, waste, carbon, and emission intensity of their products and services; and

(d) monitor and review progress. The importance of measurement is described as follows by one participant: "We use measurement. If you can't measure something, then you can't let them know how they are going. Staff tend to respond to a challenge."

The second theme relates to "identifying and overcoming barriers." Some of the barriers identified included a lack of assistance, underestimating resource requirements, and additional demands on existing staff to the detriment of the business (Hillary, 2004). Such barriers often stopped ES implementation at the first stage. Interestingly, the government was identified as an important barrier due to a lack of understanding and appreciation for the needs of SMEs. This lack of understanding often results in laws and regulations which are inefficient. A general lack of government assistance for SMEs to embark on ES initiatives was also seen as a major barrier as was evident from the following comment: "When you look at commercial operations like ours, sometimes the government influences viability by bringing in barriers in regard to the environment" (C1).

The third theme "harnessing external support for sustainability efforts" is specifically relevant to SMEs because they are known to lack resources compared with larger organizations. This is evident from the following participant comment: "We don't have the cash of the big guys, so it is essential to have a relationship with our local council and representatives, plus trying to link externally with others in the same boat as us" (C4). The lack of financial resources places a major restriction on the ability of SMEs to commit adequate resources toward ES initiatives, innovation, and effective change efforts, and often SMEs are forced to direct their resources to the achievement of short-term goals with the exclusion of more proactive approaches to changing their organization for growth and prosperity.

The Evaluation Stage. In the fourth stage, the outcomes of the ES initiatives are assessed by taking a broad view of ES performance based on the triple bottom line evaluation of the ES initiatives (impact of ES initiatives on the environment, social, and economic aspects) and by acting as an influencing agent for other ES initiatives within and outside the organization. The findings suggest that organizations that aim at becoming "sustainability leaders" in their sectors assess the changes required to make a significant difference on the whole sector in relation to ES achievements.

Two main themes emerged regarding the evaluation of ES outcomes in participating SMEs, "evaluating triple bottom line outcomes" (Theme 9) and "achieving industry leadership" (Theme 10). All ES champions achieved significant environmental but also economic and social outcomes as a result of their ES initiatives. Three main subthemes emerged with regard to positive environmental outcomes: reduced energy use, reduction in waste, and a reduction in water usage. Of particular interest is the positive outcomes ES champions have achieved with regard to economic sustainability outcomes and social sustainability outcomes.

Concerning economic sustainability, six subthemes emerged including increased profitability, cost savings, increased competitive advantage, breaking into international markets, creating new business opportunities, and enhanced marketing and image benefits. Four subthemes emerged from the data regarding positive social outcomes as a result of their ES initiatives. These include increased staff learning and consciousness about sustainability issues, increased fun experienced by staff through involvement in ES initiatives, enhanced pride of staff members owing to them feeling they are a part of worthwhile initiatives, and a greater sense of community-building through constantly passing their wins from their environmental successes to the community. One firm approached this as follows:

> We came up with the mind-shift/set of "how do we make the biggest difference in our community." We have a lot of appliances that use a lot of water and a lot of energy so we wanted to come up with a training program for our staff to be able to educate consumers on their purchases and consumers were already asking what we can do for the environment. (C10)

However, in becoming recognized ES leaders in their industry, ES champions do not only commit to continuous learning and improvement but also demonstrate their ES leadership by influencing others in their industry and by becoming ES innovators.

The findings of this research indicate that the four main actions to manage change toward ES are iterative in nature without necessarily following a linear progression from one stage to the next. It was clear from the interviews that change and implementation are iterative in nature and are contingent on both intended and unintended outcomes and that firms did not necessarily progress through the stages in a step-by-step linear or "improving" trajectory. This could be of benefit to SMEs when they are required to use an ad hoc approach to ES owing to sometimes contradictory viewpoints from internal and external stakeholders (Meyer, Cross, & Byrne, 2016). Benn et al. (2006) found a similar phenomenon in their research on phases in the development of corporate sustainability in large firms. Thus, the themes outlined in this study do not represent the same constructivist approach to transformative change and do not follow a sequential process.

