



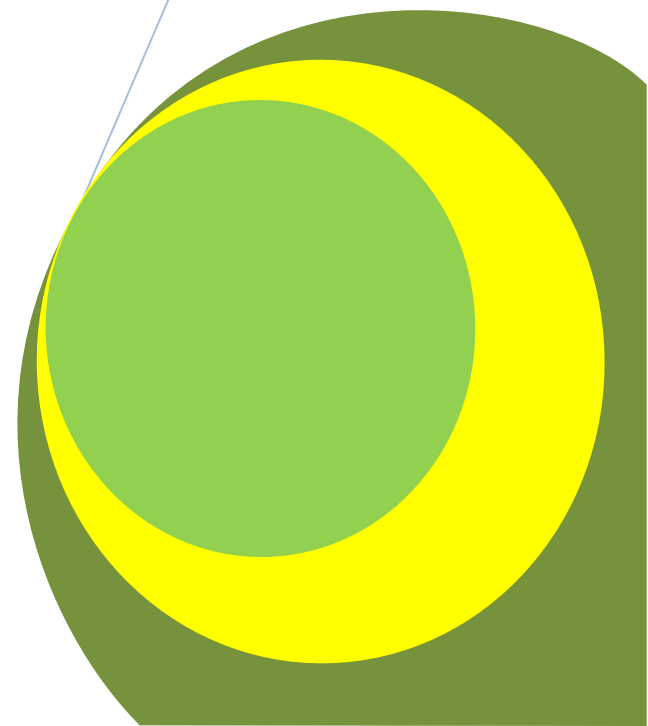
Greener Journal of Business and Management Studies

ISSN: 2276-7827 Impact Factor 2012 (UJRI): 0.6670 ICV 2012: 6.03

Green Banking Strategies: Sustainability through Corporate Entrepreneurship

By

**Dr. Broto Rauth Bhardwaj
Aarushi Malhotra**



Research Article

Green Banking Strategies: Sustainability through Corporate Entrepreneurship

***Dr. Broto Rauth Bhardwaj and Aarushi Malhotra**

Bharati Vidyapeeth University, Institute of Management and Research, New Delhi, India

*Corresponding Author's Email: brotorauth@yahoo.com

ABSTRACT

"Green Banking", an effort by the banks to make the industries grow green and in the process restores the natural environment. This concept of "Green Banking" will be mutually beneficial to the banks, industries and the economy. Not only will "Green Banking" ensure the greening of the industries but it will also facilitate in improving the asset quality of the banks in future. The paper aims to study the various models of green banking practices adopted by Indian companies to grow. The research methodology is based on case study method. The findings of the research study show that the banks which are adopting the green banking practices influence the performance of the organization. The managerial implications and discussions are also given.

Key words: corporate entrepreneurship, green banking strategies, sustainability.

INTRODUCTION

Moving to a prosperous low carbon economy can drive innovation, increase productivity and generate new well paid jobs. Climate change is a significant issue for India. But while the effects of climate change are increasingly a risk to the health, economy and the environment of the country, economists are also recognizing that there are financial rewards from controlling climate change and developing a low carbon economy. Banks can provide important leadership for the required economic transformation that will provide new opportunities for financing and investment policies as well as portfolio management for the creation of a strong and successful low carbon economy. Economists are clear that substantial funding from the private sector is needed to achieve the level of investment required to control the effects of climate change. The World Bank estimates that the cost of mitigation in developing countries alone ranges from US\$140 billion to US\$175 billion annually until 2030.

Until a few years ago, most traditional banks did not practice green banking or actively seek investment opportunities in environmentally-friendly sectors or businesses. Only recently have these strategies become more prevalent, not only among smaller alternative and cooperative banks but also among diversified financial service providers, asset management firms and insurance companies. Although these companies may differ with regard to their stated motivations for increasing green products and services (e.g. to enhance long-term growth prospects, or sustainability principles on which a firm is based), the growth, variation and innovation behind such developments indicate that we are in the midst of a promising drive towards integrating green financial products into mainstream banking. Further, those industries which have already become green and those, which are making serious attempts to grow green, should be accorded priority to lending by the banks. This method of finance can be called

Corporate Entrepreneurship as a Sustainable Strategy

Corporate entrepreneurship entails both risk and high levels of uncertainty. However, established organizations may work as efficient engines that function best through cautious and routine progress. On the contrary, this routine progress can hinder attempts to infuse innovation within the mature businesses. Therefore, conscious effort is necessary to build a corporation's capability for sustainable entrepreneurship. While very few companies have been able to build and maintain a sustainable capability for entrepreneurship, the majority of firms possess a resistance to such initiatives. Moreover, shift in the internal and external environment may influence the commitment to sustainable entrepreneurship and thus lead to cyclical support between high or moderate degree for the activity (Kelley, 2011).

