

The Impact of Renewable Energy Usages and Green Practices within Business Periphery on Improving the Sustainability of the Environment All Around the World

Geraldin B. Dela Cruz 1*, Dr P Hariharan 2

¹ Tarlac Agricultural University, Philippines .

Abstract

Establishment of sustainability is essential for the companies as this allows the business to stay competitive in the global market. In order to maintain the sustainable business firms utilises alternative energy sources that in turn assists organisations to improve their reputation on the marketplace and generate greater revenue. With the implementation of green technologies business successfully achieves competitiveness as these results in more productive supply chain. Productivity of the workers improves to a great extent with the establishment of the sustainable businesses. Utilisation of alternative energy sources helps the companies to cut down their excess operational cost and as a consequences firm's upgrades their economic growth. This also helps the companies to minimise operation cost and make more profitable business. On the other hand, this allows the companies to stay in the running in the competitive business with the support of all stakeholders. Efficacy of the supply chain and logistic and grater performance of the companies are the consequence of the establishment of sustainable business and this in turn helps the companies to conserve the natural resources for future consumption.

Keywords

Productivity, revenue, supply chain, and sustainability.

INTRODUCTION

In the past few years, most of the companies are using alternative energy sources in order to transform their business into a more sustainable business. This trend is visible in almost every sector as this is allowing the companies to gain the attention of the customers and the potential investors [1]. With the assistance of the alternative energy sources the companies successfully mitigates carbon emissions and at the same time increases the effectiveness of their operations. It is essential for all companies to focus on the establishment and maintenance of sustainable business in order to secure the future of the firms [2]. Sustainable is the key for a better future as this helps to take initiatives to reserve the natural resources and this in turn ensures availability of the resources for the forthcoming generation. This helps firms to save their operations cost and boost the customer base at the same time.

In this 21st century it has become essential and necessity for businesses to look into the betterment of the environment in order to stay in the running in the competitive world. This allows organisations to boost their productivity and profitability simultaneously as this helps businesses to improve brand image to a great extent [3]. Greater market image of the companies helps the brands to maintain their competitiveness and their brand reputation. It is clear that in this era sustainable and green practices are one of the techniques to attract more customers. Green practices within the internal and external operations of the organisation help

the business to be more productive and at the same this helps the organisation to improve the activities of their human resource. Transformation is essential for the business as this helps the business to explore a completely new perspective of tire business and improve their market position.

of alternative energy sources implementation of green approaches within all the activities of the business helps firms to boost their effectiveness on the marketplace. On the other hand, it is the high time for all the individuals to focus on the well-being of the community and environment. By prioritising the betterment of the environment and community helps the firm to stay in the good books of the customers and most essentially this allows organisations to gain the attention of the possible investors and shareholders [4]. In recent days the investors are aware of the market image of the company and the activities and approaches of the company towards the people, planet and profit. This in turn helps investors to invest their money in those companies that possess a great market reputation and have great revenue. Moreover, it is evident that utilisation of alternative energy sources such as solar energy, bio-gas, wind energy is capable of facilitating rapid growth by strengthening customers base and shareholders.

With the assistance of the alternative energy sources companies effectively redesign their carbon emission and this eventually helps to establish a positive brand image on the marketplace. Whenever firms use renewable energy sources to conduct their day to day operations this helps companies to improve their efficiency in supply chain and logistics [5].

² Assistant Professor, PSG College of Technology, India.

^{*}Corresponding Author Email: ¹ delacruz.geri@gmail.com



With the help of the green practice organisations upgrade the workflow of the supply chain as this ensures effective inventory management, greater resources management. All this ultimately allows the companies to stay in the running in this competition world and secure their future. Green practices help firms to mitigate carbon emission from their shipments and at the same time this allows the firms to reduce waste production by incorporating a 4R process.

OBJECTIVES

The aim of the study is to analyse the impact of renewable energy usage and green practices within business periphery on improving the sustainability of the environment all over the world.

Objectives

- To identify the importance of utilisation of renewable energy in the establishment of sustainability in the business.
- To evaluate the impact of renewable energy usage on the betterment of the environment.
- To understand the interrelation within the utilisation of renewable energy and sustainable business and wellbeing of the environment.

MATERIAL AND METHOD

The entire article has been carried out by implementing suitable and appropriate methods to secure the success of the study. In order to ensure successful accomplishment of the study cross-sectional research design has been incorporated. This helps the researchers to evaluate all the aspects related to the variable of the subject matter [6]. Additionally, the work has been carried out with assistance of the secondary data and has been collected from the secondary reliable sources. One of the main reasons behind the selection of the secondary information is that this process is less time consuming and comparatively less complicated.

