David vs Goliath
The necessity of recruiting SMEs in winning the sustainability battle

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ABSTRACT

Climate change; resource depletion; environmental and economic disparity – these are the 21st Century Goliaths. Governments have been discussing how to fight these Goliaths for over twenty years with limited success, if any. Sustainable development is the most promising armament to slay these giants. Non-governmental organizations (NGOs) and the general public have directed their attention on large corporations due to their global impact and a perception that these organizations have been significant contributors to the problems. It has also been argued that only large corporations have the resources to provide the necessary solutions.

Small and medium enterprises (SMEs) are primarily overlooked when discussing these issues, however this is a disservice. SMEs are the 21st Century Davids. SMEs have a substantial aggregate impact in day-to-day business operations and are frequently referred to as the “economic engine” of a country. In Canada, SMEs account for 99.8 percent of enterprises, 60 percent of employment, and 57 percent of gross domestic product (GDP). While the definition of a SME varies globally, similar statistics are cited internationally. Furthermore, a UK survey for the Environmental Agency noted that “SMEs are responsible for 80 percent of pollution incidents and 60 percent of commercial waste” and it is reasonable to assume these statistics are similar in other developed countries.

The purpose of this paper is to identify key factors that will enable SMEs to not only become sustainable enterprises but also to champion sustainable development. It will examine sustainability in a business context and establish why sustainable development is important to SMEs’ operations. A critical analysis of the current state of affairs and what is impeding these organizations in implementing sustainable initiatives provides the necessary information to develop a roadmap for success.

It is a conceptual paper, drawing from qualitative case studies conducted internationally of SMEs and their approaches to sustainability. A variety of supplementary sources have been reviewed to compare and contrast the case study findings with current general practices and progress. As the concept of sustainable development is continually evolving, and its application has only recently been applied to SMEs, studies conducted within the last five years and the most current government and NGO reports have been used as the primary sources of data.

The author demonstrates that due to SMEs’ aggregate impact and economic functions, their participation in sustainable development is essential. Most SMEs are intimate with their customers, rely heavily on the local economy, and their owner/managers have stronger motivations than mere profit maximization. This provides the incentive for them to participate in the betterment of their communities and, while sustainable development is a global issue, it requires local solutions. In addition, historically the majority of disruptive innovations have been introduced by SMEs and new business models will be required to transition to a sustainable economic model. While governments, NGOs and large corporations are increasingly recognizing SMEs’ importance, there is frequently a gap between their rhetoric and actions in engaging these organizations. SMEs
themselves find the concept of sustainable development ambiguous and the terminology inappropriate to their operations. Those that strive to adopt sustainable practices and/or develop sustainable initiatives frequently are unclear on the appropriate tools or lack the resources with which to do so.

While there are several programs and policies which can be implemented to facilitate sustainable development within SMEs, results will be most successful when all stakeholders work together to develop solutions. To play their part, SME owner/managers must display leadership – developing their competencies and those of their organizations through awareness, knowledge and collaboration within networks and alliances.
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1.0 INTRODUCTION

Climate change; resource depletion; environmental and economic disparity – these are the 21st Century Goliaths. Despite international agreements, "global GHG [greenhouse gas] emissions due to human activities... have increased 70 percent between 1970 and 2004" (IPCC, 2007). At current levels of consumption, we are using fifty percent more resources than the earth can provide and with the steadily increasing population, in less than two decades (by 2030), even two planets will not be enough (WWF, 2012). The gap between “the rich and the rest” has grown to levels seen just prior to the Great Depression (Ghitter & Keough, 2012) and although tremendous wealth has been amassed globally due to the carbon economy, 1.3 billion people remain “trapped in dire poverty” (DARA, 2012).

Governments have been discussing how to fight these Goliaths for over twenty years with limited success, if any. In some cases, policies have taken steps backward. Sustainable development is the most promising armament to slay the giants. Non-governmental organizations (NGOs) and the general public have directed their attention on large corporations due to their global impact and a perception that these organizations have been significant contributors to the problems. It has also been argued that only large corporations have the resources to provide the necessary solutions (Hart, 1997; Holliday, Schmidheiny & Watts, 2002; Wilson, 2003).

Small and medium enterprises (SMEs) are primarily overlooked when discussing these issues, however this is a disservice. SMEs are the 21st Century Davids. SMEs have a substantial aggregate impact in day-to-day business operations and are frequently referred to as the “economic engine” of a country. In Canada, SMEs account for 99.8 percent of enterprises, 60 percent of employment, and 57 percent of gross domestic product (GDP) (Industry Canada, 2011). While the definition of a SME varies globally, similar statistics are cited internationally. Furthermore, a UK survey for the Environmental Agency noted that “SMEs are responsible for 80 percent of pollution incidents and 60 percent of commercial waste” (ENDS, 2003) and it is reasonable to assume these statistics are similar in other developed countries.

Most SMEs are intimate with their customers, rely heavily on the local economy, and their owner/managers have stronger motivations than mere profit maximization. This provides the incentive for them to participate in the betterment of their communities and, while sustainable development is a global issue, it requires local solutions. In addition, historically the majority of disruptive innovations have been introduced by SMEs and new business models will be required to transition to a sustainable economic model. So what is impeding SMEs from becoming sustainable development warriors?

2.0 RESEARCH PURPOSE AND RESEARCH QUESTIONS

2.1 Audience and objective

As sustainable development is a global issue impacting a large number of stakeholders, this paper is designed for a broad audience. It will bring value to the owner/managers of SMEs by making a compelling argument to adopt sustainable business practices and providing recommendations on how to implement them. It will seek to provide insight for
SME consultants, professional associations, and large corporations so these organizations can better facilitate SMEs in achieving the sustainability objectives of all. This insight will also benefit NGOs and policy makers by offering suggestions on how to more successfully include SMEs in the sustainability conversation and engage them in the solution.

The purpose of this paper is to identify key factors that will enable SMEs to not only become sustainable enterprises but also to champion sustainable development. It will examine sustainability in a business context and establish why sustainable development is important to SMEs’ operations. Based on this backdrop, a review of SMEs’ aggregate impact and structural advantages will demonstrate that the participation of SMEs is essential in moving toward a sustainable economy. A critical analysis of what is impeding these organizations in implementing sustainable initiatives will enable the author to provide suggestions on how to overcome these limitations. The questions it will seek to answer are in the following section, and form the outline of the paper.

2.2 Questions

2.2.1 What is sustainable development?
The most cited definition is that of the Brundtland Commission: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987), but what does this mean to the business community? How can it be translated into business strategy? Since this first introduction to the concept, many other definitions have been proposed. While no single definition has been agreed upon within political, academic or business circles, all are based on the principle of considering environmental stewardship and social equity as important as economic viability. Corporate social responsibility (CSR), environmental management/responsibility, eco-efficiency and resiliency are terms frequently used interchangeably within both academic and business literature. While it is the opinion of the author that these are components of sustainable development, they may actually serve to fracture the holistic approach required for sustainable development to be successful.

2.2.2 Why is it important?
Climate change, resource depletion, environmental degradation and economic disparity are issues that permeate the news on a daily basis. While there continues to be disagreement regarding mankind’s role in climate change – or if climate change even exists (Booker, 2008), what cannot be refuted is the fact that the global economy is dependent on non-renewable resources, which, by their very definition, will cease to exist at some point. In addition, ecosystems – “a vital support for water quality, food security, flood protection, amongst many others” (UNEP, 2010), continue to be compromised.

It has also been suggested that “what has been sold as an economic crisis is, in fact, a sustainability crisis with social and ecological dimensions at its core” (Ghitter & Keough, 2012). While frequently considered an issue only in developing countries, poverty and income inequality are global issues, directly impacting the well being and economic prosperity of all.
2.2.3 Why are SMEs important to achieving sustainability results?

If each SME is considered individually, it is understandable why SMEs have been overlooked in the sustainability conversation. For example, when a manufacturing SME cuts its water consumption by 80 percent, it represents an infinitesimal volume compared to what a large corporation such as Coca Cola can save with a mere 8 percent reduction. When considered as a business bloc, however, SMEs have a tremendous aggregate impact (ENDS, 2003; Industry Canada, 2011). This means as a group, SMEs can be either a significant part of the solution or of the problem.

In addition, SMEs serve different functions and have different management approaches compared to large corporations. Structurally, SMEs are flexible, network and collaborate well, and can quickly respond to market changes. Because SMEs are commonly managed by the owner/founder, they are able to utilize their resources in alignment with personal priorities. This allows for a longer term and less profit-driven agenda. Research suggests that it is these personal priorities which drive SMEs to be inherently ethical (Fassin, 2008; Spence, 2007). This innate moral compass has the potential to not only incite the implementation of sustainable principles within their organizations, but also to serve as an example to their larger counterparts.

2.2.4 Why is sustainable development important to them?

Regardless of whether “outsiders” believe SMEs have a role to play in moving toward a sustainable economy, SMEs must have the same conviction in order to be effective participants. A business case specific to SMEs must be made in terms to which they can relate and understand. SMEs traditionally cater to niche markets and compete through product differentiation. Sustainable business practices must prove to secure their place in the market – complementing their strategies either through cost savings, the ability to provide unique products and services or to provide increased customer loyalty. While market position is important to ensure long-term viability of any enterprise, maximizing profitability does not appear to be the primary incentive for SME owner/managers (Jenkins, 2009; Murillo & Lozano, 2006). Encouraging sustainable practices within SMEs must take this into consideration.

2.2.5 How are SMEs currently engaged?

A review of current government and NGO initiatives demonstrate that although SMEs are increasingly perceived as needing to play a significant role in sustainable development, the principles designed for large corporations continue to be applied to their operations – particularly in Canada. Because SMEs are not “little big businesses”, these programs fail to engage them or improve their performance (Jenkins, 2009; Spence, 2007). Corporations are realizing SMEs within their supply chain have a direct impact on their own organizations’ carbon footprint, but the majority remain focused on their internal initiatives rather than improvements within the supply chain.