The research further shows that the cycling pattern prevents the firm from developing enduring capabilities. However, the author suggests an "Evolve and Connect model" that companies can develop strategic objectives to guide entrepreneurs by providing a management structure for supporting their work, and processes that facilitate assessment and decision making during changing paradigm. Similarly, Ford et al. (2010) studied one mode of corporate entrepreneurship, namely corporate incubation (study conducted in the Technology Incubator at Philips) and found that firms have turned towards corporate entrepreneurship as a tool of exploiting knowledge accumulated within the organization and exploring external markets. The study narrates the learnings from the Philips incubator and suggests various ways in which the organization can identify alternative selection environment that can simulate the venture capitalist model for entrepreneurial innovation. Adopting the approach of corporate entrepreneurship as methodology for generating growth through new product, process, market, or strategy innovation, Miles et al. (2008) suggested ways in which sustainability can be embedded into a corporate entrepreneurship framework which may result in the discovery or creation, assessment, and exploitation of entrepreneurial opportunities. This may lead to an enhanced reputation, and a competitive advantage.

Corporate entrepreneurship refers to the process of creating new business within established firms to improve organizational profitability and enhance a firm's competitive position or the strategic renewal of existing business (Zahra, 1991). Corporate entrepreneurship is a process of organizational renewal (Sathe, 1989) that has two distinct but related dimensions: innovation and venturing, and strategic stress creating new business through market developments by undertaking product, process, technological and administrative innovations. The second dimension of corporate entrepreneurship embodies renewal activities that enhance a firm's ability to compete and take risks (Miller, 1983). According to Kuratko et al. (1990), the need to pursue corporate entrepreneurship has arisen from a variety of pressing problems including:

- (1) required changes, innovations, and improvements in the marketplace to avoid stagnation and decline (Miller and Friesen, 1982);
- (2) perceived weakness in the traditional methods of corporate management; and
- (3) the turnover of innovative-minded employees who are disenchanted with bureaucratic organizations.

Corporate entrepreneurship helps to respond to these new competitive forces, either through innovations or imitating competitors' practices (Dess and Beard, 1984; Miller, 1987; Russel, 1995; Zahra, 1991). According to Damanpour (1991), Innovation would include "... the generation, development, and implementation of new ideas or behaviors. An innovation can be a new product or service, an administrative system, or a new plan or program pertaining to organizational members."

Green Banking: An Innovative Strategy for Sustainable Development

Climate change is the most complicated issue the world is facing. Across the globe there have been continuous endeavors to measure and mitigate the risk of climate change caused by human activity. Many countries the world over have made commitments necessary to mitigate climate change. India has committed to cut its domestic carbon intensity by 20-25 percent from 2005 levels, by the year 2010. As socially responsible corporate citizens (SRCC), Indian banks have a major role and responsibility in supplementing government efforts towards substantial reduction in carbon emission. Although banks are considered environment friendly and do not impact the environment greatly through their own 'internal' operations, the 'external' impact on the environment through their customers activities is substantial. The banking sector is one of the major sources of financing industrial projects such as steel, paper, cement, chemicals, fertilizers, power, textiles, etc., which cause maximum carbon emission. Therefore, the banking sector can play an intermediary role between economic development and environmental protection, for promoting environmentally sustainable and socially responsible investment. 'Green banking' refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance green technology and pollution reducing projects. Although, banking is never considered a polluting industry, the present scale of banking operations have considerably increased the carbon footprint of banks due to their massive use of energy (e.g., lightning, air conditioning, electronic/electrical equipments, IT, etc), high paper wastage, lack of green buildings, etc. Therefore, banks should adopt technology, process and products which result in substantial reduction of their carbon footprint as well as develop a sustainable business.

Innovation and Sustainable Development

Companies have become increasingly aware of the social and environmental pressures facing business. Many management scholars and consultants have argued that these new demands offer terrific opportunities for

progressive organizations, and innovation is one of the primary means by which companies can achieve sustainable growth. Managers have had considerable difficulty dealing with sustainable development pressures. In particular, their innovation strategies are often inadequate to accommodate the highly complex and uncertain nature of these new demands. A strategy that integrates the goals of innovation and sustainable development is needed. In contrast to conventional, market-driven innovation, sustainable development innovation (SDI) must incorporate the added constraints of social and environmental pressures as well as consider future generations. Achieving Organizational goals requires investments in innovation, and that has been an alluring argument for improving both environmental and economic performance — the so-called win-win situation. Some have advocated radical new technologies, products, processes, business models and environmental innovations to change the present unsustainable industrial patterns. According to that argument, competency-enhancing incremental innovation is insufficient to meet sustainable development pressures. Instead, competency-destroying radical innovation is needed, and it will likely create new capabilities that will ultimately challenge current business practices.