Practical Implications for SME Managers

Although the results of this study cannot be generalized to a wider spectrum of SMEs around the world, there are practical implications of this study for green managers in SMEs in Western countries. Numerous suggested action steps can be inferred from our conceptual model (see Figure 1) and managers can use this to gauge where there are gaps in their own change management processes toward ES. However, critical implications are the following:

First, SME managers need to find ways to continuously challenge the status quo and gather information to ensure their ES journeys continue. Second, ensuring an internal or external ES champion(s) lead their initiatives is critical to continuous progression. Third, it is one thing to implement ES initiatives, but quite another to embed ES in the culture of the firm. By building a participative and self-directed culture through inclusion of staff in decisions regarding ES is essential to achieve the long-term sustainability of initiatives. Fourth, the identification of leverage points, where small focused action can produce larger positive changes, is essential. Finally, a belief in what they are doing and the positive benefits of ES plus thinking strategically about ES are both important ingredients to achieving ES success. To establish himself or herself as a significant influential change agent in the wider ES context, the SME manager could develop and act a plan for being a driver in entire industry and having a positive impact on ES activities in other businesses within the industry.

Conclusion, Limitations, and Directions for Future Research

Our model represents the first comprehensive ES change management model within SMEs. By understanding the ES change management themes in ES management, these could be integrated into the operational strategies of the SME which in turn support corporate strategy. The fact that the model was developed from evidence observed in the practice of SMEs that have been highly successful in ES, represents a strength. The model offers guidance on how to effectively manage and engage human resources in the pursuit of ES, identifies areas that are critical in order to be successful with ES initiatives, and provides clear themes to be considered in the ES journey of SMEs.

As with any research, this research also has several limitations. First, the interviews are based on a small sample of SMEs in a limited geographical location. Since the organizations in the sample are unlikely to face the same external business environment as other SMEs, any generalization of the results to other jurisdictions should be done with care. As mentioned earlier, our references to lessons learnt by SME ES champions, and what other SMEs can take from these, are a result of analytical inference, not statistical inference.

Consequently, the findings from this study need to be tested further on a broader sample to enhance potential generalizability across different jurisdictions. Although the approach to interview mainly CEO's is common in SME research (Avolio, Yammarino, & Bass, 1991; Frost, Birkinshaw, & Ensign, 2002) common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) can occur because CEO's and managing directors in SMEs are assumed to have wide breadth of strategic knowledge. Even though we did involve additional managers responsible for ES where possible, future in-depth case study research could incorporate the perspectives of employees in the organization as well as other stakeholders, and design the interview questions along the lines suggested by Podsakoff et al. (2003). A useful approach in future studies would be to undertake a large scale study of the ES change management processes in different SME sectors in comparison with large organizations.

A relatively new area of research within the sustainability context is the impact of business models on sustainability. Although the components of the model presented in this study is in line with the "ideal type" of sustainability-oriented business model advanced by Stubbs and Cocklin (2008) such as the need for the leader to advance various structural and cultural characteristics of an organization (e.g., affecting the community, investing in employees' trust and loyalty, engaging in sustainability assessment, and reporting), issues such as niche market strategies which are integrated with sustainability principles as a key component of a SME business model (Schaltegger, Lüdeke-Freund, & Hansen, 2016), falls outside the scope of this study. Nevertheless, this would be a worthwhile area of research in the future. Finally, in order to extend the value of this research, an instrument to test and validate the model ought to be developed. It is clear that when SMEs move through their respective journeys of ES, valuable opportunities are likely to be discovered when environmental questions are adequately intermeshed into their strategy. Making ES a strategic priority affords SMEs the opportunity to differentiate themselves from the competition.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

Adner, R., & Helfat, C. E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic Management Journal*, *24*, 1011-1025.

Agan, Y., Acar, M. F., & Borodin, A. (2013). Drivers of environmental processess and their impact on performance: A study of Turkish SMEs. *Journal of Cleaner Production*, *51*, 23-33.

Aguilera-Caracuel, J., & Ortiz-de-Mandojana, N. (2013). Green innovation and financial performance. *Organization & Environment*, *26*, 365-385.

Albertini, E. (2013). Does environmental management improve financial performance? A meta-analytical review. *Organization & Environment*, *26*, 431-457.

Aragon-Correa, J. A., Hurtado-Torres, N., Sharma, S., & Garcia-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based persspective. *Journal of Environmental Management*, *86*, 88-103.