While SMEs appear to be naturally motivated to “do the right thing”, research suggests this may not translate into effectively incorporating sustainable initiatives (Cassells & Lewis, 2011). Instead, they generally incorporate practices in an ad hoc manner, with an emphasis on the soft social side (philanthropic, workplace conditions) rather than an environmental one (Jamali, Zanhour, & Keshishian, 2009). Innovative SMEs see great opportunity, however many cite challenges in bringing their products and/or services to the market (Gunther, 2013; Marshall, 2012).
2.2.6 What factors will facilitate increased participation?
Based on the preceding analysis, a roadmap to success is presented. It includes initiatives for government, NGOs and large corporations to address the challenges SMEs are experiencing in their sustainability journeys and create environments to facilitate SME participation. Recommendations follow for the owner/managers of SMEs to promote sustainable initiatives within and amongst themselves. Three interrelated themes consistently appear as critical in building successful sustainable business models within SMEs: leadership, knowledge and alliances (networks).

3.0 RESEARCH DESIGN AND DATA COLLECTION
This is a conceptual paper, drawing from qualitative case studies conducted internationally of SMEs and their approaches to sustainability. Such an approach is appropriate when there are few metrics to quantitatively evaluate the subject matter or when the data cannot be assessed adequately using existing frameworks. Because there are many definitions of sustainable development and several approaches, how these concepts can be effectively implemented by SMEs is an interpretive process. Other scholars have used this method to apply current theories to different business issues, or, as is the case in this paper, to different business sectors.

A variety of supplementary sources have been reviewed to compare and contrast the case study findings with current general practices and progress. Theories drawn from course textbooks and readings are applied to make a business case for sustainable development within the SME context.

Literature and studies specific to cross-industry SMEs and sustainability have been accessed through online databases available through the Athabasca University library. A search using both these keywords (SMEs and sustainability) produced 5037 documents (2816 in peer reviewed journals) within the Business Source Complete database and 4724 documents (1859 in peer reviewed journals) in the ABI/Inform database. It is worth noting that the majority of documents produced were related to CSR specifically, then environmental considerations. Few documents addressed sustainability as a concept in itself. As data on Canadian firms is sparse, data from both developed and developing countries has been used, with a focus on the former.

Periodicals, newspapers and on-line news feeds have been scanned for information pertaining to the business issues and the latest developments. In addition, governmental and non-governmental organizational (NGO) websites were accessed to retrieve reports on current environmental conditions to demonstrate the necessity to move toward a sustainable economy. The relevance of their programs and policies in facilitating the implementation of sustainable practices within SMEs has been evaluated. Statistical data on SMEs has been sourced on these sites as well.

As the concept of sustainable development is continually evolving, and its application has only recently been applied to SMEs, focus is on the most current literature available. This will begin with studies within the last five years and the most current government and NGO reports.
3.1 Scope, limitations and assumptions

SMEs are heterogeneous and there is no “one size fits all” approach to facilitating sustainable development within each organization. Of course, the same can be said for large corporations. To add further complexity, SMEs experience different sustainability challenges depending on their geographic location. As this paper is designed for a broad audience, its intent is to examine how sustainable development within SMEs generally differs from that of large corporations, with an emphasis on SMEs in developed countries.

Sustainability, CSR and environmental management are terms frequently used interchangeably within the literature although each could be considered independently. Due to limited data availability on sustainable development and SMEs specifically, for the purposes of this paper case studies on all three as applied to SMEs will be referenced. This presents a challenge in correlating the literature to holistic sustainable development principles.

The case studies reviewed have been conducted most frequently by interviewing SMEs. Depending on the study, participants were either pre-selected or included based on their willingness to cooperate. The author recognizes that this method of data collection may have impacted the accuracy of the results and subsequent analyses of the authors. As supplementary sources reviewed support case study findings, it is unlikely these possible inaccuracies are material to the analysis presented herein.

While there are a variety of classifications of non-governmental organizations (NGOs), for the purposes of this paper NGOs are considered activist groups and/or non-profit organizations promoting a sustainable development agenda within the business community.

When discussing corporate initiatives within their value chain, the author recognizes that this value chain will be comprised of other large corporations in addition to SMEs. Because SMEs comprise a large percentage of the value chain, it is assumed these initiatives are focused on SME participation.

4.0 SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

“Our goal [sustainable development] is a delightfully diverse, safe, healthy and just world, with clean air, water, soil and power – economically, equitably, ecologically and elegantly enjoyed.” ~ William McDonough, co-author Cradle to Cradle

4.1 Definitions

Sustain: to keep, or keep going, as an action or process; to endure; to remain viable (www.dictionary.com).

Sustainability: capable of being sustained (economics); capable of being maintained at a steady level without exhausting natural resources or causing severe ecological damage (environmental science) (www.thefreedictionary.com).
Sustainable development: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987).

Ask any executive if they want their organization to stay in business (remain viable) and they will emphatically agree. Ask one if s/he is a proponent of sustainability and, although most will express agreement, the responses as to what that means will likely vary. Ask what his/her organization is doing to move toward sustainable development and, if a response is forthcoming at all, there is a strong possibility it does not align with the definition above.

The definition of sustainable development above was first introduced by the Brundtland Commission in its report Our common future, in response to global concerns of economic stagnation and environmental degradation at the time (Holliday, Schmidheiny & Watts, 2002). While it is the most commonly cited definition of sustainable development, it has been criticized as being vague and lacking direction on how to achieve it (ibid.). For these reasons, over the last two decades many other definitions have been proposed but consensus remains elusive.

4.1.1 Complementary/competing concepts

In addition to the multitude of definitions proposed for sustainable development, concepts such as corporate social responsibility (CSR), eco-efficiency, environmental stewardship, and resiliency have been used interchangeably within both academic and business literature. While it is beyond the scope of this paper to provide an in depth review of the nuances amongst and between these terms, it is worth noting a few key differences:

- While it has been suggested CSR is a mechanism in which to achieve sustainability (Bos-Brouwers, 2009; Jenkins, 2009), the “corporate” in CSR naturally precludes SMEs (European Commission, 2004; Fassin, 2008; Spence, 2007).

- CSR has commonly been associated with stakeholder relations and philanthropic endeavours and, while a few CSR frameworks consider the environment as a “stakeholder” (Millon, 2011), it rarely is given equal priority.

- Environmental consideration is a component of sustainable development but “does not necessarily mean a prosperous society or a healthy economy” (International Institute for Sustainable Development (IISD), 2012).

- Many environmental and CSR frameworks propose incremental improvements to current business operations. Such philosophies, while important first steps, inadvertently suggest to companies that being “less bad” – rather than significantly changing their business models – is “good enough” to be considered a sustainable enterprise.

This fragmentation creates additional confusion in an already ambiguous concept. It also contributes to businesses disassociating their operations with sustainable development, as addressing the environment and CSR are frequently perceived as “add-ons” rather than core business processes (Jamali et al., 2009; Jenkins, 2009). As such, using these terminologies interchangeably may actually contribute to the slow adoption of sustainable principles as opposed to being of benefit.
4.1.2 The three Es

Irrespective of the confusion caused by the myriad of definitions, approaches, competing and complementary concepts, there is one commonly accepted objective of sustainable development: achieving equitable and economic prosperity without exceeding the environmental carrying capacity of our one planet earth. As eloquently described by William McDonough at the beginning of this section, the three objectives of sustainable development are environmental, social (equity) and economic. They are also referred to as the three Es – and sometimes as the three Ps: people planet, profit. While several models have been proposed by academics, in all cases sustainable development resides when all three objectives are realised. The three most common graphical depictions are the three legged stool, three overlapping spheres, and three concentric circles, as shown in Figure 4.1 (Willard, 2010).

Figure 4.1 – Three common sustainability models
4.2 Why it is important

“We’re in a giant car heading towards a brick wall and everyone’s arguing over where they’re going to sit.” ~ David Suzuki, Canadian Environmentalist

Climate change, resource depletion, environmental degradation and economic disparity are issues that permeate the news on a daily basis. These are global concerns inciting discussion at multiple levels, unfortunately with less than stellar results. Success will depend on the ability of all participants – government, NGOs, businesses and consumers – to work together in developing new economic models which value all three Es.

4.2.1 Environment

Despite international agreements, “global GHG [greenhouse gas] emissions due to human activities...have increased 70 percent between 1970 and 2004” (IPCC, 2007). Even with the increasing amount of scientific evidence that GHG emissions are a primary cause of weather-related catastrophes, there are still some dissenting opinions regarding mankind’s role in this phenomena – or if climate change even exists (Booker, 2008). What cannot be refuted is the fact that the global economy is dependent on non-renewable resources, which, by their very definition, will cease to exist at some point.

At current levels of consumption, we are using fifty percent more resources than the earth can provide and with the steadily increasing population, in less than two decades (by 2030) even two planets will not be enough (WWF, 2012). Biodiversity – the interconnected webs of natural habitats and ecosystems –declined globally by 28 percent between 1970 and 2008 (ibid.). As mankind’s survival depends on the natural environment, and nature provides the “fundamental rules of the game”, it is essential to develop systems where humans and nature can exist in productive harmony (EPA, n.d.; Seale, as quoted by Even-Har, 2012).

4.2.2 Equity

It has been suggested that “what has been sold as an economic crisis is, in fact, a sustainability crisis with social and ecological dimensions at its core” (Ghitter & Keough, 2012). The gap between “the rich and the rest” has grown to levels seen just prior to the Great Depression (ibid.) and although tremendous wealth has been amassed globally due to the carbon economy, 1.3 billion people remain “trapped in dire poverty” (DARA, 2012). According to a 2006 United Nations study, the richest 1 percent of the world’s adult population owns 40 percent of the world’s household wealth, a total greater than the wealth of the world’s poorest 95 percent (The Regeneration Roadmap, 2012). Research suggests that unequal societies have “lower levels of trust, literacy and social cohesion”, which makes it more difficult to make positive inroads on economic and environmental issues (Wilkinson & Pickett, 2009).

4.2.3 Economics

The economy has historically taken precedence over the other two Es – especially within the business community. Economic models have enabled business to externalize environmental and social costs (UNEP, 2011) and businesses have neglected them as a result. However, with increasing awareness of the negative impacts traditional development has imposed on the planet, a transition is taking place. Unfortunately, in some circles the pendulum has swung too far. While environment and equity are
considered equal priorities in sustainable development models, dogmatic environmentalists propose no growth at all. Rather than contributing to finding solutions, this position understandably polarizes many stakeholders: business sees it as a threat to their viability; consumers in developed countries perceive it as a threat to their current standard of living; and, developing nations perceive it as a constraint to building prosperity. While profit may not be the reason for the existence of an enterprise, it is a requirement, and well-designed economic growth will contribute to improved quality of life and poverty elimination.

