ECOPRENEURSHIP PRACTICES AND INNOVATIVE PERFORMANCES OF SELECTED AGRO-ALLIED BUSINESSES IN NIGERIA

E.A. Dangana (KSU), Itodo, C. I. (UNIBEN), & Ahmed, S. Awak (KIU)

Abstract

The study investigated ecopreneurship practices and their effect on innovative performances of selected agro-allied businesses in Nigeria. The researcher adopted survey design. Data were collected by structured questionnaire in Five-Point Likert Scale format. The source of data was through primary source. The target population of the study comprised of owners/managers of all agro-allied businesses in North-central, Nigeria. Sample size was derived from the population with the application of Taro Yemane's formula for finite population while Bowley's proportional allocation method was adopted to determine the allocation of questionnaire to each organization. A Cronbach Alpha method was used to determine the reliability of. The hypotheses were formulated and tested using Ordinary Least Square Regression and Z-test at .05 level of significance. The findings revealed that ecopreneurial practices have influence on the competitive advantage of agro-allied businesses in north central Nigeria. The study concluded that despite the changes in legislation and regulations to protect the environment, Nigeria and various other countries are still facing many environmental problems of climate change, population growth, overflowing landfills, water scarcity, fuel shortages, and water and air pollution and that the Nigeria government should strengthen external forces, especially with respect to establishing national standards for the quality of environment and the implementation of these regulations as well as tap international standard in order to support the phasing-out of products and processes that are known to contribute to global warming and ozone depletion.

Keywords: ecopreneurship, innovative performance, agro-allied business

Introduction

Environmental degradation is perhaps the most prominent global issue of the 21st century. Academics, policymakers, non-governmental agencies and governments are all concerned about the increasing levels of land degradation, soil erosion, deforestation, and industrial toxins (Volery, 2012). 'The business activities of agro-allied businesses in Nigeria are not without some inhibiting problems emanating from their various environmental factors such as land degradation, soil (erosion, deforestation, industrial toxins, ozone depletion, climate change, nuclear radiation,

| and the destruction of biodiversity. Today, these problems are posing serious challenges to their operational capabilities, survival and "performances. A cursory analysis of some of these problems prompted the crucial need for embarking on this proposed study. The environment factors in the agro-allied industry' in Nigeria tend to be harsh on indigenous firms and their operational activities nowadays. This has brought such consequences as low productivity, increasing risks, low profitability, and tensed competition, heavy investment on equipment, increased operational cost and high rate of business failures with many other threats.

In Nigeria, many local agric-businesses and small and medium scale enterprises have failed to fully imbibe the spirit of ecopreneurship in order to shun out those products that will be environmentally friendly and socially responsible. Only multinational enterprises have put this issue into concern in their want satisfying operations. Most agriculture related organizations complaint on lack of realistic estimates on how to successfully implement eco Market systems particularly in the area of agricultural related business have adversely affected the environment by failing to deal with negative environmental externalities and undervaluing natural resources, leading to their over-exploitation and depletion. Governments have sought to deal with the problem through a mix of command-and-control and market- based instruments, with limited success. One of the most potent alternatives for dealing with such market failures is ecopreneurship, which refers to a process by which entrepreneurs introduce eco-friendly (or relatively eco-friendlier) products and process into the market place. It is in the light of these problems that this work seeks to examine ecopreneurship practices as a determinant of innovative performance of agric-allied businesses in Nigeria.

Conceptual and Theoretical Framework

Aliu (2010) stated that there exist features that are peculiar to innovation, though some products catch on immediately, whereas others take a longer time to gain acceptance. He listed these features as relative advantage which is the degree to which innovation appears superior to existing product, compatibility which is the degree to which the innovation can go with existing product of the organization, complexity which defines the degree to which the innovation is relatively difficult to understand, divisibility which defines the degree to which the innovation can be tried on a limited basis, and communicability which is the degree to which the beneficial results of usage are observable or describable to others. All products and services in the market must have gone through new product development process or program as a result of the fact that organization need to grow their revenue, market share and build their sales level by developing new products and expanding into new markets. In order to do these, organizations then put product innovation as well as process innovation in all they do?