Australian Bureau of Statistics. (2001). *Small business in Australia*. Retrieved from http://www.abs.gov.au/Ausstats/abs@.nsf/0/97452F3932F44031CA256C5B00027F19?Open

Avolio, B. J., Yammarino, F. J., & Bass, B. M. (1991). Identifying common methods variance with data collected from a single source: An unresolved sticky issue. *Journal of Management*, *17*, 571-587.

Barnes, D. (2002). The manufacturing strategy formulation process in small and medium-sized enterprises. *Journal of Small Business and Enterprise Development*, *9*, 30-49.

Battisti, M., & Perry, M. (2011). Walking the talk? Environmental responsibility from the perspective of small-business owners. *Corporate Social Responsibility and Environmental Management*, *18*, 172-185.

Baum, F. (2000). *The new public health*. Oxford, England: Oxford University Press.

Bazeley, P., & Jackson, K. (2013). Qualitative data analysis with NVivo (2nd ed.). London, England: Sage.

Benn, S., Dunphy, D., & Griffiths, A. (2006). Enabling change for corporate sustainability: An integrated perspective. *Australasian Journal of Environmental Management*, *13*, 156-165.

Blok, V., Wesselink, R., Studynka, O., & Kemp, R. G. M. (2015). Encouraging sustainability in the workplace: A survey on the pro-environmental behaviour of university employees. *Journal of Cleaner Production*, *106*, 55-67.

Blum-Kusterer, M., & Hussain, S. S. (2001). Innovation and corporate sustainability: An investigation into the process of change in the pharmaceutical industry. *Business Strategy and the Environment*, *10*, 300-316.

Bonini, S., & Swartz, S. (2014). Profits with purpose: How organizing for sustainability can benefit the bottom line. *McKinsey on Sustainability & Resource Productivity*, *2*, 1-15.

Bos-Brouwers, H. E. J. (2010). Corporate sustainability and innovation in SMEs: Evidence of themes and activities in practice. *Business Strategy and the Environment*, *19*, 417-435.

Brammer, S., Hoejmose, S., & Marchant, K. (2012). Environmental management in SMEs in the UK: Practices, pressures and perceived benefits. *Business Strategy and the Environment*, *21*, 423-434.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77-101.

Burke, S., & Gaughran, W. F. (2007). Developing a framework for sustainability management in engineering SMEs. *Robotics and Computer-Integrated Manufacturing*, *23*, 696-703.

Burmeister, E., & Aitken, L. M. (2012). Sample size: How many is enough? *Australian Critical Care: Official Journal of the Confederation of Australian Critical Care Nurses*, *25*, 271-274.

Castka, P., Balzarova, M.A., Bamber, C.J., & Sharp, J.M. (2004). How can SMEs effectively implement the CSR agenda? A UK case study perspective. *Corporate Social Responsibility and Environmental Management*, *11*, 140-149.

Chadee, D., Wiesner, R., & Roxas, B. (2011). Environmental sustainability change management in SMEs: Learning from sustainability champions. *International Journal of Learning and Change*, *5*, 194-207.

Chan, E.S.W. (2011). Implementing environmental management systems in small- and medium-sized hotels: Obstacles. *Journal of Hospitality & Tourism Research*, *35*, 3-23.

de Burgos Jiménez, J., & Céspedes Lorente, J. J. (2001). Environmental performance as an operations objective. *International Journal of Operations & Production Management*, *21*, 1553-1572.

de Wit, B., & Meyer, R. (2005). *Strategy synthesis: Resolving strategy paradoxes to create competitive advantage* (2nd ed.). London, England: Thomson Learning.

Dubois, A., & Gadde, L. (2002). The construction industry as a loosely coupled system: Implications for productivity and innovation. *Construction Management and Economics*, *20*, 621-631.

Dunphy, D., Griffiths, A., & Benn, S. (2007). *Organizational change for corporate sustainability: A guide for leaders and change agents of the future* (2nd ed.). London, England: Routledge.

Egri, C. P., & Hornal, R. C. (2002). Strategic environmental human resource management and perceived organizational performance: An exploratory study of the Canadian manufacturing sector. In S. Sharma & M. Starik (Eds.), *Research in corporate sustainability: The evolving theory and practice of organizations in the natural environment* (pp. 205-236). Northampton, England: Edward Elgar.