5.0 SMALL AND MEDIUM ENTERPRISES (SMEs)

Small and large firms are equally important for a healthy economy, fulfilling different roles and functions which often correlate to product-life cycle theories (Statistics Canada, 2011). New products and ideas generally originate with small firms and, as they gain acceptance in the marketplace, these firms either develop larger-scale production processes or the technology is adopted by larger organizations that already control sufficient resources to capitalize on economies of scale (ibid.).

5.1 Definition and impact

While the definition of an SME varies globally, governments most often identify them by the number of full-time equivalent workers they employ (ftes), a maximum amount of revenue generated annually, or a combination thereof. The government of Canada defines SMEs as those companies employing less than 500 ftes, whereas the European Union (EU) defines them as having fewer than 250. It is likely these definitions differ due to the demographic composition of their respective regions. When considering the impact of SMEs, in Canada this sector accounts for 99.8 percent of enterprises, 60 percent of employment, and 57 percent of GDP (Industry Canada, 2011). Similar statistics are present in the EU (European Commission, 2012b) and internationally. Furthermore, the International Finance Corporation has identified a positive relationship between a county’s overall level of income and the number of SMEs per 1,000 people (WBCSD, 2007).

Clearly, the aggregate influence of SMEs is substantial, which is why they are frequently referred to as the “economic engine” of a country. While non-governmental organizations (NGOs) and the general public have directed their attention to large corporations due to their global impact, high visibility and a perception that these organizations have been significant contributors to the problems, a UK survey for the Environmental Agency noted that “SMEs are responsible for 80 percent of pollution incidents and 60 percent of commercial waste” (ENDS, 2003) and it is reasonable to assume these statistics are similar in other developed countries. While these statistics alone could justify the importance of engaging SMEs in sustainable development, additional reasons, as outlined in this section, further underscore the value of their role.

5.2 Why they are important to sustainable development

SMEs’ contributions to sustainable development can be separated into two categories: those who are satisfied with their market niche but are concerned (or need to be concerned) with operating their businesses sustainably; and those who are seeking
market opportunities by introducing new and sustainable products and processes to the marketplace. To distinguish between the two, they will be referred to “Adopters” and “Innovators” respectively. The majority of SMEs are Adopters. Transitioning these businesses from organizations interested in sustainability to organizations operating sustainably can significantly reduce the pollution and waste generated globally. In addition, transitioning to a global sustainable economic model will require a new way of thinking, new processes and business models (Holliday et al., 2002). Innovators are natural incubators for such disruptive technologies. While Innovators represent a smaller percentage of the SME business bloc, they are the leading organizations for job growth and hold tremendous promise to radically shift business approaches.

5.2.1 Structural Advantages
While SMEs are officially characterized by their size, they also have unique organizational characteristics compared to large corporations. A review of these characteristics suggest that they are not only well structured to match larger enterprises in their sustainability efforts (Fassin, 2008; Jenkins, 2009; Murillo & Lozano, 2006), but have the opportunity to be leaders in sustainable development.

- The most common form of SME is one managed by the owner. As owners, they have autonomy to utilize their resources as they see fit – that is, they are not required to maximize profit for a large group of shareholders (Freisleben, 2011; Jenkins, 2009; Spence, 2007; Spence, Boubaker Gherib, & Ondoua Biwolé, 2011; Stubblefield Loucks, Martens, & Cho, 2010).

- The culture of the organization is well known and reflects the personal values and beliefs of the owner/manager. While their operations are less formalized and codified, with less hierarchy and bureaucracy information is easily and quickly disseminated throughout the organization (Jamali et al., 2009; Jenkins, 2009). This allows for cohesiveness of action in alignment with the company’s objectives – making business practices a “way of life” instead of “lifeless documents” (Bos-Brouwers, 2010; Fassin, 2008).

- They are flexible and organic and can more quickly identify and respond to changes in market demand as a result (Jenkins, 2009; Lefebvre & Lefebvre, 2012; Stubblefield Loucks et al., 2010).

- It is commonly accepted that sustainability is a global issue that needs local solutions. SMEs are more intimate with their customers and rely more heavily on the local economy than do large corporations; relationships are critical to their success (Spence, 2007). This provides the knowledge and incentive for them to participate in the betterment of their communities.

5.2.2 Job creation
In Canada, between 2001 and 2011, small firms accounted for 43 percent of all jobs created (Industry Canada, 2012). Statistics in the United States (US) cite an even greater impact. In researching the recovery periods of the recessions post-World-War-I, Henry Nothhaft discovered “since 1977, all new job creation in the US has been due to startups” (Harvard Business Review, 2011). In addition, startups provide more opportunities to women and minorities and this naturally fosters a more equitable marketplace. “Unlike corporate management, there is no glass ceiling in a company you
start for yourself” (Chamorro-Premuzic, 2012). In the US, female-owned companies account for over $3 trillion in GDP – equating to approximately 40 percent of China’s entire GDP (ibid). While similar statistical data for Canada is unavailable, over one third of self-employed persons are women (Industry Canada, 2012). In order to transition to a sustainable economy, these organizations must have incentive to introduce and/or adopt sustainable principles.

5.2.3 Integral value chain members
Large corporations rely on SMEs for the supply of a myriad of products and services. A 2010 internal assessment by Baxter (medical equipment - international) calculated its supply chain was responsible for almost 38 percent of its carbon footprint, with similar statistics (41 percent) being reported by GlaxoSmithKline (pharmaceuticals – international) (Schatsky, 2012). Puma (apparel – international) calculated their supplier impact to be over 90 percent of total water use and GHG emissions (ibid.). As pressure is placed on large corporations to become more transparent regarding their own sustainable business practices, they will be increasingly interested in ensuring the SMEs in their value chain adopt similar and/or complementary practices.

5.2.4 Innovation
“In the middle of difficulty lies opportunity.” ~ Albert Einstein, Physicist
While large corporations can provide scalability, historically the majority of disruptive innovations have been introduced by SMEs. This is attributable in part to their structural advantages, but also because many large companies have too much capital invested in current technologies. Such capital investments can lead large corporations to believe they will remain profitable operating in a “business as usual” manner and/or make it difficult to cost justify major retooling. As mentioned, disruptive technologies will be a critical component in transitioning from the current economic model to a sustainable one. The inventor of the cotton gin (Eli Whitney) may be a distant memory, but how society now interacts (Microsoft, Google, Dell, Amazon, Facebook) is fresh in the minds of most. Each of these now-major corporations had humble beginnings with game-changing results. From a sustainability perspective (although likely lesser known), ZipCar (car sharing), Grameen Bank (microfinance) and Cradle to Cradle design (zero manufacturing waste) are three disruptive innovations which hold similar promise.

5.3 Why sustainable development is important to them
“People are looking for meaning, for companies that are doing something positive. Sustainability differentiates us.” ~ Dominic Fielden, Co-founder, Rocky Mountain Flatbread Co.
While the argument for sustainable development as a global initiative is substantive, these large-scale issues often do not resonate with SMEs. One would be hard-pressed to find an individual or company who believes that equity or the environment is not important, however without a clear understanding of how it impacts their own organizations, sustainable development will continue to be perceived as “someone else’s” problem. By framing sustainable development in terms that directly relate to SMEs’ operations, there is a greater opportunity for engagement.
It has been argued that business needs to actively engage in the sustainability solution because they have not only contributed to the problem but also have the resources necessary to provide solutions (Hart, 1997; Holliday et al., 2002; Wilson, 2003). While the former may be applicable to SMEs, a common argument for why SMEs do not engage in sustainable practices is their resource poverty (Bos-Brouwers, 2010; Cassells & Lewis, 2011; Freisleben, 2011; Murillo & Lozano, 2006; Revell, Stokes, & Chen, 2010). This section outlines the business case as it applies to SMEs.

5.3.1 Competitive advantage
Grant (2008) defines competitive advantage as the ability of an organization to earn (or potentially earn) a persistently higher rate of profit. Competitive advantage is obtained by utilizing the resources and capabilities of the organization to cater to market demand, and a higher rate of profit is realized either through reduced costs or the ability to realize a price premium. While market position is important to ensure long-term viability of any enterprise, SME owner/managers are motivated by factors other than profit maximization (Jenkins, 2009; Lewis & Cassells, 2010; Spence, 2007; Weinzimmer & Manmadhan, 2009). Grant (2008) further clarifies that a firm may forgo current profit achieved through securing competitive advantage in favour of other opportunities – such as customer loyalty, technology or executive perks. As a result, Grant’s definition can resonate with SMEs on both business and personal levels.

Sustainable principles are based on doing more with less; improving the quality of life of all while simultaneously preserving the natural environment and adding to its beauty. These principles enable Adopters to achieve competitive advantage through improved cost control, risk management and stakeholder (employee and customer) satisfaction. New approaches such as bio-mimicry, green chemistry, closed-loop production and service-based sales models, offer tremendous opportunities for Innovators to satisfy under-served market demand.

5.3.2 Resource scarcity
SMEs traditionally cater to niche markets and compete based on product differentiation; large corporations capitalize on economies of scale and commonly compete on price. Although their focus is different, SMEs still need to consider costs. From a material cost perspective, SMEs are more susceptible to the price fluctuations of natural resources than their larger counterparts. Resource scarcity creates volatility in pricing and increases business risk. Evidence strongly suggests with the growing population and wealth creation in developing countries, this demand will only continue to increase (WWF, 2012). Large corporations – who already have greater resource control than SMEs – are currently realizing that resource scarcity has a negative impact on their market position. Multinationals such as Ikea, Puma and Pepsico are significantly increasing their investments in renewable energy and reducing resource use in efforts to drive their costs down (“Ikea”, 2013).

When organizations minimize waste, improve efficiencies and streamline processes, they realize lower transaction costs without sacrificing value to their customers. These cost savings can benefit the organization by directly flowing to the bottom line, freeing up resources to provide added value to the consumer or to enable the organization to become more cost competitive.
From a human resource perspective, SMEs compete with large corporations for talent and frequently cannot provide comparable wages, benefits or opportunities for upward mobility. By cultivating an environment of caring, incorporating fair labour practices, ensuring safety and promoting personal development they are better positioned to attain and retain high quality talent (Fassin, 2008; Murillo & Lozano, 2006). In addition, individuals prefer to work in organizations with purposes that align with their own values (Holliday et al., 2002). SMEs that incorporate sustainable practices will attract like-minded individuals and company members committed to their organizations’ vision.