The need of the paper is to introduce new innovative financial strategy “green banking” in banking sector. Banking is often associated with formal and rigid approaches and the sector generally perceives itself as environmentally neutral. There has not been much initiative in this regard by the banks and other financial institutions in India though they play an active role in India’s emerging economy. Therefore, this paper suggests possible policy measures and initiative to promote green banking in India. Banks may not be the polluters themselves but they will probably have a banking relationship with some companies/investment projects that are polluters or could be in future. The contribution of the paper is to develop the competency-destroying environmental innovations to change the present unsustainable patterns and leads to sustainable development as previous research innovations is insufficient to meet sustainable development pressures. This paper explains the effect of three organizational factors of corporate entrepreneurship i.e. rewards, top management support and risk-taking and tolerance for failure on the adoption of green banking practices. Adoption of green banking practices is itself a bigger challenge for the organizations as it is a new concept on which the paper throws the light. The paper explains about different types of risks faced by banks due to environmental problems and also suggests practice measures to mitigate such risks.

Caselets on Green banking strategies

Various banks in India are undertaking the corporate entrepreneurship approach to innovate and adopt green banking strategies for sustainable development of the banks. For example, ICICI Bank India recognizes that care of the environment and the larger society in which it operates is essential both from business continuity as well as a corporate citizenship perspective. IndusInd Bank, India inaugurated Mumbai’s first solar-powered ATM as part of its Green Office Project campaign ‘Hum aur Hariyali’. It also unveiled a ‘Green Office Manual _ A Guide to Sustainable Practices’, prepared in association with the Centre for Environmental Research and Education (CERE). IndusInd’s new Solar ATM has replaced the use of conventional energy for eight hours per day with eco-friendly and renewable solar energy. The energy saved will be 1980 kW hrs every year and will be accompanied by a simultaneous reduction in CO₂ emissions by 1942 kgs. The uniqueness of this solar ATM is the ability to store and transmit power on demand (in case of power failure) or need (time basis). In terms of costs, the savings will be substantial, approximately Rs. 20,000 per year in case of a commercial user with grid power supply. And in areas with erratic power supply the solar will replace diesel generators and translate into savings as high as Rs. 40,200 every year. Moreover, several banks are putting in place policies to reduce the footprint of their electrical energy consumption by implementing energy efficiency measures such as smart lighting and replacement of inefficient appliances. Additionally, they have expressed interest in procuring energy from cleaner sources if available. The majority of banks have specific policies in place to consider the environmental issues associated with energy use, purchasing, transport, recycling and waste minimization.

State Bank of India's Green Banking Policy

The State Bank of India (SBI), as part of its Green Banking Policy, will set up windmills to generate 15 MW of power in Tamil Nadu, Maharashtra and Gujarat for its own consumption. The SBI chairman inaugurated the windmills set up at Panapatti village in Tamil Nadu’s Coimbatore district on April 23, 2010. The mill in Tamil Nadu will generate 4.5 MW of power, while the Maharashtra mill will have a capacity of 9 MW and Gujarat 1.5 MW. SBI was the first Bank in the country to think of generating green power as a direct substitute to polluting thermal power and implement the renewable energy project for captive use.