For the purposes of this study, ecopreneurship means entrepreneurial action that contributes to preserving the natural environment (Pastakia, 2008; Schaper, 2002). Ecopreneurs are, therefore, entrepreneurs who found their businesses based on the principle of sustainability (Kirkwood and Walton, 2010). They are a new breed of eco-conscious change agents who are redefining the way business is conducted and are introducing eco-friendly ideas and innovations in the marketplace (Pastakia, 2008). Ecopreneurship is distinguished from social entrepreneurship which focuses on enhancing the social wellbeing of the society (Zahra, *i*Gedajlovic, Neubaum, Shulman, 2009). Ecopreneurship is also different from sustainability entrepreneurship which integrates the three strands of the triple bottom line (economic, social; and environmental). Tilley and Young (2009) argued that sustainability entrepreneurship goes further than "environmental" or "social"

entrepreneurship as it encompasses a more comprehensive range of the triple bottom line.

Most researchers agreed that there are two categories of environmental entrepreneurs -those who have a profit or economic orientation and those who have the sustainability orientation and want to help change or improve the environment (Taylor ecA alley. 2003: Isaak, 2002; Koester, 2011). Schnick, Marxen&Freiman, (2002) refer to the categories as the two ends of the ecological orientation continuum. At one end are ecopreneurs who constantly adopt environmentally-friendly practices and at the other end are entrepreneurs who give no ecological consideration to the businesses at all. In other words, environmental entrepreneurs are either starting green businesses or making their businesses green (OECD, 2011). Environmental Conscious Develops innovations that either reduces resource and impact or improve cost efficiencies. Green Entrepreneurs aware of environmental issues and has their businesses in the environmental marketplace.

Innovative opportunist is a financially oriented entrepreneur who spots a green niche or business opportunity that happens to be green Ad hoc or accidental entrepreneur Spots opportunities that are green, rather than seek out a niche in green spaces Visionary Entrepreneur Built their businesses based on sustainability principles. Advocates nature-oriented enterprises e.g old life habitat preservation, eco- tourism etc; low desire to change the financial drive i.e. Opportunist involved in environmental technology to help businesses and communities reduce environmental load on water, air and soil. They have a low desire to change the world and high financial drive. Green Business: Entrepreneur did not start green business from scratch, but later discovered the advantages of greening their existing businesses. Green-Green Business: Entrepreneurs designed business to be green in its products and processes from Scratch

One criticism of the ecopreneurship typologies is that they do not account for the changes that might occur among entrepreneurs, e.g., could ecopreneurs move between different typologies, and which drivers mainly guide their behavior (Bruin& Lewis, 2005 in Gibbs, 2009). In response, Isaak (2008) argued that the various types of ecopreneurs are not pure forms but represent reference points for broad changes within businesses. The process theory of entrepreneurship supports Isaak's viewpoint, which emphasizes the fact that "you can't pin people down to one type, because entrepreneurs are always in the process of becoming something.

Ecopreneurship is also important because eco-innovations, according to Klimova and Zlek, j2011) will be the future competitive advantage of companies and countries. They argued that if companies and countries want to be successful in the international market, they cannot rely on having low cost as their competitive advantage; but rather on new and innovative environmental technologies, services and processes which will be the more important sources of competitive advantage. The long-term sustainability of our economic system does not depend only on quantitative growth, but also on the ecological aspects of the growth and enable development problems.

First, our finite resources, for example fish, minerals or gas are limited in their supply. Once consumed, many of them cannot be recreated and we will be left with diminishing or no natural resources, if we do not sustain them. Also, because of economic activity and consumption, most of our resources become waste. As a result, we have the problem of pollution, which seriously affects humans and the ecosystem and could lead to greenhouse gas accumulation and potential climate change (Volery, 2012). To sustain them, ecopreneurship is important to constantly look for alternatives, e.g. recycling or new sources of energy, such as wind, water, and solar. (Arber &Speich, 1992; Barnes, 1994).

Second, the global population growth is also influencing ecopreneurship. The world population is expected to increase by 50% by 2050 and with it will come an increase in consumption (World Business Council for Sustainable Development, 2002). Although part of this consumption is important for relieving poverty in many emerging countries, most it will be done by affluent consumers and can have a negative impact on the ecosystems (Volery, 2012). Ecopreneurship is therefore important to find the new technologies to protect the environment, and to ensure that there are enough resources to fill the needs of both the current population and future generations (Volery, 2012).

third, biodiversity loss also justifies entrepreneurial action to solve environmental problems. According to Volery*(2012),* "the rates of takeover of wild life habitat, and of species extinction are the fastest they have ever been in human history and are accelerating."