5.3.3 Market demand
SMEs are heavily dependent on their external relationships with customers, suppliers and other industry members (Jenkins, 2009; Stubblefield Loucks et al., 2010). Consumers are increasingly more interested in purchasing responsibly and members of the value chain look to partner with organizations that treat them fairly. In a recent US survey by the League of Conservation Voters, “An overwhelming 93 percent say there is a moral obligation to leave an Earth not polluted or damaged to future generations, with 67 percent strongly agreeing” (Johnson, 2013). By considering the needs, preferences and objectives of these stakeholders, SMEs are better able to deliver on their fundamental objective: customer satisfaction.

As integral members of large corporations’ value chains, the adoption of sustainable practices provides SMEs an advantage in working with these organizations (Freisleben, 2011; Moore & Manring, 2009). Large corporations will increasingly seek to work with suppliers that have business processes in alignment with their own.

While large corporations are customers for many SMEs, they are also competitors. SMEs need to consider the threat of large corporations usurping their market position by being both price competitive and becoming truly ethically responsible. As consumer demand for sustainable business practices increases and large corporations can demonstrate they are meeting those needs, SMEs’ competitive advantage could be compromised.

5.3.4 Imminent regulation
While converting to renewable sources and minimizing waste can produce cost savings for SMEs, many environmental regulations have the potential to increase costs to businesses. With increasing global pressure to transition to a green economy, regulation will only increase. SMEs are in an inferior position to fight legislation, and for those companies who wish to become more sustainable this approach is imprudent. Fighting legislation also wastes resources in litigation instead of using them to find real solutions, and pushes cost estimates higher than they actually are (Porter & van der Linde, 1995). The authors also determined that an overwhelming majority of companies proactive in achieving compliance through innovation achieved cost savings rather than increases (ibid.). SMEs proactive in adopting new technologies prior to regulation have the time to experiment and find the most cost-effective approach for their organizations.

5.3.5 New opportunities
Sustainable development will require a new way of thinking, new processes and business models (Holliday et al., 2002). As one competency of SMEs is their ability to improve existing products/services and create new ones, sustainable development can be viewed as a tremendous opportunity for this sector (Jenkins, 2009; Lefebvre &
Lefebvre, 2012; Stubblefield Loucks et al., 2010). As important innovation is to sustainable development, it is the basis on which SME Innovators create value: niche markets and product differentiation are their lifeblood.

5.3.6 Ethics

"Indeed the modern organization was expressly created to have results on the outside, that is, to make a difference in its society or its economy."

~ Peter Drucker, Management guru

Businesses – both large and small – have an obligation to be good corporate citizens. It is their “license to operate”. This is one of the premises on which CSR is founded (Sexty, 2011). While it has been argued that CSR itself is a concept both difficult for SMEs to understand and poorly designed for their organizations, SMEs rely heavily on their reputation and relationships within the community (Fassin, 2008; Jamali et al., 2009; Jenkins, 2009; Murillo & Lozano, 2006). The identity of their business is intricately tied to the identity of the owner/manager. While exact figures are unavailable, a large percentage of SME company names include that of the owner/founder (Clark Builders, Smith Business Solutions, Shane Homes, Pete the Plumber, McCann’s Movers, McDaniel & Associates). This suggests an incentive to maintain a high moral standard (Spence, 2007).

The majority of SMEs are rooted in their communities and are greatly impacted by the local economy and environmental conditions (Medina-Munoz & Medina-Munoz, 2000; Moore & Manring, 2009). Healthy, prosperous and diverse communities ensure the long-term viability of any organization. “Business cannot succeed in societies that fail” (Holliday et al., 2002). In actively cultivating equity and preserving the environment – improving the standard of living and well being of society as a whole – local SMEs simultaneously improve their business opportunities.

SMEs are motivated more by metrics such as quality, customer service, employee satisfaction and ethics than by profit maximization. These values allow SMEs to naturally embrace sustainable principles in concept. CSR can nurture creativity and innovation by encouraging SMEs to view current business models, and products/services through a different lens (Lefebvre & Lefebvre, 2012; Stubblefield Loucks et al., 2010). It is in their having a clear understanding of what sustainable development means to their specific organizations – and how it can be implemented with the resources at their disposal – that will ensure implementation.

6.0 CURRENT STATE OF AFFAIRS

Recognizing that both the global sustainable development agenda and SMEs themselves can benefit from SME involvement, it is worth examining the current state of affairs. Do government and NGOs initiatives consider the unique needs of these organizations? How do large corporations promote sustainability practices within SMEs? What is the current degree of SME participation and the challenges they encounter introducing sustainable programs?
6.1 Government and NGO initiatives

While it is impossible to review the efforts of all governmental bodies and NGO initiatives, the following section provides a general picture of different degrees of commitment in Canadian and European governments, as well as the focus and initiatives of some prominent international and Canadian NGOs.

6.1.1 Canadian and European efforts

Industry Canada has created a sustainability roadmap for SMEs – available on its website – which is little more than a document that describes responsible business practices and links to other governmental and non-governmental resources (Industry Canada, 2011). While the department claims to provide business case examples, examples are few and too generic to provide value to the reader. The only link to funding and incentive programs directs the reader to the Canada Business Network Environment and Business webpage (http://www.canadabusiness.ca/eng/page/2860/). Most programs are provincial, and while some target specific industries (such as farming) the majority do not target SMEs. That is, funds are available for all enterprises. In reviewing all federal/provincial grants, contributions and financial assistance, programs to promote “green” initiatives represent less than fifteen percent.

In contrast, with a €3 million budget, the European Commission (2012a) co-financed fourteen projects over a three year period (2006–8), partnering with multiple organizations and directly organizing events, seminars and training modules. Most recently they organized a networking conference for organizations who advise SMEs on CSR. It is worth noting that according to the Commission, “CSR is about the long-term sustainability of business and of society”, including the engagement of stakeholders, the wider environment and how business sources, manufactures and markets its products/services (ibid.). Its summary report concluded that participants found the conference “highly valuable” and “strongly recommended that the event be repeated on a regular basis to help further the networking, exchange and learning that occurred” (ibid.). Considering the EU’s commitment to engaging SMEs and comprehensive reporting on their initiatives, what is surprisingly absent from their site are metrics on the impact these initiatives have had improving CSR adoption within SMEs.

6.1.2 International NGOs

NGOs with activist agendas have been instrumental in raising awareness of sustainability issues, primarily on an international level (IISD, 2012). With this international focus, NGOs’ engagement naturally is geared toward large corporations, but SMEs are impacted indirectly. Understanding the influence large corporations can wield, watchdog NGOs have drawn attention to the sustainability practices of these companies’ value chains as well as their own operations. NGOs with a willingness to work with business enterprises are partnering with large corporations to create programs that fund and/or cultivate sustainable development within the operations of their supply chains.

Two organizations spearheading international frameworks for sustainability – the Global Reporting Initiative (GRI) and the International Standards Organization (ISO) – have introduced programs specific to SMEs. GRI has developed simplified reporting procedures and has adapted its certified training course to focus on SMEs. In 2004 the ISO reviewed its environmental management standard (ISO 14001) to make it more
accessible to SMEs and in 2010, introduced a guide for social responsibility (ISO 26000) “aimed at all types of organizations, regardless of their activity, size or location” (http://www.iso.org/iso/home/standards/iso26000.htm).

6.1.3 Canadian NGOs
There are varied levels of SME engagement with NGOs that focus on education, information dissemination and the development of programs to support sustainable development within businesses agendas. The Canadian Business for Social Responsibility (CBSR) (www.cbsr.ca) is a non-profit organization referenced by Industry Canada as a resource for SMEs. According to a message from the outgoing President and CEO, Adine Mees, the CBSR was created in 1995 “with a staff of 1.5, an operating budget of $100K, and a member base of Vancouver-based small to medium-sized companies”, but is now “a vital aspect of the Canadian corporate persona” (ibid). This indicates its focus has shifted away from the SME to cater to larger organizations. A review of their membership base and programs offered supports this assessment. In fact, a search for “SME” within their database produced zero results. While in 2013 CBSR introduced a reduced rate for SMEs to join the organization (50 percent less), its message: “get visibility for your valuable CSR commitments” is unlikely to interest the typical SME owner/manager. Case studies have indicated SMEs are uncomfortable in promoting their CSR commitments (Jamali et al., 2009; Jenkins, 2009).

Alternatively, the Network for Business Sustainability (NBS), a Canadian non-profit organization founded in 2005, is a growing international network of academic and business leaders seeking to align “resource-based practice with practice-based research” (www.nbs.net). With the sponsorship of Industry Canada, it has not only realized the importance of SMEs, but has restructured its organization to direct resources to SME sustainability development. Their first SME conference was held in October of 2011, with a newly created council dedicated to SME issues having their first meeting in March of 2012 (ibid.). Due to its recent creation, it is premature to assess the effectiveness of the SME council or its initiatives however its holistic approach is promising. The report produced from the council’s inaugural meeting identified the seven key challenges SMEs encounter in their sustainability journeys, which will set the stage for future research and discussion (NBS, n.d.). NBS’s website has also introduced a section dedicated to SME issues, with a dozen articles posted to date.

6.1.4 NGO certifications and eco-labels
Many NGOs also support sustainable development by leveraging their credibility to influence consumers. In creating independent certifications and eco-labels, their endorsements contribute to consumer confidence. This allows consumers to make better-informed decisions and purchase more responsibly, driving sustainable development from the demand-side. Again, while these programs promote sustainable development on a global scale, they have mixed results in supporting sustainability within SMEs. There are over 400 eco-labels in the marketplace, with almost half originating by NGOs (Corporate Sustainability Initiative, 2010). This makes it difficult for SMEs to decide which certification(s) are best suited to their organization. Also, there is little differentiation in the certification process of large corporations and SMEs and, as certifications can be time consuming and costly, this puts SMEs at a disadvantage.
While the third-party certifications of NGOs may contribute to consumer confidence, there is little empirical evidence of a “causal link between certification/eco-labeling efforts, and real improvements in social and/or environmental outcomes” (ibid) and fraud cases have demonstrated audits do not always guarantee performance either (Fassin, 2008). Participants at a 2008 multi-stakeholder coffee conference expressed concerns about the policies of the two NGOs present – Fair Trade and Rainforest Alliance. They commented Fair Trade’s focus on cooperatives disadvantaged other small producers (independent producers are not eligible for certification) and the NGO’s marketing tactics overshadow those who support direct trade initiatives (Coffee & Conversation, 2008). According to the participants, direct trade initiatives are equally, if not more, beneficial by paying a higher price than Fair Trade directly to the supplier. Rainforest Alliance was criticized for allowing large roasters to use its seal on product that only contains a small percentage of certified beans (ibid.). While a disclaimer of content is required by the NGO, the responsibility is now placed on the due diligence of the consumer. This impacts not only SME producers, but also SME suppliers who commit to 100 percent certified/sustainable products. While both these organizations have been substantial contributors to sustainable initiatives and awareness, there is obvious room for improvement in their support of SMEs.

“What good will it do to have Nestlé displaying the fair-trade seal on a tiny portion of its coffee if the company ultimately succeeds in confusing consumers and undermining their confidence in the integrity of fair trade overall?” ~ Daniel Jaffee, Author

6.2 Corporate initiatives

In a study of France’s 40 largest companies (by market capitalization), the authors found all had adopted some form of GHG management strategy as a result of significant media exposure and resulting public pressure. The extent to which the companies embraced sustainability, however, varied significantly. To identify these differences, the authors categorized the companies as “Conformist”, “Engaged”, or “Visionary” (NBS, 2012b). As there are varying levels of commitment to sustainable development within large corporations, there are equally varying levels of commitment large corporations make to assisting SMEs members of their value chain in the adoption of sustainable practices. As a rule, the programs of companies who have embraced sustainable development as a corporate cultural value not only encourage SME participation, but also facilitate their learning, knowledge and implementation.

“Our approach of being an open-minded company seeking to co-design new solutions with our stakeholders is firmly rooted in Danone’s culture and model and contributes to our overall long-term performance.” ~ Franck Riboud, CEO

In 2001, Danone, one French “Visionary” company identified in the study, introduced “The Danone Way”. It is described as “a charter, code of conduct and self-assessment tool that integrates CSR into every business unit” (ibid.). The company’s sustainability report discusses some of their supply chain initiatives, a few of which are listed below (Danone, 2011):
The creation of danone.communities in 2007, a “social business incubator whose mission is to promote, support and finance social businesses that want to contribute to eliminating malnutrition and poverty”.

In partnership with the Livestock Institute and Lower Normandy Regional Council, the introduction of a project to support 300 suppliers in expanding their organic knowledge as it relates to milk production.

The inclusion of environmental criteria in its Quality charter, using technicians to audit and improve practices within the majority of the farms that are direct suppliers to the organization.

The development of the Danone Ecosystem Fund in 2009, funded by an initial grant of €100 with ongoing annual support from the organization. Its objective is to partner with NGOs to develop programs “to strengthen the local players in Danone’s ecosystem: small farmers, suppliers and subcontractors, transport and logistics operators, distributors, and regions around [its] plants”.

The launch of the Ukraine Milk Communities project to support small farmers (80 percent of the industry) and preserve the dairy farming sector. Cooperatives have been organized to increase small farmers’ incomes, and significant training to improve quality production methods has reached 2,300 farmers.

Interface is another multinational corporation hailed as a beacon for sustainability. As a commercial carpet manufacturer, Interface was heavily reliant on petroleum-based products. Its strategy, “Mission Zero”, was formulated in 1994 – the objective: by 2020 to have zero impact on the environment – taking nothing from the earth that cannot be reproduced by the earth, generating no waste that cannot be used as “food” for another process. Its philosophy in regard to its supply chain: a “green” company cannot use “brown” suppliers (Anderson, 2009). A few initiatives the organization has adopted are as follows (ibid.):

- Limitation of the number of its suppliers to both strengthen relationships and facilitate life cycle assessments (LCAs).
- Establishment of cross-functional internal/external teams to develop products and processes that mimic nature’s functionality.
- Creation of the Fairworks outreach effort to source locally available materials and use methods designed to work best with local cultures, increasing earning opportunities for local communities.
- Introduction of the DiversityConnect program to offer opportunities for SMEs that are owned/managed by people historically underrepresented (minority, women, disabled or veteran-owned).

In 2005, Walmart unveiled a “sweeping business sustainability strategy” adapting its business model from an internal focus to external – partnering with nonprofits, government agencies, consultancies and academic institutions for expertise (Plambek & Denend, 2008). By collaborating with NGOs and government agencies to ensure its suppliers meet stringent guidelines (certifications, processing standards) and looking further down the supply chain, the company has been able to recognize opportunities to select better suppliers, minimize transportation and transaction costs and secure better
quality goods. Walmart also changed its purchasing model to forge closer, longer-term relationships with its suppliers and help support sustainable initiatives. The company’s senior director of corporate strategy and business sustainability at the time, Tyler Elm, recognized the importance of including the supply chain in achieving Walmart’s objectives, stating: “If we had focused on just our own operations, we would have limited ourselves to 10 percent of our effect on the environment and eliminated 90 percent of the opportunity that’s out there” (ibid.). Ray Anderson (Interface founder) and many other executives cite similar statistics (Anderson, 2009; Schatsky, 2012).

Encouraged by their success, Walmart broadened its reach. Initially spearheaded and funded by the company, The Sustainability Consortium (Consortium) was created to improve sustainable business practices across industries and throughout multiple value chains. Founded in 2009 with 14 other organizations, it has grown exponentially – now boasting 75 members comprised of large corporations, academia, government, associations and NGOs and is now a self-sustaining NGO in its own right (www.sustainabilityconsortium.org). One of the Consortium’s primary objectives is to develop “a standardized framework for the communication of sustainability-related information throughout the product value chain [to enable]... rigorous product level LCAs to be done at a fraction of today's time and cost, and provide a platform for sustainability-related data sharing across the supply chain” (ibid.). Such standardization, clear, consistent and cost-effective data has the potential to greatly benefit the SME community.

While there are many other similar examples of “Visionary” efforts to promote sustainable development within the value chain, industry benchmarking studies by Green Research suggest that overall there remains substantial room for improvement. According to Green Research, large corporations are increasingly using “supplier scorecards” to assess environmental performance but requesting information from suppliers is not sufficient to engage suppliers. “Suppliers often don’t have a clear idea of what is expected of them and where to focus their own sustainability efforts” (Schatsky, 2012). Although the supply chain accounted for a significant portion of the top performers’ carbon footprints, (publicly available) initiatives to address improvements throughout their supply chains averaged less than 4 percent (ibid.). Table 6.1 provides a breakdown of the data per industry.

**Table 6.1 – Share of sustainability goals by value chain location**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Operations Goals Share of Total</th>
<th>Supply Chain Goals Share of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Equipment</td>
<td>87%</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Alcoholic Beverages</td>
<td>72%</td>
<td>0%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>90%</td>
<td>3%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>69%</td>
<td>7%</td>
</tr>
<tr>
<td>Food Processing</td>
<td>87%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Source: Green Research analysis (2011-2012)*
6.2.1 Social initiatives

While an increasing number of large corporations are advancing environmental sustainability initiatives through their supply chains, adoption of social initiatives have been slower. Even within “Visionary” organizations, social initiatives (other than philanthropic) have been introduced subsequent to environmental ones. This can be attributed to the fact that environmental improvements are easier to benchmark and cost savings directly benefit the bottom line. According to Elm, the first year after Walmart introduced its sustainability strategy, savings were roughly equal to the profits generated by several Wal-Mart Supercenters (Plambek & Denend, 2008). As a rule, large corporations seek to quantify results (measurable performance improvement) and maximize profit for their shareholders. In addition, they are under constant pressure by the financial markets to report positive profits quarterly.

Many large corporations encouraging sustainable environmental practices within SMEs –Walmart included – are also pressuring these same companies to cut costs and fix prices (Fassin, 2008; Mitchell, 2012). This sends mixed messages to SMEs – should they invest in sustainable practices for long term benefit or be the most cost-competitive? The trend to use manufacturing and support services offshore forces local SMEs to compete with labour rates unsustainable in their home countries and/or produce inferior quality (and subsequently more disposable) products.

6.3 SME Participation

Because of the heterogeneous nature of SMEs and their lack of formal reporting, it is more challenging to assess their participation than it is within large corporations. A report from the European Commission’s (2004) Roundtable concluded that relatively little is known about CSR practices within SMEs and better baseline data is needed to more accurately assess the scale and impact of their initiatives. They noted, however, that it is clear many SMEs are committed to sustainable practices (ibid.). Although additional research has been conducted subsequent to its report, conclusions regarding SME participation have been mixed. CSR, as it applies to large corporations, is rarely found in SMEs, but CSR principles – at varying degrees – are well entrenched in many SME operations (Fassin, 2008; Jamali et al., 2009; Jenkins, 2009).

Spence et al. (2011) conducted a study of 44 SMEs in three French-speaking countries and labelled participants’ efforts similarly to the study of France’s large corporations: “Indifferent”, “Aware” and “Committed”. These labels underscore the personal nature of SME operations. An “Indifferent” organization reflected the owner/manager’s opinion that they are “not guilty” of environmental degradation…that it is “someone else’s” problem. Conversely, owner/managers of “Committed” organizations were “convinced that their actions will benefit the larger community, allow them to develop themselves, i.e. provide them and their employees with a living and make them better persons, as well as give them a competitive edge” (ibid.). The personal values of the owner/manager cannot be stressed enough. In all case studies reviewed, the commitment to sustainable practices is a direct result of the owner/manager’s buy-in and, in most cases, initiatives are personally implemented. As a rule, although their practices are not formalized, they are internalized – “the way we do business around here” (Bos-Brouwers, 2010; European Commission, 2004; Fassin,
Formalization is more prevalent when required by governance or international business relations (Spence et al., 2011).

Contrasting to large corporations, research suggests that SMEs place a greater emphasis on the social aspects of sustainable development over the environmental. This can be attributed to the fact that such initiatives require less capital, utilize existing resources and are congruent to their business objectives. Most SMEs have an ingrained sense of responsibility to their employees, customers and community (Fassin, 2008; Jamali et al., 2009; Jenkins, 2009; Murillo & Lozano, 2006). Reliant on local economics and reputation, issues that concern them most are more personal – work-family issues; employee retention; trust; altruism (Jamali et al., 2009). Higher social involvement has been found when normative pressures, such as culture, industry standards and country level of welfare support these behaviours (Lefebvre & Lefebvre, 2012; Spence et al., 2011).