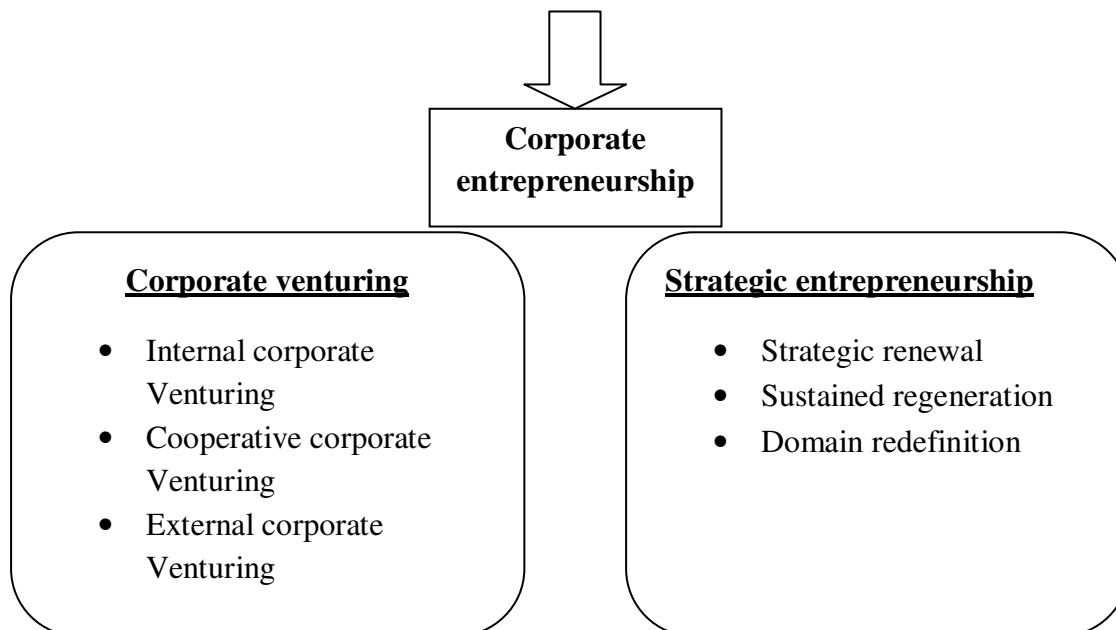
Citi's Equator Principles

The Equator Principles serve as a backbone for Citi's broader Environmental and Social Risk Management (ESRM) Policy, which extends beyond project finance. Citi was a leader in the development of the Equator Principles in 2003. Citi's ESRM policy was developed in 2003 and has been regularly updated to reflect implementation experience.

Literature Review

The concept of corporate entrepreneurship has evolved over the last four decades and the definitions have varied considerably over time. The early research in the 1970's focused on venture teams and how entrepreneurship inside existing organizations could be developed (Hill and Hlavacek, 1972; Peterson and Berger, 1972; Hanan, 1976). In the 1980's, researchers conceptualized Corporate entrepreneurship as embodying entrepreneurial behavior requiring organizational sanctions and resource commitments for the purpose of developing different types of value-creating innovations (Alterwitz, 1988; Burgelman, 1984; Pinchott, 1985; Kanter, 1985; Schollhammer, 1982). Corporate entrepreneurship was defined simply as a process of organizational renewal (Sathe, 1989). In the 1990s, researchers focused on corporate entrepreneurship as re-energizing and enhancing the firm's ability to develop the skills through which innovations can be created (Jennings and Young, 1990; Merrifield, 1993; Zahra, 1991; Borchetal, 1999). Guth and Ginsbey (1990) stressed that corporate entrepreneurship encompassed two major types of phenomena: New venture creation with existing organizations and the transformation of on-going organizations through strategic renewal. Sharma and Chrisman (1999) suggested that corporate entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation with that organization. With all of these definitions taking shape, the 21st century linked corporate entrepreneurship to firm's efforts to establish sustainable competitive advantages as the foundation for profitable growth (Kuratko et al., 2001; 2005). In this regard, Morris et al. (2008) described corporate entrepreneurship as being manifested in companies either through "corporate venturing" or "strategic entrepreneurship".

Model of corporate entrepreneurship (source: Morris et al., 2008), corporate entrepreneurship and innovation (Thomson/south-western publishers), p.81.)



Corporate venturing includes various methods for creating, adding to or investing in new businesses (Covin et al., 2003). Corporate venturing has as their commonality the adding of new businesses (or portions of new businesses via equity investments) to the corporation. This can be accomplished through three implementation modes_ internal corporate venturing, co-operative corporate venturing and external venturing. By contrast, strategic entrepreneurship approach has as their commonality the exhibition of large-scale or otherwise highly consequential innovations that

are adopted in the firm's pursuit of competitive advantage. These innovations may or may not result in new businesses for the corporation. With strategic entrepreneurship approaches, innovation can be in any of the 5 areas_ the firm's strategy, product offerings, served markets, internal organization (i.e. structure, processes and capabilities) or business model (Morris et al., 2008).

The first dimension is the appropriate use of rewards (Scanlan, 1981; Souder, 1981; Kanter, 1985; Sathe, 1985; Fry, 1987; Block and Ornati, 1987; Sykes, 1992; Barringer and Milkovich, 1998). Theorists, therefore, stress that an effective reward system that spurs entrepreneurial activity must consider goals, feedback, emphasis on individual responsibility, and results-based incentives. The use of appropriate rewards can also enhance middle managers' willingness to assume the risks associated with entrepreneurial activity.

Proposition 1: *Appropriate use of rewards influences the green banking strategies positively.*

A second dimension is management support, which indicates the willingness of manager to facilitate and promote entrepreneurial activity in the firm (Quinn, 1985; Hisrich and Peters, 1986; MacMillian et al., 1986; Sykes and Block, 1989; Sathe, 1989; Stevenson and Jarillo, 1990; Damanpour, 1991; Kuratko et al., 1993; Pearce et al., 1997). This support can take many forms, including championing innovative ideas, providing necessary resources or expertise, or institutionalizing the entrepreneurial activity within the firm's system and processes.