Goodland (2001) also reported that tie tropical forest, me world's richest species habitat, has already been 55% destroyed and the need for environmental sustainability, there is need for a new ktr.d c: entrepreneur who will incorporate environmental concerns into the consideration of their bottom- ne Yolery. 2012).

The relationship between business and the environment is not new. There was an upsurge of interests in environmental degradation during the 1960s, in Western Europe and North America because of the incidents of heavy smog in London caused by business activities. At that time, people became more aware of the negative environmental consequences of business activities. Business response to the environmental concerns was antagonistic, with little care about the cost of business activities to the environment. They saw the environmental concerns as a nuisance to their businesses and opposed any effort to control performance (Tillery, 1999).

Ecopreneurship literature is still comparatively young (Linnanen, 2002; Pastakia, 1998; Schaltegger, 2002). The growth so far has heen supported by various consumer groups as well as the strong demand for green products, especially in the developed countries (Schaper, 2002). Ecopreneurship has thus become a market-based approach for identifying; opportunities for improving the quality of life through sound environmental practices.

Given the growth of ecopreneurship, the question now is, how do we harness the innovative potential of ecopreneurs to exploit the opportunities within environmental degradation? In other words, how do we foster the development of new entrepreneurial firms that will create the innovations necessary to solve environmental problems? According to Shane and Venkataraman (2000), "entrepreneurial action is created at the nexus of two phenomena: the presence of enterprising individuals and the presence of lucrative opportunities". Ecopreneurs are the enterprising individuals. Some are motivated by profit and; start businesses that happen to be green, while others have a sustainability orientation and are motivated by environmental needs. Their businesses are founded on the principle of sustainability and they seek to combine environmental awareness with conventional entrepreneurship (Schnick, et al. 2002). Lucrative entrepreneurial opportunities exist within the environmental degradation e.g. the problems of climate change, pollution, energy, etc.

According to Shane (2003), the nexus is the place where the entrepreneur interacts with the environment, e.g. environmental degradation, to identify opportunities. How they interact and whether opportunity recognition and exploitation take place depends on the resources the entrepreneur has at his or her disposal and the resources available in the environment. Given that the entrepreneur-environment interaction is so critical to creating entrepreneurial action necessary for developing environmental innovations, what should be done to stimulate

ecopreneurship, provide high quality and reliable information to ecopreneurs; facilitate collaboration and networking among ecopreneurs and innovation intermediaries; refocus the publicly funded environmental technologies (Research&Development); Increase the speed of commercialization of environmental technologies?

Availability of funding and other incentives are critical for environment; establish clear policy on government procurement of green products; *Provide incentives;* Promote flexible labor market policies and support worker skills training programs (OECD, 2011) and assessing Ecopreneurship in the Developing Economy:

Schumpeterian Theory provides the theoretical basis for environmental entrepreneurship. According to Schumpter (1942), entrepreneurs are the innovators and as society's needs evolve the entrepreneur provides the innovation or "creative destruction" that gives society a new way of addressing problems. He argued that "environmental problems are inherently calling for ' innovation, as most of them are caused by the outdated applications of old, polluting and inefficient technology". Given that the current solutions to our environmental problems are ; inadequate for sustainability, there is need for entrepreneurial action to develop something new, whether it is a production method, technological development, product/service distribution system, or even a new organizational form

Empirical review

According to Cohen and Winn (2007), in the study 'Ecopreneurship and Performance on agrobusiness', the study which survey 332 sample of respondents in Holland through an ministered questionnaire and interview schedules found out that ecopreneurs have the potential to resolve our environmental problems and to gradually improve the earth's |system. The paper

began by reviewing the major environmental challenges facing the's ecosystems and the need for entrepreneurial action to deal with the challenges. It recommends that the only way out of poor business performance is by considering eco-novation, eco-commitment. McEwen (2013), conducted a study on ''Ecopreneurship as a solution to environmental problems: Implications for college level entrepreneurship education' and explain that given : the present environmental problems facing the world, it is clear that past strategies used to f address these challenges have failed to prevent environmental degradation. He further explained that therefore time to pay attention to the role that entrepreneurs can play in solving ; our environmental problems. The paper which uses exploratory design focuses on how to i harness the innovative potential of environmentally conscious entrepreneurs, called eneurs, to encourage more startups that would create the environmental technologies (needed to address our environmental problems. It recommends that the role of : entrepreneurship education in promoting ecopreneurial behavior and presented an outline for possible ecopreneurship course that could be integrated into college-level entrepreneurship education.