6.3.1 Environmental initiatives

The UK Environment Agency’s 2009 survey of 7,000 respondents identified a steady increase in the adoption of environmental measures since 2005 – the most common measures being recycling and reducing business waste, improving energy efficiency and reducing water usage (Netregs, 2009). Its report noted that such improvements may have been influenced by regulatory changes and awareness campaigns conducted over the two years prior to the survey. While larger organizations (50-249 ftes) were more aware of their environmental impacts, the majority of businesses still considered a formalized environmental management system (EMS) to be of “little or no use” to their organizations (ibid.).

The results of Netregs’ survey are supported by case studies in both developed and developing nations. Many academics and NGOs have concluded that while there is increasing awareness, the majority of SMEs continue to view their environmental impact as negligible or environmental initiatives as too complex and costly to implement (Lewis & Cassells, 2010; NBS, 2012a; Revell et al., 2010). Cost reductions and/or financial benefits were seen as the main driver for environmental initiatives, but as profitability is not the primary motivation of SME owner/managers, such practices frequently address only the “low hanging fruit” such as recycling or waste reduction (Lewis & Cassells, 2010).

When resource efficiency or environmental conditions are perceived as crucial to competitiveness, SMEs are more likely to engage in learning and incorporate systemic practices (Cassells & Lewis, 2011; Millard, 2011). For example, in the rubber and plastics industry, oil derivates are already becoming increasingly costly and scarce, which has incited several SMEs within the industry to utilize renewable (and environmentally-friendly) alternates and re-design processes to incorporate recycled materials and reduce waste (Bos-Brouwers, 2010). Not only has this eco-efficiency provided them with more consistent cost control, to several it has been a source of value creation for their organizations. Similarly, recognizing environmental preservation is required to preserve their livelihoods, SMEs in the Canary Islands’ farming and tourism industries have voluntarily implemented environmental system certification (Medina-Munoz & Medina-Munoz, 2000).
6.3.2 Leadership examples

In addition to the academic research conducted, current articles increasingly feature small companies who have embraced sustainable principles. For example, Johan Reynke Jr. converted his family winery in South Africa (a multi-generation business) from conventional to biodynamic, self-sustaining agriculture. His reason: “I wanted [my two girls] to be able to play in the fields. If I was spraying chemicals, they wouldn’t be able to do that” (Siddiqi, 2012).

Five “green” building companies were featured in the October 2012 edition of *Canadian Contractor*. While each has a unique emphasis on their sustainable principles, all are incorporating green products and methods over and above mere energy efficiency, and agree that “the perception that green is prohibitively expensive is outdated and misleading” (Laudrum, 2012). Most confirmed there is more than adequate demand for their services, and Neil Kerchum of Natural Balance Homes mentioned that consumer demand had provided sufficient pressure to amend provincial building codes. He stated (ibid.): “Everyone recognized that putting a green roof on your house was a great idea but you weren’t able to do it within BC building codes. Now those things have changed.”

Lehigh Technologies, backed by venture capital funding, converts used tires into micronized rubber powders for reuse in other products such as new tires, pallets and waterproofing. Green Roads Recycling partnered with two other paving contractors and the British Columbia government to develop technology to recycle asphalt in place. Both company managers echo the same sentiment: burning, burying or down-cycling finite resources are not solutions… they are problems to be solved (Gunther, 2013; Thompson, 2012). Despite challenges faced in gaining widespread acceptance (Lehigh’s plant currently operates at only half-capacity), they are convinced they are providing answers for the future.

Many SMEs are creating cooperatives on their own within their industries. CROPP, the largest cooperative for organic farmers in the US, boasts over 1,700 members and is projecting growth over 25 percent this year (Guevarra, 2012). Formed in 1988 by seven members during “the worst farm crisis” (on average, 2,000 dairy farmers a week were going out of business at the time), their objective is simple: keep farmers on the land farming (ibid.; GreenBiz, 2012). They provide marketing expertise to their members that any one SME would be unable to maintain, let alone afford. While their advertising budget is small (they were outspent by their competitor 18 to 1), their impact is large, and has enabled them to pay more to their farmers than any other organic co-op in the country (ibid.). In addition to the marketing efforts of the cooperative, they provide support to their members in other ways ([http://www.farmers.coop/about-us/](http://www.farmers.coop/about-us/)):

- Assistance for both process implementation and administrative guidance to obtain organic certification.
- Dedicated staff to help with feed allocation, herd health, quality control and all other aspects of organic livestock production.
- Availability of veterinarians, animal nutritionists and animal care specialists for consultation and workshops.

Sustainable practices are not new to many SMEs. For example, Ecological Fibers, Inc. has been committed to environmentally sound paper coatings since the 1970s (CICA,
The commitment of the company emphasized the importance of the owner/manager’s commitment, who “was more interested in protecting the environment and his employees than saving money” (ibid.). When every other company in the industry was using solvents, Ecological Fibers developed a water-based solution with no harmful components – protecting the environment, the health of its workforce and any potential risk to its end users (ibid.). Over the years, other sustainable practices have been incorporated in both its manufacturing processes and facilities – such as using only FSC certified products, incorporating post-consumer recycled content, converting to cleaner energy and focusing on energy efficiencies.

6.4 Challenges

While there are an increasing number of examples of SMEs implementing sustainable practices, they remain a minority. The reasons for this can be attributed to the challenges discussed in this section.

6.4.1 Concerns about “greenwashing”

A Newsweek magazine’s study to evaluate the “greenest” companies in the US discovered that not only “the worst environmental performers communicate more extensively on their environmental actions” but also “both reputation and membership in the Dow Jones Sustainability Index (DJSI) appear to be related more to what companies say through environmental disclosure than what they do” (Cho, 2012). A cursory review of the sustainability commitments of Accor (a “Conformist” according to the French study referenced earlier) would suggest to the reader that the organization has a robust program (http://www.accor.com/en/sustainable-development/the-planet-21-program.html). The more comprehensive review conducted by the study’s authors, however, led them to conclude the company does nothing more than meet regulations (NBS, 2012b). This supports the concern cited by many SMEs that environmental responsibility and CSR are merely communications and marketing strategies rather than a cultural value within large corporations (Fassin, 2008; Jenkins, 2009; Murillo & Lozano, 2006). Based on these findings, it is understandable SMEs are reticent to associate themselves with similar practices.

6.4.2 Terminology

There continues to be much confusion regarding what constitutes sustainable development. Terminology and business practices not only need to be more clearly defined and standardized, but also adapted to be applicable to the unique organizational structure of SMEs. Case studies and government reports indicate that even the language used to define sustainability does not resonate with SMEs. “The very phrase ‘Corporate Social Responsibility’ implies a certain size of enterprise” (European Commission, 2004). One company presenting at the European Commission’s CSR forum stated “we did not want to be in CSR but now we are happy we did” (European Commission, 2004), underscoring the negative stigma SMEs attach to “big business” philosophy.
6.4.3 Tools

“Overnight, our sector was inundated with initiatives and certifications aimed at facilitating the adoption of sustainable practices. Making an informed choice about the best solution for our company was a laborious process.” ~ Jean Barbeau, Artopex, NBS SME council member

While there is increasingly more exposure about and interest in sustainable development, there is still much debate regarding effective implementation and confusion about the most appropriate tools to incorporate (Murillo & Lozano, 2006). For example, how does an SME choose the eco-label(s) with which to incorporate? Support offered by formal organizations is seen as “patchy, not coming from the right sources, is confusing, overlapping or is not the right kind of support” (Fassin, 2008; Jenkins, 2009). Information overload can cause paralysis, with SMEs choosing to continue “business as usual” rather than trying to navigate the labyrinth of options.

There is also a tendency to “re-size” CSR for SMEs instead of re-examining principles to address the unique characteristics of these organizations (Freisleben, 2011; Jenkins, 2009). For example, although admirable in its effort to engage SMEs, few SMEs implement GRI reporting, and the complexity of ISO certification led a Guardian reporter to suggest the acronym really stands for “irritate small organizations” (Large, 2012). “The present initiatives have not proposed adequate solutions for small businesses yet” (Fassin, 2008).

6.4.4 Lack of demand

Weak industry pressures and governmental policies have signaled to SMEs that environmental performance is not a priority, and many SMEs have stated consumers are unwilling to pay a premium for environmentally responsible products/services (Revell et al., 2010; Spence et al., 2011). As research indicates this is a changing trend, and as more organizations understand how to migrate to sustainable practices without the need to pass cost increases to their customers, this is the least substantiated argument, but does influence owner/manager attitudes.

6.4.5 Owner/manager attitudes

“Without a committed entrepreneur, nothing happens” (Spence et al., 2011). The attitude of the owner/manager is critical in the implementation of sustainable initiatives (Bos-Brouwers, 2010; Cassells & Lewis, 2011; Freisleben, 2011; Jenkins, 2009; Murillo & Lozano, 2006; Revell et al., 2010; Spence et al., 2011; Stubblefield Loucks et al., 2010). Owner/managers may incorporate some initiatives which are personally valuable to them, and forgo others. Millard’s (2011) research suggests that more stable companies are less likely to be receptive to learning. As cited by one green builder “it’s hard to argue with success and for a long time conventional builders were making excellent money until the slowdown. The better and more entrenched of those builders are back to that again” (Laudrum, 2012).

A lack of awareness also influences owner/manager attitudes. With 93 percent of UK SMEs believing they do not engage in any harmful environmental activities (Netregs, 2009), it is understandable they would perceive environmental management to be superfluous.
6.4.6 Resource poverty

Even with the desire of the owner/manager, lack manpower or capital required can prevent the introduction of new initiatives or the ability to obtain third-party certifications (Lewis & Cassells, 2010; Murillo & Lozano, 2006). SMEs have limited financial and human resources. Although the long term benefits of environmental initiatives frequently outweigh costs, many require initial capital expenditures and expertise that may be difficult for SMEs to acquire.

Third-party certifications can be lengthy and costly to obtain and more difficult for SMEs to absorb than their larger counterparts. Formalized reporting procedures are labour intensive and do not suit the organic structure of SMEs (Fassin, 2008). Even the “SME friendly” ISO 14001 reporting standard remains costly and cumbersome. Direct and indirect costs exceed $35,000 before factoring the cost of the responsible manager – leading some SME managers to “simply pay the fines associated with environmental regulations than initiate a costly and seemingly complex management standard” (NBS, 2012a).