Necessity information related to the utilised renewable energy sources and its impact on the maintenance and establishment of sustainable business to look into the better of the society and environment have been gathered from the reliable sources. The reliable secondary sources include websites, various articles, journals and other reliable and relevant sources [7]. The entire research has been carried out by maintaining a qualitative approach and as a consequence this overall process has become seamless and effective. The reliability and the validity of the study have been maintained throughout the study and at the same time all the ethical considerations have been followed. To maintain the authenticity of the study it has been taken into consideration that all the data that has been collected from the secondary sources peer-reviewed journals and articles that have been published after 2019. On the other hand, by looking at the demands of the study, the primary approach has not been performed.

RESULTS

Overview of green practice and renewable energy sources

Green practices help the companies to stay in the running in the comparative world and make profitable business. The term Green practices can be explained as the activities that are eco-friendly and do not cause harm on the environment or on the locality [8]. There are several activities that are referred to as the green practices such as sustainable purchasing of the goods or the resources. In addition, renewable energy sources can be described as the source of energy that has been derived from natural sources that are available in nature and can be revived. In simple words, alternative energy sources can be explained as the energy sources that are obtained from those natural sources that cannot run out, for example: sunlight, wind, bio-gas and do on [9]. Utilisation or three energy sources are beneficial for the environment as this does not cause a negative impact on the environment. It is evident that this helps the organisations to mitigate their operational cost and as a result the business makes more profitable business [10]. With the incorporation of the green practices business improves their effectiveness within their internal operations. As a condescending perspective this eventually allows businesses to upgrade their revenue and expand their brand recognition on the market

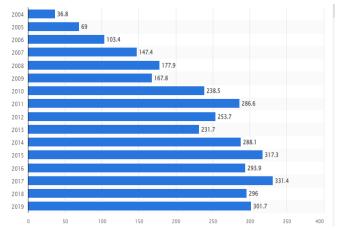


Figure 1: Investment in alternative energy worldwide from 2004 to 2019

In the past few years the trends of utilisation of alternative energy have increased to a great extent as this helps forms to effectively carry out their business. The companies are investing in alternative energy sources in order to carry out sustainable business and look into the betterment of the business [11]. All around the world the businesses are shifting towards alternative energy sources and implementing green approaches to ensure the activities of the forms are not causing harm to the environment. Green practices allow business to maintain competitiveness in the marketplaces in turns of great revenue and brand recognition, image. Utilisation of renewable energy sources along with other green practices prevents pollution to a great extent and by maintaining this business organisation get the attention of the



potential shareholders and customers. This in turn allows the companies to upgrade their effectiveness in the activities of the firm.

Importance of sustainability and its impacts on the growth of the business

In this era sustainable business operations help the companies to stay in the priority list of the customers. Sustainability is essential for the environment and this acts as the key for securing the future in terms of availability of the resources. This helps to mitigate pollution and improve the standard of living and it is great for the companies. By maintaining CSR companies improve their sustainability in the global platform and this also helps the businesses to be innovative [12]. It is evident that by maintaining sustainable practices business better business opportunities that allow companies to grow rapidly in the competitive marketplace. By looking into the betterment of the society and the environment, firms gain the attention of the customers and the investors that facilitates greater business opportunities to the company. Apart from that, in recent days customers are aware about the wellbeing of the environment and the conservation of natural resources. Therefore, it is quite evident that customers are most likely to purchase from a sustainable business. By incorporating green supply chains and utilising alternative energy sources firms increase their profitability by reducing their transactional cost and operating costs [13]. On the other hand this also slows the economy of the world to expand rapidly. It is visible that, whenever firms make greater revenue this impacts the revenue of the nation to a great extent and this facilitates greater economic growth systematically. Companies are focusing on the establishment of sustainable business as this allows businesses to gain more profit and this improves the reputation of the company. Companies are incorporating green technologies to maintain sustainable business and this helps firms to boost the productivity of the employees and the overall activities. In the past few years global technology and the sustainable market size have expanded rapidly and are expected to increase in forthcoming years.

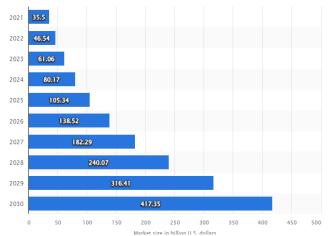


Figure 2: Green technology and sustainability market size worldwide from 2021 to 2030

It is estimated that by the year 2030 the market size of the global green supply chain technology and sustainability will grow unto 21.6 % from 2022. In addition, it is anticipated that the market size will grow around 417. 35 billion U.S dollars by the year 2030 [14]. The main reason behind the growth is the benefits that are gained by the firms in terms of revenue, reputation and economic growth.

Necessity of utilisation of alternative energy sources for the establishment of the sustainable business

The modern day's business companies throughout the business peripheral have been faced with a number of environmental issues, resources and energy scarcity due to pollution in the international market. It increases the overall need for adoption of using unconventional and renewable energy sources within their business. The overall implications of renewable energy sources mostly help an organisation to perform their entire business through adopting sustainable business practices [15]. Hence a huge number of business organisations in the global market sphere have started to use renewable energy sources in order to avoid energy scarcity issues as well as to improve the environment well-being throughout the globe.

The overall implications of the renewable energy sources mostly assist the business companies in the global market to gain a high brand image in business peripheral areas. This eventually allows firms to stay competitive and boost their customer base. In addition, use of renewable energy sources helps to meet the zero-carbon emissions target which helps to deploy sustainable business processes within enterprises effectively [16]. On the other hand, this allows businesses to gain the satisfaction of the customers and the employees as the workers and the purchasers are more likely to do business with a sustainable business. Whenever companies take initiatives to resolve social issues or environmental issues this eventually increases the market value of the company in terms of net income and brand image. It can be claimed that in order to proceed with sustainable business for a company in the global market it is necessary to adopt the use of renewable energy sources within the organisation.

Importance of green practices in maintaining sustainable business

Green practices help the businesses to establish and maintain sustainability in all levels of the business. This in turn allows the companies to become more effective and competitive in the marketplace. It is important for the companies to create a sustainable business environment to stay in the corporate world for a longer period of time. Going green is essential for the companies as this allows firms to ensure that any of the activities of the company is creating severe damage to the society and environment. On the other hand, this helps the business to be more effective and allows the business to establish a helpful workplace. Whenever brands focus on green practices this eventually results in green and more efficient supply chain and logistics [17]. As a consequence of this transformation the efficiency and



performance of the overall organisation improves in terms of productivity and effectiveness.

Companies focus on 4R techniques to establish a green business and look into the better of the company. This process helps the business to make sure that the initiative is optimum and capable of providing necessary support to mitigate waste production [18]. With the assistance of sustainable methods and strategies companies establish green business to make sure the natural resources and the essence of the environment is intact and not manipulated for carrying out business. In order to adopt a green approach, companies focus on the green purchase and expand their suppliers' network to make sure that process is environmentally friendly. Apart from that this also allows the companies to ensure the well-being of the community and environment and as a consequence improve their brand reputation on the marketplaces. By maintaining green practices, organisations improve the productivity of their employees by boosting morale.

In addition, this allows the companies to increase transparency within all levels of the business and this ultimately assists companies to establish a positive and effective workplace. It is clear that, with the help of the green practices brand, make sure that the activities of the logistics and the supply chain are producing less carbon emissions [19]. That eventually helps brands to ensure that the activities of their operations are not creating pollution. Prioritising sustainability is critical for the business as this helps the firms to gain the attention of the stakeholders. On the other hand, green practices help the companies to upgrade their inventory management. This eventually prevents excess spending on resources and this helps businesses to manage waste production [20]. At the same time, green practice helps businesses to shift towards better packaging that is eco-friendly. Utilisation of renewable energy sources upgrades the overall process and secures the future of the business in the competitive marketplace.

Necessity of looking into the environmental betterment for a better future

Whenever companies focus on their CSR practices this in turn assists the companies to prioritise on the well-being of the community and environment. By prioritising the betterment of the society and community is crucial for business as this ensures future availability of the natural resources. Taking care of natural resources and environmental well-being is beneficial for maintenance of the brand reputation. At the same time this helps companies to ensure that in forthcoming years the essential resources will be available [21]. In the past few years companies have focused on the betterment of the local habitats and the environment to secure their growth and maintain the natural balance of the environment.

It has been observed that the companies have focused more on the well-being of the environment and have taken several initiatives to intact the natural sources. The outbreak of Covid 19 pandemic have acted as the catalyst and have highlighted the importance of the well-being of the environment and the necessary effectiveness of the organisation in terms of the diverse supplier network, effective and skilled employees and suitable strategy [22]. Several companies from all the sectors have taken initiatives to Establish a green and Sustainable business to ensure future growth and existence of the companies in the global market.

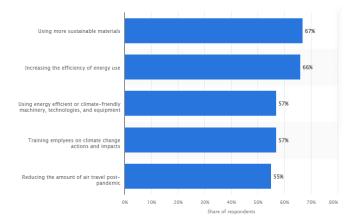


Figure 3: Leading actions taken up by companies as part of sustainability efforts worldwide 2021

Companies have focused on the establishment of an efficient workplace to ensure uninterrupted workflow and at the same time ensure the business is sustainable. With the help of green approaches firms have made sure that all the activities are eco-friendly and not creating hazards on the environment. Utilisation of sustainable materials and adaptation of the alternative energy sources not only improve the efficiency of the firms but at the same time this allows companies to reduce carbon footprint print for a better future. The firms have also taken initiatives to train the employees to make sure that the workers are capable of handling the technologies to update the efficiency of the companies in terms of establishment of the sustainable business. Green practices have helped the companies to look into their carbon emission in the firm's shipment process to a great extent.

DISCUSSION

Sustainability is a necessity for the firms and this is essential in the present circumstances in order to stay in the running and ensure future availability of the resources. Looking into the betterment of the environment and maintaining sustainable business are two sides of a coin. Whenever businesses focus on the improvement of the environment this in turn allows companies to boost their revenue and market share. In addition, this assists the business to stay in the running by improving the market image and recognition of the company. It is essential for the companies to focus on the well-being of the community and environment for the betterment of the organisation and society. Companies take several initiatives to improve their sustainability of the environment. Utilisation of attack energy sources are one the initiatives taken by the companies from all around the world.



Apart from that, companies also adopt green practices that help the firms to ensure sustainability in all the levels of their business. Green approach helps the firms to improve their efficiency to a great extent and this ensures greater productivity. Establishment of a sustainable business helps the business to reduce carbon emissions and increase customers support and the guidance of the potential investors. With the help of the green practices, firms from over the world establish a diverse supplier base that is crucial for ensuring availability of the resources in the time of crisis [23]. On the other hand, usage of green pests and renewable energy sources helps the companies to make greater profit by mitigating operations cost. In the past few years the awareness of the betterment of the environment has increased drastically. Moreover, after the outbreak of Covid-19 the shifting towards sustainable business has increased greatly.

Whenever business focuses on the establishment of eco-friendly business this in turn helps businesses to improve their market value. Utilisation of alternative energy helps to mitigate pollution and at the same time this is able to help the companies to make greater revenue. In addition, this also helps the companies to save natural resources for future generations and this ultimately secures rapid growth of the firms in forthcoming years. By adopting sustainable practices firms enhance their products and this helps companies to retain customers and employees. Both aspects secure their market position and ensure greater performance. Green practices allow the companies to improve the efficiency of the supply chain and this eventually allows businesses to boost productivity of the organisation.

On the other hand, this allows companies to reduce carbon emissions from the activities of the supply chain and logistics. As a consequence, companies improve their market position and ensure sustainability of the environment. Adopting the advanced technologies helps the companies to seamlessly carry out all the activities of SCM and this is beneficial for the employees of the companies [24]. Firm's prioritises on the employees training to ensure effectiveness of the activities and successful establishment of sustainable business. By maintaining green business firms make sure that all the activity of the company is coming harmful to the environment and locality.

CONCLUSION

In this study all the aspects related to the adaptation of renewable energy and green practices have been discussed critically to identify its impact on the establishment of a sustainable environment around the globe. From the assessment of the subject matter it is clear that this approach has the capability to improve the sustainability of the environment and this in turn allows the business to make a profitable business in the corporate marketplace. This has helped the companies to upgrade their overall performance by improving the efficiency of the activities. Its use of alternative energy sources helps the business to improve the standard of the service and the process. At the same time this

allows businesses to improve the market image and secure the future.

Adaptation of the green approach helps the companies to stay in the running in the competitive world as this helps businesses to make sure that any of the activities are not creating severe damage on the environment. Moreover, utilisation of renewable energy sources helps companies to mitigate carbon emission and at same time this helps businesses to make greater profit by minimising operational cost. On the other hand, green practices help the companies to strengthen supplier base and this secures the availability of the material in the crisis period also. In addition, this allows businesses to transform their entire work and secure the future of the company. