

Global Prospects of Eco-Innovation in Business and its Sustainability for Better Economic Growth

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Abstract: Innovation is known to be the key for sustainable economic growth for an Economy. Right from manufacturing to service industries, Innovative Techniques and Entrepreneurship has been a major part of success stories in many international firms. Manufacturing industry, Public health industry, Finance sector, Railways, Retail are some of the important sectors practicing entrepreneurship and promoting innovation. Now with promotion of Corporate social responsibility and developing Civic Sense, environment is one the most focal areas of concern for every nation. Eco-Innovation is the need of hour which will not only assure better productivity but will also ensure sensitivity towards environment. This research paper identifies the need for Eco-Innovation among manufacturing industries, services and business professionals and will try to explain the necessity of Eco-innovation for a sustainable eco-friendly future.

1. INTRODUCTION

Modern industry advancement has developed with experience over past several decades globally and mutually. In the recent century the global market has been highly influenced by research among research firms, consultancies, research scholars arguing that which is the most important area for Eco-Innovation which lays a ground for interactive learning processes amongst entrepreneurs and promote innovation in the society. Eco-Innovation can be termed as a key pre-requisite for a sustainable development as it promotes a nation's environmental condition, economic and social condition. Most of the global research organizations, public and private sector and research institutes are emphasizing on the importance of eco-innovation. Developing countries are still lacking a level in education, urbanization, health services, and public services. They still need to innovate new ideas to overcome these problems for a long term with quality but affordable solutions.

2. LITERATURE REVIEW

Eco-Innovation is any form of innovation resulting in sustainable development through reducing environmental pressure, efficient use of natural resources and increased

responsibility towards environment. Use of Green Technology results in advancement of environmental and economic sustainability. Increased affect of global warming on environment calls for the need of green technology. The growing momentum to promote to save environment creates a niche for eco "technopreneurs" to come up with innovative ideas by introducing new eco-friendly processes and products. Developing countries needs to stimulate its entire innovation eco-system to develop new solutions for the nation's calling needs. This sustainable eco innovation will offer clear business opportunities to all classes in short and long term thereby generating employment and impacting per capita income of a nation. In other words, technological changes, institutional changes and behavioral changes are important in a sustainable direction. Technological changes like use of eco-technology and use of green business and Institutional changes includes changes in social norms, routines, social customs that harm the environment. Based on the recent literature on eco-innovation five types of barriers for eco innovation can be drawn:

1. *Institutional Barrier* like lack of subsidies and incentives.
2. *Market Barrier* like poor market demand and incompatible industrial standards.
3. *Technological Barrier* like limited absorptive capacity and Research & Development capacity.
4. *Organizational Barrier* like lack of management systems, government collaboration via voluntary agreements.
5. *Behavioral Barrier* like obsolete demand and consumption need of customer.

3. ECO INNOVATION: GLOBAL PERSPECTIVE

Eco-innovation is emerged form of innovation that aims at scaling up sustainable development, through minimizing the harmful impact on environment and conserving energy. In other word it is introduction of improved ideas , products, process, organizational change or marketing solution, business policy , services that reduces the use of environmental

resources like materials, energy, water and land) and prohibits the introduction or release of harmful substances in Nature. Eco-innovation defines a modified field of Innovation among all sectors like product innovation, process innovation and innovation in service that focuses more on environment and economy.

Eco-Innovation & Business: Today with the increasing Consumer Feedback the aim of the company is not only confined towards profit generation infact it's beyond that now. Consumers also expect the organizations to have a sense of responsibility towards environment where eco innovation is incorporated in company's corporate social responsibility and also in other operations. In customer centric market now customer demand products and services which are energy and resource efficient as well. Eco-innovation offers Business organizations a huge opportunity to set apart from rest and reduce costing, penetrate into new markets, create more job profiles, and reduce the environmental pressure, thus creating a link between maximization business profit and minimization of negative impact on environmental. This not only helps the organization to boost its market share and corporate image, increasing demand for eco-innovation will enable organization to achieve high level of legitimacy when market players will be compared in terms of organization which fulfills criteria for environmental rules and regulations imposed by governments and international organizations. Developing countries needs innovation to accelerate its growth inclusively which is environmentally sustainable.

Eco Innovation & Challenges: Eco-innovation is still at a nascent stage, still expanding quickly across many nations. The greatest challenge is to create an enabling environment that promotes entrepreneurs and organizations to explore and pursue their innovative ideas despite the common barriers like lack of information, insufficient finances and poor business management skills. Overcoming this problem constructively can promote eco innovation which will contribute not only in sustainable future but will also promise economic growth..

4. THE NEED FOR ECO-INNOVATION

Most nations now highly encourage entrepreneurial ideas that tackle both economic and environmental challenges. Introducing new innovative eco-friendly products, services and processes, Eco-Innovation creates a huge niche for green "technopreneurs" to come up with Innovative solutions which would encourage the growth of environment-conscious consumers. They promote creation of novel and affordable priced goods, processes, systems and services designed by using minimal natural resources which will to satisfy human needs with better quality of life.

5. MARKET PENETRATION OF ECO INNOVATION

- Introduction and Implementation of India's biggest cleanliness drive and National level campaign "Swachh Bharat Abhiyan" (Campaign Clean India,2014) introduced by Government of India to clean the infrastructure , streets and roads of the country included participation of 3 million government employees and schools and colleges students of India has helped India in promoting environmental awareness. This in turn is giving momentum to entrepreneurial spirit promoting eco innovation in a sustainable manner.
- United Nation agency "United Nations Environment Programme" is an agency that coordinates its environmental activities, assisting developing countries in implementing environmentally sound policies and practices has recently helped 100,000 people finance solar power systems in India which has been successful and similar projects has been promoted in other parts of the developing world like Tunisia, Morocco, Indonesia and Mexico.
- Different countries have different contribution percentage towards defense. Like USA has 50% of Research & Development budget goes to defense, whereas Germany, France and UK has 11%, 30% and 40% contribution respectively. As US has maximum contribution towards defense which is the reason United Nations has maximum contribution in Eco Innovation activities.
- Today, small and medium-sized enterprises (SMEs) constitute a major portion of business. In Europe alone, SMEs represent 99 percent of all businesses, providing jobs to more than 100 million people. In Asia, Small manufacturing enterprises constitute 99% of business, this if organized and restructured innovatively in an eco friendly manner will bring revolutionary sustainable changes for environment.
- According to the latest Eco-Innovation Scoreboard, Finland is rated to the top performer in eco-innovation in the European Union. Globe Hope Ltd with its innovative marketing has the most notable Finnish practices. In which they transforms waste materials such as army and hospital waste textiles, advertisement banners , worker uniforms, flags, Vintage home textiles, seatbelts and recycled sails into high quality textile and accessories. This promotes sustainability by turning waste material into new usable raw materials through re-cycling, re-sewing, re-cutting, re-cutting, re- printing and re-dying.

6. BENEFITS TO ECO-INNOVATION

Eco-innovation can be seen as a business management approach which is a long-term strategic drive to sustainability that allows creating a clear vision in the decision-makers' mind and cohesive understanding among employees and could lead to resource efficiency and shared gains. Most importantly, it helps to sustain results. Over the recent years, Eco-

innovation has helped companies to achieve a significant advantage over their competitors and generate business growth in their respective markets with new opportunities and long-term sustainable strategies resulting in increased efficiencies and savings. Globally this potential is highest in small and medium sized enterprises (SMEs) that has maximum market share, making them the backbone of most economies. Now the governments have realized the need of innovation and entrepreneurship for economic development, competitiveness reasons and environmental reasons. Here innovation based on environmental sustainability is more viable that means to put into practice the national strategies for Sustainable Development. Eco-innovation can contribute to reduce resource constraints, addressing environmental degradation, and improving social welfare while creating new jobs markets. However, the market itself is not always responsive towards adoption and diffusion of eco innovation. Companies aspiring for eco innovation need an incentive to develop and practice their sustainable business practices for a commercial success.

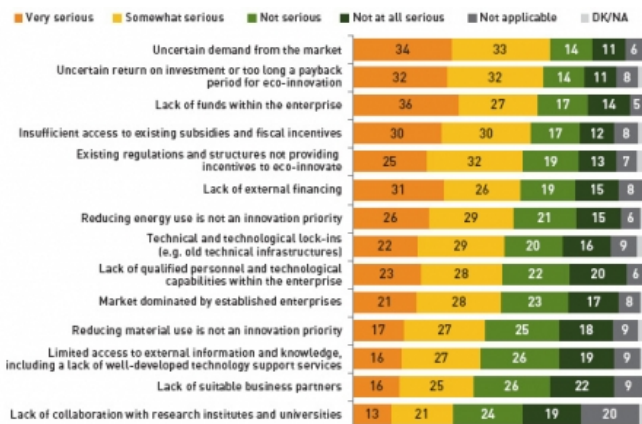
Economic Benefits: Transfer technologies; Create local businesses and jobs

Environmental Benefits: Reduce consumption of fuel wood; Develop alternative energy source

Social Benefits: Encourage local entrepreneurship; Reduce health risk; Capacity building

7. BARRIERS TO ECO-INNOVATION

In spite of eco-innovation benefits, it has not received much wider application because of inherent market barrier, barriers derived from a non conducive enabling environment and lack of drivers to innovate. Barriers can be the resultant of both market failures and system failures. Market failures are quite evident when governments face the challenge of overcoming a negative economic externality issue such as air pollution and where systemic failures arise from lack of the enabling environment.



Q7. I will list you some barriers that could represent an obstacle to accelerated eco-innovation uptake and development for a company. Please tell me for each of them if you consider them a very serious, somewhat serious, not serious or not at all serious barrier in case of your company?
Base: all companies, % EU27

Barriers provide a reason to why there is need for effective policy planning and implementation, which can range from direct participation in the development and arrangement of innovation to indirect influence through setting a wider framework favoring eco-innovation. *Figure 1* represents some of the barriers responsible for retarded growth of eco-innovation.

7.1 Factors responsible for promoting Eco-Innovation

Eco-innovation needs to be promoted in order to protect the environment and to increase competitiveness. The following factors have to be taken into consideration while assessing the competitive advantage of nations:

- *Domestic market affecting demand:* A growing domestic market demand is oriented towards innovations and supports new technological solutions that drive the cost of the technology down.
- *Market factors affecting Supply Chain Management:* If a country already has a successful technological methods and applications, it will make the export much easier.
- *Nation's Technological Capability:* Technological capabilities affect International trade performance. If a country has a comparatively high research knowledge base, it also has an advantage in developing, implementing and marketing future technologies.
- *Innovation-friendly Policies:* Government intervention to generate environmental awareness among people drives the demand for eco innovation among people. This results in making and implementation of environmental friendly policies.
- *Business Connections among Market Players:* Powerful economic market players are able to develop new markets to and implement innovative processes. Interaction among users and suppliers are important element which keeps them integrated on demand supply parameters respectively.

8. CONCLUSION

The considerations addressed in this paper suggest that there is considerable scope for eco-innovation in the global market. Rising demand of customers and environmental awareness among society calls for eco friendly innovative business ideas at all levels. An effective eco innovation policy requires recognition that innovation is not the absolute domain of the private sector and is not only created through market mechanisms. The public sector plays a major part as a place for origin of many radical technological and process eco innovations. This enhances s the entrepreneurship and innovation culture in both public and private sector which has a positive effect on innovation potential of the economy as a whole. This also has huge impact on changing patterns of production, demand and consumption which directly affects the lifestyle of people and supports the environment in a

sustainable manner. There lies a benefit and opportunities for those who produce eco innovative products and follow eco innovative process which includes increased competitiveness, cost savings and job markets. With continuous demand for safe and clean technologies and increases environmental awareness from environmentally conscious consumers, and stringent environmental policies, it is certain that eco-innovation is importance for successful businesses in the future.

9. ACKNOWLEDGEMENT

I am grateful to my supervisor Dr.M.S.Khan, who gave me moral support and guided in different matters regarding the topic, he had been very kind and patient while suggesting me the outlines of this Research. Without his guidance and support this research would not have been possible. I thank him for his overall supports.

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