(2014), studied the Impact of Innovation and Managing Technology based business Entrepreneurs and explained that both technological innovation and entrepreneurship ices mainly two areas: the organization, development, and commercialization of logy-based innovation in existing firms; and the formation, development, and growth technology-based new enterprises. Technology and innovation businesses also cover a fc range of industries. The paper is a qualitative paper and its study is based on the diary data collected from different sources and it highlights problems faced by the entrepreneurs globally regarding businesses to stimulate technological innovation and heighten the role of small business in meeting research and development needs and increase participation in this role. The study recommends that businesses

may focus on levities such as researching and developing new products or providing innovative solutions natural ingredients with green technology, produce approved chemical which do not harm or pollute the environment, caused no environmental hazards and do not posed dangers to the environment. The study shows that green marketing is crucial in preventing eco-harm H & D environmental degradation. The study made some applicable recommendations for business enterprises to produce ecological products which must not only pollute the environment but should protect it, sustain the environment and even liquidate existing environmental damages.

4. Methodology: Sample size determination

Model specification, the general formula for the Regression Analysis is:

$Y= a + \beta X + e$.

where;

Y = Dependent Variable

X= Independent Variable

a = constant

β = coefficient of X

e = error margin

The model to be estimated is functionally stated as

CMA = f(EPR)

This can be stated in econometric form as

CMA=a+BEPR+e

Where,

CMA= competitive advantage,

EPR=ecopreneurial practice of the agroallied small businesses

This is the interaction effect of ecopreneurial practice on the competitive advantage of agroallied small businesses in Nigeria

Results and discussions

Model summary

Model	R	R square	Adjusted R square	Standard error of estimate
1	0.918a	0.891	0.823	30.46883

A Predictors constant),ecopreneurial practices

ANOVAb

Model	Sum of square	DF	Mean square	F	Sig
Regression	20670.151	1	20670.151	21.265	0.002a
Residual	2785.049	339	928.350		
Total	24655.200	340			

a Predictors constant), Ecopreneurial practices

b Dependent variable: ompetitive advantage

Table: Coefficients

	Unstandardised coefficient		Standardised coefficient		
model	B	STD Error	Beta	T	Sig
Constant	116.031	47.649		2.215	0.00.00803
EP	1.964	0.416	0.939	4.619	

Dependent variable: Competitive Advantage

The F value at 21.265 is higher than the critical f value of 1.698, leading to acceptance of alternatve hypothesis that 'Ecopreneurial practices would have positive influence on the competitive advantage of agro-allied businesses in Nigeria' .This value is significant at 0.002 less than 0.05. The R square at 0.891 indicates that ecopreneurial practices accounted for 89.1% increase in the competitive advantages. In line with the data analysis, the following are the major summary of findings: Ecopreneurial practices have influence on the competitive advantage of agro-allied businesses in north central Nigeria

The finding from the tested hypothesis revealed that ecopreneurial practices influence the competitive advantage of agro-allied businesses in Nigeria. the implication of this is that ecopreneurial activities and practices have a positive influence on competitive advantage of agro-allied businesses in Nigeria. This is in line with the study of Oskamp (2000), and Jones and Misky(2007, supported by Hamas (2010)which showed that if a firm partake in ecopractices it has a full control of its costs handling and sales revenue which have competitive edge in a keen environment. The findings also gave nod to the work of hunold, Roller and Stahl(2012)wro explained the longrun business effectiveness of ecopreneurial activities.

Conversely, gbadeyan and Omolekan(2015)queried the impact of ecopreneurial practices on competitive advantage of a Firm performance and explained that it is not a feasible strategy

useful in a volatile competitive environment. The result also negates the outcome of the finding of McEwen(2013)who elucidated on the pitfalls of ecopractices on business arguing that many people never attached relevance to ecopreneurship.

Conclusion and recommendation

The focus of this study was to harness the effect of ecoprenuership practices on innovative performance of the selected agro-allied firms in Nigeria mainly to take the advantage of the entrepreneurial opportunities within the environmental degradation and to explain the role of eco -practices in environmental sustainability. Based on our review of the literature, most researchers agree that environmental problems do present entrepreneurial opportunities. Despite the changes in legislation and regulations to protect the environment, Nigeria and various other countries are still facing many environmental problems of climate change, population growth, overflowing landfills, water scarcity, fuel shortages, and water and air pollution. If we are to solve these problems, ecopreneurship is a major part of the answer.

Theoretically, the existence of any one or more of the activities described in this work can trigger change and promote ecopreneurship. However, whether such change can be sustained over longer periods of time will depend on the support gained from key forces most especially the government and society at large. In the case of Nigeria, we find five activities strong enough to bring about the independent and dependable and their proxies, the theoretical framework and eventually the empirical review of relevant journals, all in chapter two, while chapter three, discussed the process of collecting, analyzing and interpreting observation under study. It also explained the various methods of data collection that the used and as well explain the sampling procedures that was employed. Validity and reliability of the research instruments was also

captured in this chapter. Chapter four, focused on presentation, analysis and test of validity underlying relevancy substituting among a set of variables using tables, simple averages and statistical method highlighted in chapter three. The analysis is basic on the responses obtained from administered questionnaire distributed to selected agro-allied firms in Northern Nigeria. Tables are used to present the variable followed by brief analysis of the results and linear regression and z-test were employed in testing all the hypotheses change—namely, the green products, creativity and environmental innovation, ecopreneurial practices and to a lesser extent, the ecosystem 'control and environmental sustainability. However, as of now, the competitive and economic advantages of going green are not very strong and hence it may take some time for geological values to express themselves in the agricultural business arena. At the grass-roots level, where economic stakes are not very high, expression of such values seem to be less inhibited - a situation that also applies to the upper end of agricultural sector and industry, where large industrial houses and multinationals have to meet international standards to remain competitive. For the bulk of Nigeria’s small and medium-sized agro-allied firms, however, it is business as usual.

After a critical consideration of the finding and discussions so far, the following

Recommendations were offered: The Nigeria government could do much to strengthen external forces, especially with respect to establishing national standards for the quality of environment and the implementation of these regulations. It could also take more proactive measures through the state-level cleaner production centres. This will encourage the ecopreneurs to develop more environmentally friendly goods and as well enhance their level of involvement in green product.

Ecopreneurs, government and society at large could tap into international standard in order to

support the phasing-out of products and processes that are known to contribute to global warming and ozone depletion. They could also strengthen the consumer movement in the country. Since environmental sustainability promote business growth, it is recommended that agro-allied business needs to build more on their sustainability concerns as it affect agricultural goods

During the next decade, the agro allied business in Nigeria will most certainly be marked by further disaggregation and reaggregation due to the described shifts in the sector's value chain. In order to keep their status quo, agro-allied business must consider continued invention, innovation and creativity as the most viable method to get instant access to industry- or operations-specific knowledge and keep abreast with the pace of technological change. Non-innovative in nature may provide benefits to such firms only in the short term. Therefore, in the long-term an articulated developed ecological friendly innovation will control rival and give firms a sustainable and non-imitable competitive advantage. Ecopractices must not just be a back runner in agro-allied organizations anymore. It is the critical aspect of organizational turnaround and must be given its rightful place during policy making and through this process

thatecopreneurs can enjoy the long-run benefits without undue pressures and inconsistencies in Nigerian. Agro firms must therefore engage their managerial team, through training and development to know, understand, and apply, the principles of ecopreneurship practices and ecological management in their daily decision making, especially as it concerns agro-allied operations.

In the final analysis, it is the education of producers, consumers and regulators that will pave the way for a major transformation of agricultural industry. This will stimulate the ecopreneurs to

develop more ecoprenerial practices that would not only give them competitive advantage but will also go a long way in developing the sector.

References

Ali, A. krapfel .R and Labahn , D. (1995). Product innovativeness and entry strategy: impact on cycle time and break –even time. *Journal of product innovation management*

Aliu, T.L (2010). The impact of Nigerian business environment on the survival of small scale: ceramic industries: case study, south-western Nigeria. J*ournal of Asian and African studies administration* 43(6), 663-679.

Barnes, P. (1994). A new approach to protecting the environment. The European Unions environmental and audit regulation. *Environmental management and health, 5(3), 8-12*

Cohen, B. and Winn, M, I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. Journal of business venturing, 22(1), 29-49.

Cohen, Michael D Roger Burkhart, Giovanni Dosi, Massimo Egidi, Luigi Marengo, Massimo W and Sidney Winter (1996), Routines and other recurring action pattens of organization: contemporary research issues, industrial and corporate change, 5)3), 653.