6.4.7 Access to capital

Access to capital through traditional investment mechanisms is difficult to obtain and usually incurs higher rates or shorter terms. This has required Adopters to use their (already limited) working capital to fund improvements and restricts the opportunities for Innovators to bring new products/services to market. According to the CEO of one clean-tech Canadian company, the early part of development is the most difficult to fund but is when capital is perhaps the most critical (Marshall, 2012). The complexity and administrative requirements for loans, as well as government and NGO sponsored grants and programs further exacerbate the ability (and discourage the willingness) of all but the larger SMEs to utilize their programs (Fassin, 2008).

7.0 ROADMAP FOR SUCCESS

“The stone age didn’t end because we ran out of stones.” ~ Shiekh Zaki Yamani, Former OPEC Foreign Minister

Sustainable development “will require types of partnership never before witnessed in human history” (Holliday et al., 2002). Until the tipping point is reached where sustainable development is perceived as an opportunity instead of an obligation (commitment vs. compliance), and embraced by all stakeholders – government, large corporations & consumers – SMEs will be slow to embrace its principles. SMEs need to be engaged in the same manner in which they do business: locally, personally, and within networks and associations with whom they trust and regularly interact. Based on the analysis above, governments, NGOs, large corporations and SMEs themselves can implement several initiatives that will greatly contribute to SME commitment.

7.1 Government & NGOs

The realities of SMEs' operations – lack of codification, resource poverty – require a different approach to the development of policies and programs.
7.1.1 Walk the talk

Government, like big business, is frequently slow to adopt new protocols and processes. For example, although LEED (Leadership in Energy and Environmental Design) is being adopted by many governmental bodies, new building processes such as vegetated roofs and water catchment systems have been disallowed by many, the city of Victoria still discharges raw sewage into the ocean and conventional paving remains a requirement for Albertan municipalities even though recycled asphalt is a proven green technology. By fast-tracking approval processes for these technologies, and incorporating them as governmental procurement standards, political bodies encourage and support environmental innovation. “Without political leaders willing to push change via policy, citizens and corporations are left to grapple with whether and when to change their own behaviours and standards” (The Regeneration Roadmap, 2012).

7.1.2 Minimize bureaucracy and scale costs

Requiring SMEs to adopt rigorous reporting procedures or obtain complex certifications may prove not only to be ineffective, but also counterproductive (European Commission, 2004; Large, 2012). It runs the risk that SMEs will focus more on compliance than truly adopting sustainable practices, or worse – turning them off sustainability altogether. Widely accessible and easy to understand standards and guidelines, as well as simplified versions of reporting and labeling programs would be better embraced by the SME community than complex and administratively intensive protocols (European Commission, 2004; WBCSD, 2007).

SMEs already bear a disproportionate burden of regulatory costs (Deveau, 2013) and will be reticent to introduce sustainable initiatives if additional red tape is required. By reducing the cost of regulation and streamlining approval processes for sustainable systems and products – SMEs will be encouraged to channel their capital towards initiatives that provide solutions for the future.

7.1.3 Restructure incentives

Existing policies and market incentives have allowed businesses to externalize social and environmental costs and have supported non-renewable technologies (UNEP, 2011). Many grants and programs specific to SMEs focus on growth, such a funds for equipment purchase, without consideration of the sustainable properties of the initiative. Restructuring these incentives to specifically promote green technologies and allocating funds for grants and loan support for third-party certifications, can provide much-needed capital and mitigate their risk in adopting or creating sustainable processes. It should be noted that the application process for such grants and loans should be structured as per the recommendations above: simplified, easily accessible with a fast-tracked approval process.

Subsidies that promote the depletion of natural capital and use of non-renewable resources discourage the investment in and development of sustainable methods. For example, in 2008 global subsidies for fossil fuel consumption were estimated at US $557 billion (UNEP, 2011). While the Canadian oil and gas industry is controlled by large corporations, the majority of clean tech companies are SMEs. Eliminating these subsidies and establishing a strong clean energy plan would contribute to providing...
some of the certainty needed to attract capital investment and commitment to sustainable technology development (de Sousa, 2013).

### 7.1.4 Build connectivity and capacity

Because SMEs are rooted in their communities and greatly impacted by local conditions, the greatest impact will be achieved shaping sustainable initiatives at a local or regional level (European Commission, 2012a; WBCSD, 2007; WWF, 2005). International agencies speak the same language as international businesses; SMEs identify with smaller, regional entities. National/international governments and NGOs can partner with local representation (municipalities; chambers of commerce) to translate broad initiatives to local scale. This provides the benefit of worldwide expertise to develop a web of local solutions to global issues.

In addition to grants and funds directly available through these institutions, governments can implement policies to facilitate and promote private investment in SME businesses. Providing loan guarantees and tax incentives can mitigate the risk venture capitalists and traditional lending institutions perceive in investing in small and start-up organizations and new technologies. Crowdfund investing is a new structure which is believed to become a significant source of financing for SMEs (Invest Crowdfund Canada, 2012). Its premise is to raise small amounts of capital from a large number of investors, usually through internet portals. It has been legislated in Australia and certain parts of Europe over the last few years with total loans in the hundreds of millions (US) with no successful cases of fraud having been reported to date (ibid.). The US has recently adopted legislation to enable crowdfunding, but it currently remains illegal in Canada. Again, promoting sustainable business models or requiring sustainable practices within this investment mechanism would encourage SMEs to concentrate on these opportunities.

SMEs rely on the expertise of trusted professionals and trade associations for knowledge transfer and networking opportunities. These organizations also serve as liaisons between “big business ideas” and “small business realities”. Both government and NGOs can facilitate connectivity through facilitating the development of sustainable education and programs within these organizations. As the active participation of SMEs in these associations is also necessary, alliances are discussed in greater detail below.

Educational avenues such as universities, business schools and entrepreneurship development centres can be encouraged to add sustainable development to their curriculums and support services. Funds specifically flagged for sustainable entrepreneurship agendas (as opposed to business survival/success education) would be most effective. Research on sustainable technologies can be supported within the academic community and bridges built to push these out to SMEs to bring to the market.

### 7.2 Large Corporations

“We as global companies can provide the catalyst to partner with SMEs to mutual benefit. We can access their local expertise and markets; they can access our technologies and business skills for local momentum.” ~ Michael Pragnell, CEO, Sygenta
7.2.1 Maximize influence

Rather than the typical scorecard used by large corporations, Schatsky (2012) suggests these companies should “invest in suppliers’ success”. His company’s four stage engagement process is shown below. Such a process improves two-way communication, providing vital information to each side to continually improve the sustainability efforts of both. Corporations can reward committed participants by creating a preferred vendor program, sharing cost savings/income generation and/or providing access to company resources for joint venture opportunities (European Commission, 2004).

Figure 7.1 – Stages of supplier sustainability engagement

Source: Green Research, Schatsky (2012)

7.2.2 Share resources and expertise

The resource poverty of SMEs is likely the most common justification why SMEs have been slow (or unable) to transition to sustainable enterprises. In many industries, technology is no longer a barrier to environmental sustainability efforts (Caulfield, 2012), however this technology (or the expertise with which to incorporate it) may still be unavailable to smaller enterprises. Companies that share their expertise with their suppliers can accelerate suppliers’ performance gains and ultimately improve their own (Schatsky, 2012).

The Consortium is an excellent example of large corporations’ commitment to actively supporting sustainable initiatives throughout the supply chain. One thing worth noting is the apparent lack of direct SME representation within the Consortium. While the efforts of the group are brought into the members’ organizations to address with their respective suppliers, direct SME participation may contribute to a deeper understanding of universal issues facing their organizations.

7.2.3 Capitalize on the strengths of SMEs

“The more progressive multinationals understand that to innovate, they often don’t do it very well internally” (Marshall, 2012). One avenue many large corporations pursue is to acquire SMEs who have developed innovations valuable to their operations, however a large percentage of mergers and acquisitions fail to deliver anticipated benefits (Moore & Manring, 2009). An alternate, and perhaps more effective, approach would be to provide SMEs the much-needed capital to develop sustainable products and processes. In this approach win-win scenarios are produced: innovation is expedited through the SME without the pitfalls of assimilation and scalability is available through its larger partner.

A McKinsey & Company article on improving manufacturing operations suggests turning supply chains into supply circles (Mohr, Somers, Swartz & Vanthournout, 2012). As closed loop systems become prevalent, mechanisms to recover materials to reuse in the production process will be necessary. Such services are better suited to SME partners, allowing manufacturers to focus on their core operations. To develop these
processes successfully, corporations need to engage in conversation and develop relationships with suppliers to strengthen capabilities (ibid.)

7.3 SMEs

7.3.1 Collaboration (networks/alliances)

Collaboration amongst SMEs can take two forms: informal networks of like-minded owner/managers; formal alliances to support the objectives of participating firms. Each serves different functions in supporting SMEs in their sustainability objectives.

Informal networks can be both created across industries or sector-specific. Research suggests SME owner/managers prefer to learn from their peers, frequently viewing competitors (other industry members) more as colleagues than enemies (Revell et al., 2010; Spence, 2007). While Hart and Milstein (1999) caution that “collaboration among competitors can serve to perpetuate the current industry structure”, the potential benefit gained from the sharing of sustainable processes and practices overshadows this risk. The most “Committed” SMEs freely share information, are active members of networks and industry trade associations (Millard, 2011; Revell et al., 2010). These interactions also create normative pressure for participating firms, increasing the commitment to sustainable practices of all (Spence et al., 2011).

Alliances within the SME business bloc – either within or across industries – can enable participating companies to promote like-minded agendas, share risks, costs and expertise. This pooling of resources allows SMEs to become more competitive with their larger counterparts. Moore and Manring (2009) compare the effectiveness of networks of SMEs and large corporations to networked PCs and mainframe computers: the former can be much more efficient in the 21st Century marketplace of rapid change by capitalizing on the fluidity and nimbleness of its multiple members.

REAP (Respect for the Earth and All People), a local cross-industry organization in Calgary, Alberta was created to promote sustainability through their “Be [buy] Local” initiative. Its objective, by definition, naturally supports SMEs. REAP organizes networking events to educate the general public on sustainability issues and supports its members’ sustainability efforts through forums geared toward sharing resources and best practices (www.reapcalgary.com).