Proposition 2: *Management support for green banking strategies influences sustainability outcomes positively.*

Community banks around the U.S. are realizing the benefits of embracing ecologically friendly practices which come in many forms, including energy savings, long-term investment returns, increased business efficiencies and new customers (Ginovsky and John, 2009). Managers to improve the management of their environment and has launched a major report which gives basic tips on greening the workplace (British Institute of Management (BIM), 1992). There has been very few initiatives in this regard by the banks in India namely, State Bank of India (SBI), ICICI, IDBI and others. Therefore, there is a need to study and suggest possible policy measures and initiative to promote green banking in India (Pravakar et al., 2008). Moreover, banking sector can play a crucial role in promoting environmentally sustainable and socially responsible investment (SRI). Banks may not be the polluters themselves but they will probably have a banking relationship with some companies/investment projects that are polluters or could be in future. SRI funds are highly demanded for example SRI assets in the U.S. have reached \$2.29 trillion in 2005 (Starogiannis, 2006). Internationally, there is a growing concern about the role of banking and institutional investors for environmentally responsible/socially responsible investment projects. (Earth Summit in 1992, the United Nation Environment Programme Initiative on the Environment and Sustainable Development" was established in order to initiate a constructive dialogue between UNEP and Financial Institutions.). It is of importance to the banking sector to follow certain environmental evaluation of the projects before financing.

There are studies showing positive correlation between environmental performance and financial performance (Hamilton, 1995; Hart, 1995; Blacconiere and Pattern, 1993). Credit risk can arise indirectly where banks are lending to customers whose businesses are adversely affected by the cost of cleaning up pollution or due to changes in environmental regulations. The cost of meeting new requirements on emission levels may be sufficient to put some companies out of business (In United Kingdom, the breach of terms of the license given by integrated pollution prevention control would lead to prohibition, financial penalties and enforcement notice). All such notices can have significant financial implications for the business and as well as the financial institutions that have put money into it. Thus banks/financial institutions need to take actions before financing the project. The enactment of CERCLA in USA in 1980s has resulted in huge loss to the banks in USA as banks held directly responsible for the environmental pollution of their clients and made to pay the remediation cost. Risk of loan default by debtors due to environmental liabilities because of fines and legal liabilities and due to reduced priority of repayment under bankruptcy. In few cases, banks have been held responsible for actions occurring in which they held a secured interest (Schmidheiny and Zorraquin, 1996; Ellis et al., 1992). Green banking strategies involves two components (1) managing environment risk and (2) identifying opportunities for innovative environmentally oriented financial products (IFC, 2007). The banking and financial institutions should prepare an environmental risk and liability guidelines on development of protective policies and reporting for each project they finance or invest (Jeucken, 2001). A study confirms that only air pollution causes the loss of 200 million working days and the resulting losses in productivity and medical expenses costs around 14 billion pound to the European Union (Stavros Dimas, 2005). The investors in the stock market are equally aware of environmental pollution and would take a stand against those industries/institutions that do not comply with pollution norms (Gupta, 2003; Goldar, 2007). Banks also need to monitor post transaction for the ideal environmental risk management program (Rutherford, 1994) during the project implementation and operation. There should be physical inspections of production, resources, training and support, environmental liability, audit programs etc. Commercial banking

has been more attentive to the investment banking than the environmental problems; the environmental liabilities would play a larger role in their investment decision in the near future (Schmidheiny and Zorraquin, 1996). Schmidheiny and Zorraquin (1996) conclude from their primary study that banks are not hindering the achievement of sustainability, banks can also play a hindering role for sustainable development because (1) they prefer short-term payback periods whereas sustainable development needs long-term investment, (2) investment which takes into account of environmental side-effects usually have lower rate of return in short-term (Jeucken and Bouma, 1999).

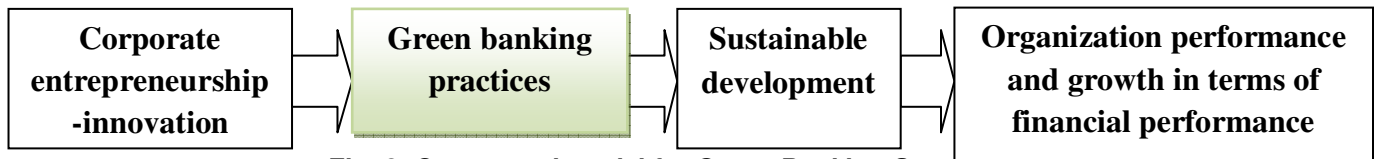


Fig. 2: Conceptual model for Green Banking Strategies

CONCLUSIONS

Pollution prevention is a new concept of the idea of environmental entrepreneurship as it is process based and focused on reducing costs rather than increasing revenues (Douglas, 1998). Entrepreneurship has been recognized as a major conduit for sustainable products and processes, and new ventures are being held up as a panacea for many social and environmental concerns (Hall et al., .). While entrepreneurial activity has been an important force for social and ecological sustainability; its efficacy is dependent upon the nature of market incentives. This limitation is sometimes explained by the metaphor of the prisoner's dilemma, which we term the green prison. In this prison, entrepreneurs are compelled to environmentally degrading behavior due to the divergence between individual rewards and collective goals for sustainable development (Pacheco et al.,). With two main predictors: Top management commitment and employee support. The effect of green development and environmental aspects as well as CSR and local community engagement on financial performance is also considered as positive, but mainly indirect through non-financial performance from the employee perspective. Not only does environmental responsiveness help organizations to remain competitive and increase market share (Chan, 2001; Fitzgerald, 1993; Porter and Van der Linde, 1995a) but also there is some evidence showing increase in customer loyalty (D'Souza et al., 2006). Chang et al. (2010) argue that green product quality had positive effects on green customer satisfaction and green customer loyalty. Green management in organizations has to go beyond regulatory compliance and needs to include conceptual tools such as pollution prevention, product stewardship and corporate social responsibility (Hart, 2005). The needs for efficient use of resources and environment friendly corporate policies and behaviors have now been recognized all over the world (Das et al., 2006). The performance of an enterprise can no longer be evaluated on the basis of economic parameters alone and it needs to be integrated with environmental performance as well (Saxena et al., 2003). Moving towards sustainable development, therefore, is now a major concern in most of the developed countries, resulting in stricter regulations concerning the impact of the products during their manufacturing, use and end of life including the obligation to define reverse logistics strategies and systems (Gou et al., 2008; Hong et al., 2008; Kumar and Putnam, 2008). Organizations involved in eco-design activities are generally subject to the same influencing factors. One frequently mentioned factor is management commitment and support (Ehrenfeld and Lenox, 1997; Ritzén, 2000; Pujari et al., 2004; Boks, 2006). In order to survive and compete successfully, the organization needs innovation-friendly business strategy, organizational structure, top management style, middle management practices and effective modes of managing innovation for innovational success and competitive excellence (Khandwalla and Mehta, 2004).

TABLE1. REVIEW OF TOPICS RELATED TO GREEN BANKING PRACTICES

Donald F Kuratko (2007)	Business and Economics	Corporate entrepreneurship	Corporate Entrepreneurship provides a thorough review of the literature on this topic and presents a model based on this literature.
Hornsby, Kuratko and Zahra (2000).	Journal of business venturing. 17: (2002) 253-273	Middle managers perception of the internal environment for corporate entrepreneurship: assessing a measurement scale	The role of the middle manager in corporate entrepreneurial activity has been recognized in the literature. The empirical research on the internal organizational factors that may foster middle manager activity has been limited, both in volume and scope. However, the literature does converge on at least five possible factors.
Barringer MS, Milkovich GT (1998).	Acad. Manage. Rev. 23: 305–324.	A theoretical exploration of the adoption and design of flexible benefit plans: a case of human resource innovation.	The first dimension is the appropriate use of rewards of middle manager's internal organizational factor.
Bird B, (1988).	Acad. Manage. Rev. 13: 442–453.	Implementing entrepreneurial ideas: the case for intention	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Block Z, Ornati OA, (1987).	J. Bus. Venturing. 2: 41–51.	Compensating corporate venture managers	The first dimension is the appropriate use of rewards- middle manager internal organizational factor
Burgelman RA, (1983a).	Adm. Sci. Q. 28: 223–244.	A process model of internal corporate venturing in the diversified major firm	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Burgelman RA, (1983b).	Manage. Sci. 29: 1349 – 1363 (December).	Corporate entrepreneurship and strategic management: insights from a process study.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Burgelman RA (1984).	Calif. Manage. Rev. 26: 154–166.	Designs for corporate entrepreneurship	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Damanpour F (1991).	Acad. Manage. J. 34: 55 – 390.	Organizational innovation: a meta-analysis of effects of determinant and moderators.	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.

Ellis Taylor (1988).	RJ, NT	Frontiers of Entrepreneurship Research. 518–533.	Success and failure in internal venture strategy: an exploratory study.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Fry A (1987).		SAM Adv. Manage. J. 52: 4 – 9 (Summer).	The Post-It-Note: an entrepreneurial success	The first dimension is the appropriate use of rewards of middle manager's internal organizational factor.
Hisrich Peters (1986).	RD, MP	J. Bus. Venturing 1: 307–322.	Establishing a new business venture unit within a firm.	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
Kanter (1985).	RM	J. Bus. Venturing 1: 47–60.	Supporting innovation and venture development in established companies.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Kuratko DF, Hornsby JS, Naffziger DW, Montagnano RV (1993).		Adv. Manage. J. 58 (1): 28–33 (Winter).	Implementing entrepreneurial thinking in established organizations.	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
MacMillan IC, Block Z, Narasimha PNS (1986).		J. Bus. Venturing 1: 177–191.	Corporate venturing: alternatives, obstacles encountered, and experience effects.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Pearce Kramer Robbins (1997).	JA, TR, DK	J. Bus. Venturing. 12: 147–160.	Effects of managers' entrepreneurial behavior on subordinates.	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
Quinn (1985).	JB	Harv. Bus. Rev. 63: 73–84 (May/June).	Managing innovation: controlled chaos.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Sathe (1985).	V.	636 – 656. Frontiers of Entrepreneurship Research Babson College, Wesley, Mas.	Managing an entrepreneurial dilemma: nurturing entrepreneurship and control in large corporations	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Sathe (1989).	V	Organ. Dyn. 18: 20–32.	Fostering entrepreneurship in a large diversified firm.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Scanlan (1981).	BK	Bus. Horizons 24: 5–9 (March/April).	Creating a climate for achievement.	The first dimension is the appropriate use of rewards of middle manager's internal organizational factor.
Souder (1981).	W	Res. Manage. 24 (3): 18–22 (May).	Encouraging entrepreneurship in large corporations.	The first dimension is the appropriate use of rewards of middle manager's internal organizational factor.
Stevenson		.Strategic	A paradigm of	The second dimension is management