Elkington, J. (2001). *The chrysalis economy: How citizen CEOs and corporations can fuse values and value creation*. Oxford, England: Capstone.

Epstein, M. J. (2008). *Making sustainability work: Best practices in managing and measuring corporate social, environmental, and economic impacts*. Sheffield, England: Greenleaf.

Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361-376). Thousand Oaks, CA: Sage.

Friedman, A. L., Miles, S., & Adams, C. (2000). Small and medium-sized enterprises and the environment: Evaluation of a specific initiative aimed at all small and medium-sized enterprises. *Journal of Small Business and Enterprise Development*, *7*, 325-342.

Frost, T. S., Birkinshaw, J. M., & Ensign, P. C. (2002). Centers of excellence in multinational corporations. *Strategic Management Journal*, *23*, 997-1018.

Gapp, R., & Fisher, R. (2008). Achieving organisational transformation: An action learning approach. *Total Quality Management*, *19*, 609-625.

Graetz, F. (2000). Strategic change leadership. *Management Decision*, *38*, 550-562.

Halme, M., & Korpela, M. (2014). Responsibility innovation toward sustainable devleopment in small and medium-sized enterprises: A resource perspective. *Business Strategy and the Environment*, *23*, 547-566.

Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston, MA: Harvard Business School Press.

Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. *Nurse Researcher*, *12*(1), 7-20.

Hillary, R. (2004). Environmental management systems and the smaller enterprise. *Journal of Cleaner Production*, *12*, 561-569.

Hoogendoorn, B., Guerra, D., & van der Zwan, P. (2015). What drives environmental practices of SMEs? *Small Business Economics*, *44*, 759-781.

Horisch, J., Johnson, M.P., & Schaltegger, S. (2014). Implementation of sustainability management and company size: A knowledge-based view. *Business Strategy and the Environment*, *24*, 765-779.

Howarth, R., & Fredericks, J. (2012). Sustainable SME practice. *Management of Environmental Quality: An International Journal*, *23*, 673-685.

Hudson, M., Lean, J., & Smart, P. A. (2001). Improving control through effective performance measurement in SMEs. *Production Planning & Control*, *12*, 804-813.

Hutter, G., & Wiechmann, T. (2005, May). *Back to the future: Emergent strategies in strategic spatial planning*. Paper presented at the Regional Studies Association International Conference: Regional Growth Agendas, Aalborg, Denmark.

Hyvonen, S., & Tuominen, M. (2006). Entrepreneurial innovations, market-driven intangibles and learning orientation: Critical indicators for performance advantages in SMEs. *International Journal of Management and Decision Making*, *7*, 643-660.

Jabbour, L. (2010). Offshoring and firm performance: Evidence from French manufacturing industry. *World Economy*, *33*, 507-524.

Jackson, D. (1997). *Dynamic organizations: The challenge of change*. London, England: Macmillan Business.

Johnson, G., Scholes, K., & Whittington, R. (2005). *Exploring corporate strategy* (7th ed.). Essex, England: Pearson Education.

Johnson, M.P. (2013). Sustainability management and small and medium-sized enterprises: Managers' awareness and implementation of innovative tools. *Corporate Social Responsibility and Environmental Management*, *22*, 271-285.

Jonsen, K., & Jehn, K. A. (2009). Using triangulation to validate themes in qualitative studies. *Qualitative Research in Organizations and Management*, *4*, 123-150.

Klewitz, J., Zeyen, A., & Hansen, E.G. (2012). Intermediaries driving eco-innovation in SMEs: A qualitative investigation. *European Journal of Innovation Management*, *15*, 442-467.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, *73*, 59-67.

Kouzes, J. M., & Posner, B. Z. (1995). *The leadership challenge*. San Francisco, CA: Jossey-Bass.

Lee, K. (2009). Why and how to adopt green management into business organizations? *Management Decision*, *47*, 1101-1121.

Lewis, K., & Cassells, S. (2010). Barriers and drivers for environmental practice uptake in SMEs: A New Zealand perspective. *International Journal of Business Studies - Special Edition*, *18*, 7-21.

Lindlof, T. R. (1995). *Qualitative communication research methods*. Thousand Oaks, CA: Sage.

Martin-Tapia, I., Aragon-Correa, J. A., & Senise-Barrio, M. E. (2008). Being green and export intensity of SMEs: The moderating influence of perceived uncertainty. *Ecological Economics*, *68*, 56-67.