While most commonly associated with agricultural endeavours, the cooperative business model has proven to be successful in other sectors as well. To draw attention to the contribution cooperatives have on sustainability initiatives –poverty reduction, employment generation and social integration – the United Nations (UN) declared 2012 the International Year of the Cooperative (http://social.un.org/coopsyear/index.html). While having contributed to economic prosperity in both developed and developing countries, they have also “demonstrated they are generally more resilient to economic crises than non-cooperative businesses, [with] cooperative banks are actually protecting against market failure” (Dean, 2012).

An alliance can also serve to promote relationships between SMEs and large corporations. While SMEs are well suited to developing sustainable innovations, they need to expertise to successfully deliver and market their creations. As an example, Sustainable Development Technology Canada (SDTC), an alliance for clean-tech companies, serves both purposes. While it supports small companies in attracting
capital and developing competencies, it also acts as a liaison between clean-tech SMEs and the larger corporations whom they serve. "Conversations between an SME and multinational [can be challenging]. So SDTC operates as a very useful bridge between the two", attests the president and CEO of the organization, Vicky Sharpe (Marshall, 2012).

7.3.2 Knowledge

Gaining a deeper understanding of environmental and social issues is important; understanding how to translate this understanding into viable business practices is critical. Ray Anderson began his company’s transformation after reading Paul Hawken’s *The Ecology of Commerce* and acknowledging he was a “plunderer of the earth”. But from there, he sought help to understand how sustainability could be incorporated into his business by creating an eco “Dream Team” (Anderson, 2009). While SME owner/managers aren’t in a position to invite the great sustainability thinkers into their Board rooms (if they even have one), they can take advantage of their knowledge through books and online sources. Participating in the networks and alliances discussed above can reinforce these concepts and help put them in context to the owner/managers’ personal operations (Stubblefield Loucks et. al., 2010). SME owner/managers who embrace sustainable principles may be reticent to boast about their initiatives to their customers, but are very willing to share when it involves promoting the wider acceptance of these ideals (Jenkins, 2009). Millard (2011) concluded that higher level learning was facilitated within networks of broader groups, and enabled companies to see environmental issues in a broader perspective. One creative Vermont NGO hosts “Energy Parties” in communities so neighbours can share their positive stories (Binsacca, 2012). Markowitz, the manager responsible for these events argues “if you really expect people to change…you have to leverage real people who have done it to inspire and help others do the same” (ibid.). Similar results could be obtained among SMEs through the avenue of trade and business organizations. As more organizations adopt sustainable principles, social pressure within the alliance will encourage others to follow suit.

Avenues must be available to transfer the tacit knowledge of the owner/manager and explicit knowledge gleaned from outside the organization throughout the organization. While the structure of SMEs facilitates this knowledge transfer, the lack of resources – and time constraints on the owner/manager – frequently impedes the process. This is especially salient when new processes are introduced and will require leadership to actions align with intentions.

7.3.3 Leadership

“If you think you’re too small to have an impact, try going to bed with a mosquito.”
~ Anita Roddick, Founder, Body Shop

The primary differentiator between a sustainability leader and laggard is personal commitment. As repeatedly concluded in the case studies and reinforced throughout both business and academic literature, it is leadership that determines results.

Martin Luther King (civil rights activist) didn’t write the ‘I have a plan’ speech – he wrote the ‘I have a dream’ speech; the Wright brothers (aviation pioneers) were first in flight regardless of a lack of funding (TED, 2009)... or assurance of commercial viability. Ray Anderson didn’t let the petroleum-intensive industry his company operated within
prevent him from leading the organization – and setting an example for many others along the way – to reaching its Mission Zero halfway milestone in twelve short years. John Mackey (Whole Foods co-founder) wanted “to have a company that provided good, healthy food and make a living” (Sacks, 2009), while Anita Roddick (Body Shop founder) created a line of natural cosmetics to appeal to customers’ concern for the environment (“Anita”, 2008). These are just a few examples of well-known leaders passionate about their beliefs and willing to act upon them – there are many lesser-known SME leaders around the globe accomplishing similar feats, a few of whom were discussed herein.

When Joel Makower, executive editor of GreenBiz Group Inc., asked the question “Why aren’t there more Ray Andersons?”; the responses he received provided him little satisfaction: greed; lack of ethics; fear of trying new things, to name a few (Makower, 2012). These are traits rarely used to describe SME owner/managers. While a few individuals start businesses with “get rich” aspirations, they are the exception. The majority of small business owners have other motivations - disenchantment with “big business” philosophy; fulfilling an unmet market; improving quality of life; pursuing a passion; making a difference. Many wish to leave a legacy to their children. But what benefit is a passing a business down through the generations if it is not partnered with passing down a healthy, vibrant, naturally beautiful world in which the business can continue to prosper?

The structural advantages of their organizations (see section 5.2.1) make them ideal candidates to affect change – quickly and deeply. To begin this process, SME leaders must critically examine the reason for their organization’s existence. Simon Sinek calls this “starting with the ‘why’” – suggesting that businesses flourish not only because they make great products and/or provide great services, but also because their staff and the market buys into their purpose (TED, 2009). The incorporation of sustainable practices and/or pursuit of sustainable opportunities are natural complements to the SME owner/managers’ motivations described above.

The challenges SMEs face should not be marginalized, however strong leadership with a clear vision can mitigate these issues. “Leadership is about vision, about people buying in, about empowerment and, most of all, about producing useful change. Leadership is not about attributes, it’s about behaviour. And in an ever-faster-moving world, leadership is increasingly needed from more and more people, no matter where they are in a hierarchy” (Kotter, 2013). Leadership sees possibilities rather than limitations; asks “How can we?” instead of explaining “Why we can’t”. And isn’t this entrepreneurship in its truest form?

7.4 Collectively

"...there are a zillion ideas out there from an awful lot of innovative people...[I]t's less about trying to generate a whole new set of ideas and more about bringing all the good ideas together... and giving them the impetus they need to have an impact on a [larger] scale." ~ Sally Ride, Education Activist

While this roadmap has examined how different stakeholders – including SMEs themselves – can contribute to sustainable development within SMEs, almost all solutions involve some degree of collaboration. The most successful programs, policies
and standards have been created with the involvement of multiple stakeholders. Each stakeholder group brings a different strength to the table; each organization within these groups a unique perspective:

- **Governments** – the ability to set policy; create regulation and market instruments to support demand, encourage innovation of and investment in sustainable technologies.

- **NGOs** – objectivity and credibility to develop and administer independent assessments and to support consumer confidence; provide guidance for implementing and maintaining best practices.

- **Large corporations** – global reach; a wealth of resources to affect significant change through scalability.

- **SMEs** – drivers of innovation; a strong moral compass to influence business decisions and a deep understanding of local issues.

- **Consumers** – consumers are market demand; they need to understand how to purchase, use and recycle responsibly; be willing and committed to doing so.

In a post-Rio+20 survey conducted by GlobeScan/SustainAbility (GS/SA) (2012), sustainability experts overwhelmingly viewed collaboration as “one of the few models that could catalyze solutions to the sustainable development challenges that we face at the speed and scale that we need”. Collaboration spreads risk and allows access to expertise and diverse perspectives unavailable within a single organization (GS/SA, 2012; Millard, 2011).

William McDonough points out that the word “competition” is derived from the Latin word “competere” – meaning *strive together*. He used Olympic athletes as an analogy for how businesses could optimally approach sustainable development: “they get fit together...then compete” (TED, 2005). This approach complements GS/SA’s survey findings: collaborate to address systemic issues (disengaged investors & citizens, lack of enabling policy, resource scarcity) but move forward independently to develop sustainable products and services (GS/SA, 2012).

Such collaboration can be compared to the diverse ecosystems on which mankind relies. An ecosystem is comprised of a combination of air, water, soil, plant and animal matter. Each element within the ecosystem has its own properties and must be healthy to perform its intended function; the ecosystem relies on the functions of all to sustain itself. Multiple ecosystems work together to support the environmental health of the planet and degradation of any one reverberates throughout the network.

While all will benefit through collaboration in moving toward a sustainable economy, SMEs will also realize benefits to their individual organizations’ operations:

- As new policies are being developed, participation challenges specific to their businesses (and business size) can be considered.

- In truly partnering with multiple stakeholders, new opportunities for competitive advantage will become available.

- Knowledge transfer is facilitated with minimal cost.
• Leveraging the resources and expertise of others reduces their business risk in developing new business models and/or introducing sustainable products. This also mitigates their primary challenge: resource poverty.

8.0 CONCLUSION

“The question becomes not ‘growth or no growth’ but ‘what do you want to grow’?”
~ William McDonough

There is a compelling argument to engage SMEs in the battle to achieve sustainable development due to SMEs’ aggregate impact, structural advantages and economic function they provide. Most SMEs rely heavily on their local economies, are intimate with their customers and their owner/managers have stronger motivations than profit maximization. While sustainable development is a global issue, it requires local solutions. In addition, historically the majority of disruptive innovations have been introduced by SMEs and new business models will be required to transition to a sustainable economic model. Governments, NGOs and large corporations can facilitate the inclusion of SMEs through implementing policies and programs that take into consideration the resource poverty and lack of codification within these organizations.

There is an equally compelling argument to SMEs for embracing sustainable development. In addition to their local economic reliance, most SMEs have an innate sense of responsibility to their customers and employees. This provides the incentive to participate in the betterment of their communities and, in adopting sustainable principles, they are better positioned satisfy these stakeholders. When SMEs view current business models and their products/services through the sustainability lens, creativity and innovation is nurtured, generating new opportunities for these organizations to thrive. To play their part, SME owner/managers must display leadership – developing their competencies and those of their organizations through awareness, knowledge and collaboration within networks and alliances.

To slay the 21st Century Goliaths, 21st Century tactics are required. While it has been demonstrated the SME Davids are critical warriors, today’s giants cannot be slain be a slingshot alone. No one stakeholder has all the answers; no one business has all the resources. A collaborative approach between all stakeholders will most successfully develop solutions at the speed and scale necessary.

8.1 Further research

Current research has limited its scope to the success of sustainable practices of a specific group (business, municipality), sector (manufacturing; tourism) or company, but for sustainable development to be successful, the participation of multiple stakeholders is required. Examining the success of sustainable practices of a locality to include all stakeholders (cross-industry business; government; society) may underscore the interrelatedness of policy, process and preference and lend new insights.
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