HH, Jarillo JC (1990).	Manage. J. 11: 17 – 27 (special issue).	entrepreneurship: entrepreneurial management.	support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
Stopford JM, Baden-Fuller CWF (1994).	Strategic Manage. J. 15: 521 – 536.	Creating corporate entrepreneurship.	The fifth, Dimension is risk taking of middle manager's internal organizational factor.
Sykes HB (1992).	J. Bus. Venturing. 7: 253 – 265. Sykes, H.B.,	Incentive compensation for corporate venture personnel	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
Block Z (1989).	J. Bus. Venturing. 4: 159 – 167	Corporate venturing obstacles: sources and solutions.	The second dimension is management support, which indicates the willingness of managers to facilitate and promote entrepreneurial activity in the firm.
Ginovsky, John (2009).	Community Banker; Apr2009, Vol. 18 Issue 4, p30-32, 3p	Green banking	The article focuses on the efforts of community banks in the U.S. to leverage sustainability, or green banking.
British Institute of Management (BIM) (1992).	Management Services, Apr92, Vol. 36 Issue 4, p6-8, 2p	Managers urged to go green	Managers to improve the management of their environment and has launched a major report which gives basic tips on greening the workplace.
Pravakar Sahoo, Bibhu Prasad Nayak (2008).	Indian Economic Journal (IEJ, paper series no.125/2008	Green banking in India	This paper explores the importance of Green Banking, sites international experiences and highlights important lessons for sustainable banking and development in India.
Jeucken M and Bouma JJ (1999).	GMI Theme Issue, GMI-27, Autumn, 1999.	The Changing Environment of Banks	Investment which take into account of environmental side-effects usually have lower rate of return in short-term.
Rutherford, Michael (1994).	The Banker, January.	At what Point can pollution be said to cause damage to the Environment?	Banks also need to monitor post transaction for the ideal environmental risk management program During the project implementation and operation.
Schmidheiny S, Federico J, Zorraquin L (1996).	Cambridge, MIT Press.	Financing Change: The Financial Community, Eco-Efficiency and Sustainable development	Commercial banking has been more attentive to the investment banking than the environmental problems; the environmental liabilities would play a larger role in their investment decision in the near future.
Gupta S (2003).	Delhi School of Economics working Paper Series, No-116.	Do Stock market penalise Environment-Unfriendly Behaviour? Evidence from India”,	The investors in the stock market are equally aware of environmental pollution and would take a stand against those industries/institutions that do not comply with pollution norms.
Ellis, BillieJ, Jr Sharon S Willians and Sandra Y	The Practical Real Estate Layer, July.	“Helping a Lender Develop Environmental Risk Program,”	Risk of loan default by debtors due to environmental liabilities because of fines and legal liabilities and due to reduced priority of repayment under bankruptcy. In

Bodeau (1992).			few cases, banks have been held responsible for actions occurring in which they held a secured interest.
Jeucken M (2001).	London, earthscan	Sustainable Finance and Banking, The finance Sector and the Future of the Planet”	The banking and financial institutions should prepare an environmental risk and liability guidelines on development of protective policies and reporting for each project they finance or invest.
Blacconiere Walter and Dennis Pattern (1993).	Journal of Accounting and Economics (December).	Environment Disclosure, regulatory costs and changes in firm values,”	Studies showing positive correlation between environmental performance and financial performance.
Hamilton, James T (1995).	Journal of Environmental Economics and management 28.	“Pollution as News: Media and Stock markets Reactions to the toxics release inventory data”	Studies showing positive correlation between environmental performance and financial performance.
Hart, Stuart (1995).	Business Strategy and the Environment (September).	“Does it Pay to be green? An Empirical Examination of the relationship between Emissions Reduction and Firm Performance”	Studies showing positive correlation between environmental performance and financial performance.
Hall, Jeremy K., Daneke, Gregory A, Lenox, Michael J (2010).	Journal of Business Venturing; Sep2010, Vol. 25 Issue 5, p439-448, 10p.	Sustainable development and entrepreneurship: past contributions and future directions.	Entrepreneurship has been recognized as a major conduit for sustainable products and processes, and new ventures are being held up as a panacea for many social and environmental concerns.
Douglas J, Lober (1998).	Journal of Organizational Change Management, Vol. 11 Iss: 1, pp.26 – 37	“Pollution prevention as corporate entrepreneurship”	Pollution prevention is a new concept of the idea of environmental entrepreneurship as it is process based and focused on reducing costs rather than increasing revenues.
Pacheco, Desirée F, Dean, Thomas J and Payne David S (2010).	Journal of Business Venturing; Sep2010, Vol. 25 Issue 5: p464-480, 17p.	Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development.	In this prison, entrepreneurs are compelled to environmentally degrading behavior due to the divergence between individual rewards and collective goals for sustainable development.
Boks C (2006).	J. Clean. Prod. 14: 1346-1356.	The soft side of ecodesign	Organizations involved in eco-design activities are generally subject to the same influencing factors. One frequently mentioned factor is management commitment and support.
Chan RY (2001).	Psychol. Market. 18(4): 389-413.	Determinants of Chinese	Not only does environmental responsiveness help organizations to