Meyer, M. E., Cross, J. E., & Byrne, Z. S. (2016). Frame decoupling for organizational change: Building support across divergent stakeholders. *Organization & Environment*, *29*, 231-251.

Miles, M. B., & Huberman, A. M. (1994). *Data analysis*. Thousand Oaks, CA: Sage.

Milliken, F. J., & Lant, T. K. (1991). The effect of an organization's recent performance history on strategic persistence and change: The role of managerial interpretations. In J. Dutton, A. Huff, & P. Shrivastava (Eds.), *Advances in strategic management* (pp.125-152). Greenwich, England: JAI Press.

Milliman, J., & Clair, J. (1995). Environmental HRM best practices in the USA: A review of the literature. *Greener Management International*, *10*, 34-48.

Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard Business Review*, *72*, 107-114.

Moran, J. W., & Brightman, B. K. (2001). Leading organizational change. *Career Development International*, *6*, 111-119.

Nejati, M., Amran, A., & Ahmad, N.H. (2014). Examining stakeholders' influence on environmental responsibility of micro, small and medium-sized enterprises and its outcomes. *Management Decision*, *52*, 2021-2043.

Newton, T., & Harte, G. (1997). Green business: Technicist kitsch? *Journal of Management Studies*, *34*, 75-98.

Nulkar, G. (2014). SMEs and environmental performance: A framework for green business strategies. *Procedia: Social and Behavioral Sciences*, *133*, 130-140.

O'Laoire, D., & Welford, R. (1996). The EMS in the SME. In R. Welford (Ed.), *Corporate environmental management: Systems and strategies* (pp. 201-211). London, England: Earthscan.

O'Regan, N., & Ghobadian, A. (2005). Innovation in SMEs: The impact of strategic orientation and environmental perceptions. *International Journal of Productivity and Performance Management*, *54*, 81-97.

Organisation for Economic Co-operation and Development. (2002). *OECD Small and medium enterprise outlook 2002*. Paris, France: Author.

Palmer, J., Russell, S., & McIntosh, M. (2012, December). *Organizational change for sustainability: An agenda for cultural research*. Paper presented at the Managing for Volatility and Instability: 26th Annual Australian and New Zealand Academy of Management Conference, Perth, Australia.

Parker, C. M., Redmond, J., & Simpson, M. (2009). A review of interventions to encourage SMEs to make environmental improvements. *Environment and Planning*, *2*, 279-301.

Parry, S. (2012). Going green: The evolution of micro-business environmental practices. *Business Ethics: A European Review*, *21*, 220-237.

Patton, M. Q. (2001). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Perez-Sanchez, D., Barton, J. R., & Bower, D. (2003). Implementing environmental management in SMEs. *Corporate Social Responsibility and Environmental Management*, *10*, 67-77.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903.

Raar, J. (2015). SMEs environmental management and global warming: A fusion of influencing factors? *Journal of Small Business and Enterprise Development*, *22*, 528-548.

Ramus, C. A., & Steger, U. (2000). The roles of supervisory support behaviors and environmental policy in employee eco-initiatives at leading edge European companies. *Academy of Management Journal*, *43*, 605-626.

Rasi, R.Z., Abdekhodaee, A., & Nagarajah, R. (2012). Environmental protection through small businesses: An analysis of the role of stakeholders in green operations. *Advances Materials Research*, *vols 356-360*, 2555-2565.

Reger, R. K., Gustafson, L. T., DeMarie, S. M., & Mullane, J. V. (1994). Reframing the organization: Why implementing total quality is easier said than done. *Academy of Management Review*, *19*, 565-584.

Rigby, D., & Tager, S. (2008). Steps to increase your sustainability advantage: Learning the advantages of sustainable growth. *Strategy & Leadership*, *36*, 24-28.

Roy, M., Boiral, O., & Paille, P. (2013). Pursuing quality and environmental performance. *Business Process Management Journal*, *19*, 30-53.

Runhaar, H. C., Tigchelaar, C., & Vermeulen, W. J. V. (2008). Environmental leaders: Making a difference. A typology of environmental leaders and recommendations for a differentiated policy approach. *Business Strategy and the Environment*, *17*, 160-178.

Rycroft, R. W., & Kash, D. E. (2000). Steering complex innovation. *Research Technology Management*, *43*(3), 13-18.

Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2016). Business models for sustainability: A co-evolutionary analysis of sustainable entrepreneurship, innovation, and transformation. *Organization & Environment*, *29*, 264-289.

Schaper, M. (2002). Small firms and environmental management - Predictors of green purchasing in Western Australian Pharmacies. *International Small Business Journal*, *20*, 235-251.

Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Chichester, England: Jossey-Bass.
Seidel, M., Seidel, R., Tedford, D., Cross, R., Wait, L., & Hammerle, E. (2009). Overcoming barriers to implementing environmentally benign manufacturing practices: Strategic tools for SMEs. *Environmental Quality Management*, *18*, 37-55.
Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal*, *43*, 681-697.
Simpson, M., Taylor, N., & Barker, K. (2004). Environmental responsibility in SMEs: Does it deliver competitive advantage? *Business Strategy and the Environment*, *13*, 156-171.
Spradley, J. (1979). *The ethnographic interview*. New York, NY: Holt, Rinehart and Winston.
Stewart, H., & Gapp, R. (2014). Achieving effective sustainable management: A small-medium enterprise case study. *Corporate Social Responsibility and Environmental Management*, *21*, 52-64.
Stone, L. J. (2006). Limitations of cleaner production programmes as organizational change agents I: Achieving commitment and on-going improvement. *Journal of Cleaner Production*, *14*, 1-14.
Stubbs, W., & Cocklin, C. (2008). Conceptualizing a "sustainability business model." *Organization & Environment*, *21*, 103-127.
Theyel, G., & Hofmann, K. (2012). Stakeholder relations and sustainability practices of US small and medium-sized manufacturers. *Management Research Review*, *35*, 1110-1133.
Tinsley, S., & Pillai, I. (2006). *Environmental management systems: Understanding organizational drivers and barriers*. London, England: Earthscan.
Uhlaner, L.M., Berent-Braun, M.M., Jeurissen, R.J.M., & de Wit, G. (2012). Beyong size: Predicting engagement in environmental management practices of Dutch SMEs. *Journal of Business Ethics*, *109*, 411-429.
Useem, M., & Kochan, T. A. (1992). Creating the learning organization. In T. A. Kochan & M. Useem (Eds.), *Transforming organizations* (pp. 391-406). New York, NY: Oxford University Press.
Walker, H. J., Armenakis, A. A., & Bernerth, J. B. (2007). Factors influencing organizational change efforts: An integrative investigation of change content, context, process and individual differences. *Journal of Organizational Change Management*, *20*, 761-773.
Walker, H. P., Seuring, S., Sarkis, J., & Klassen, R. (2014). Sustainable operations management: Recent trends and future directions. *International Journal of Operations & Production Management, 34*. doi:10.1108/IJOPM-12-2013-0557
Walley, L. E., & Stubbs, M. (1999). "Greenjacking": A tactic for the toolbag of environmental champions? Reflections on an SME success story. *Eco-Management and Auditing*, *6*, 26-33.
Wiesner, R., & Millett, B. (2012). Strategic approaches in Australian SMEs: Deliberate or emergent. *Journal of Management & Organization*, *18*, 98-122.
Williams, S., & Schaefer, A. (2013). Small and medium-sized enterprises and sustainability: Managers' values and engagement with environmental and climate change issues. *Business Strategy and the Environment*, *22*, 173-186.
Zollo, M., Cennamo, C., & Neumann, K. (2013). Beyond what and why understanding organizational evolution towards sustainable enterprise models. *Organization & Environment*, *26*, 241-259.

Author Biographies

Retha Wiesner is deputy director of the Australian Centre for Sustainable Business and Development and professor of management and organizational behavior in the School of Management and Enterprise at the University of Southern Queensland, Australia. Her research focuses on maximizing positive triple bottom line (economic, social, and environmental) organizational outcomes through innovative high-performance management and business sustainability strategies.

Doren Chadee is professor in management at the School of Management and Marketing, Deakin University, Australia. He has extensive research and consulting experience in the areas of management and marketing with a particular focus on the food and agricultural sector, globalization, and sustainability in SMEs.

Peter Best is professor of accounting at the Central Queensland University. His research focuses on accounting information systems, forensic accounting, and business sustainability.