Cohen, Wesley M and Levinthal D. (1990) Absorptive capacity: a new perspective on learning and innovation, administrative science quarterly, 35(1), 128-152.

Gibbs, D.(2009). Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy. Greener management international. 55, 63-78

Goodland R. (1991) Tropical deforestration: solutions, thics and religion. Environment department working paper No. 43, Washington DC The world bank.

Hamsa, S. (2014) Impact of innovation and managing technology based business for

entrepreneurs. *Issues in general managemenet.*12(2), 51-55.

Heunks, I. (1998) Creativity, innovation and firms success. International journal of physical distribution and logistics management. 30(10), 869-886.

Isaak, R.(2008) green logic: ecopreneurship theory and ethics. Sheffield UK:Grwwnleaf publishing West Hartford, CT Kumarian press.

Isaak, R.(2002). The making of the ecopreneur. Green management international. 38(3), 81-91.

Jones O. and Miskel, U. (2007) Ecopractices among firms in a keen industry. International journal of business 9(4), 111-123.

Kirkwood, J, and Walton S (2010). What motivates ecopreneurs to start business? International journal of entrepreneurial behavior and research, 16(3), 204-228

Klimova, V.and Zltek. V. (2011) Eco innovations as a result of companies innovations activities UK: Westline Prints.

Koester, E.(2011) Green entrepreneur handbook. Boca Raton, florida: CRC Press, taylor and francis group.

Kotler, K . (2006) Marketing management (12th ed) India: prentics hall inc.

Kotler, P (1986) Magamarketing, havard business review 2, 32-39

Kotler. P. (1998) Marketing management: analysis planning , implementation and control,

Englewood cliffs NJ: practice hall.

Lennox, M, and York J. G. (2011) environmental entrepreneurship. In A. J. Hoffman and T.

Bansal (EDS), Oxford handbook of business and the environment, Oxford, UK: Oxford University Press.

McEwen T. (2013) Ecopreneurship solution to environmental problems: impliocations for college level entrepreneurship education. International journal of academic research in business and social science .3(5), 264-288

OECD (2008). Eco-innovation policies in the united states, environmental directorate,

OECD. Retrieved from http://www.oecd.org/unitedstates/44247543.pdf

OECD (2009). Policy briefs: sustainable manufacturing and eco-innovation: towards a green economy. Retrieved from http://www.oecd.org/sti/42944011.pdf.

Schaltegger, S and A. Sturm (1990) environmental rationality, die unternehmung 4, 273-290

Schaltegger, S and H Petersen (2011) ecopreneurship: concept and typology. Luneburg, germany: centre for sustainablilty management: Lucerne, Switzerland: rio management forum.

Schaltegger S and R Burritt (2000) contemporary environmental accounting: issues, concepts and practice. Sheffield, UK: Greenleaf publishing.

Schaltegger, S and T Dyllick (2002) Nachhaltig managen mit der balanced scorecard (management of sustainability with the balanced scorecard) (Wiesbaden, germany: gabler)

Schaper, M. (2012). The essence of ecopreneurship. Greener management international 45 (summer) 49-60

Schaper, M(2004) the essence of ecopreneurship. Greener management international, 38(20) 26-

30.

Schnick H, Marxen S and Freiman, J. (2002) sustainability issues for startup entrepreneurs. Greener management international 38(2) 59-70.

Schumpeter , J, (1942) *capitalism, socialism and democracy. New York: Harper*

Shane, S and Venkataraman S (2000). The promise of entrepreneurship as a field of research academy of management review, 25(1), 217-226.

Taylor D and Walley. E. E. (2003) The green entrepreneur : visionary, maverick or opportunist? Manchester Metropolitan university business school working paper series.

Tillery, F, and young F(2009) sustainability entrepreneurs: can they be the true wealth generators of the future. Greener mangement international. 55, 79-92

Tillery, F (1999). The gap between the environmental attitude and the behavior of small firms. Business strategy and the environment. 8(4), 238-248.

Volery, T (2012) Ecopreneurship: rationale, current issues and future challenges. In U.

Figlisteraller, H.J Pietner T. Vollery, W. Weber (eds). Radical change in the world: will SMEs soar or crash? ST. Gallen KMU Verlag.

Zahra S. A Gedajlovic, E, Neubaum D.O and Shulman J.M (2009). A typology of social entrepreneurs: motives and search processes and ethical challenges, journal of business venturing, 24(5), 519-532.