		consumers – green purchase behaviour.	remain competitive and increase market share.
Chang NJ, Fong CM (2010).	Afr. J. Bus. Manage. 4(13): 2836-2844.	Green product quality, green corporate image, green customer satisfaction, and green customer loyalty.	Green product quality had positive effects on green customer satisfaction and green customer loyalty.
D'Souza C, Taghian M, Lamb P, Peretiatkos R (2006).	Soc. Bus. Rev. 1(2): 144-157.	Green products and corporate strategy: an empirical investigation.	Not only does environmental responsiveness help organizations to remain competitive and increase market share but also there is some evidence showing in- creases in customer loyalty.
Das Gandhi NM, Selladurai V, Santhi P (2006).	Int. J. Prod. Perform. Manag. 55(7): 594-606.	Green productivity indexing A practical step towards integrating environmental protection into corporate performance.	The needs for efficient use of resources and environment friendly corporate policies and behaviors have now been recognized all over.
Fitzgerald K (1993).	Advert. Age, 1: 44.	It's green, it's friendly, it's wal- mart, eco-store	Not only does environmental responsiveness help organizations to remain competitive and increase market share.
Hart SL (2005).	Res. Technol. Manage., 48(5): 21-7.	Innovation, creative destruction and sustainability	Green management in organizations has to go beyond regulatory compliance and needs to include conceptual tools such as pollution prevention, product stewardship and corporate social responsibility.
Pujari D, Peattie K, Wright G (2004).	Ind. Mark. Manag. 33: 381–391.	Organizational antecedents of environmental responsiveness in industrial new product development.	One frequently mentioned factor is management commitment and support.
Saxena AK, Bhardwaj KD, Sinha KK (2003).	Int. Energy J. 4(1): 81-91.	Sustainable growth through green productivity: a case of edible oil industry in India.	The performance of an enterprise can no longer be evaluated on the basis of economic parameters alone and it needs to be integrated with environmental performance as well.
Ritzén S (2000).	PhD Thesis. Department of Machine Design. Royal Institute of Technology. Stockholm.	Integrating Environmental Aspects into Product Development – Proactive Measures.	One frequently mentioned factor is management commitment and support.

Khandwalla PN, Mehta K (2004).	J. Decis. Makers Vikalpa. 29(1): 13-28.	Design of corporate creativity	In order to survive and compete successfully, the organization needs innovation-friendly business strategy, organizational structure, top management style, middle management practices and effective modes of managing innovation for innovational success and competitive excellence.
Kumar S, Putnam V (2008).	Int. J. Prod. Econ., 115: 305–31	Cradle to cradle: reverse logistics strategies and opportunities across three industry sectors.	Moving towards sustainable development, therefore, is now a major concern in most of the developed countries, resulting in stricter regulations concerning the impact of the products during their manufacturing, use and end of life including the obligation to define reverse logistics strategies and systems.
Hong IH, Ammons JC, Realf MJ (2008).	Int. J. Prod. Econ. 116: 325–337.	Decentralized decision-making and protocol design for recycled material flows	Moving towards sustainable development, therefore, is now a major concern in most of the developed countries, resulting in stricter regulations concerning the impact of the products during their manufacturing, use and end of life including the obligation to define reverse logistics strategies and systems.
Ehrenfeld J, Lenox M (1997).	J. Sustain. Prod. Des., 1: 17-27.	The Development and Implementation of DfE Programmes.	Organizations involved in eco-design activities are generally subject to the same influencing factors. One frequently mentioned factor is management commitment and support.
Gou Q, Liang L, Huang Z, Xu C (2008).	Int. J. Prod. Econ. 116: 28–42.	A joint inventory model for an open-loop reverse supply chain.	Moving towards sustainable development, therefore, is now a major concern in most of the developed countries, resulting in stricter regulations concerning the impact of the products during their manufacturing, use and end of life including the obligation to define reverse logistics strategies and systems.

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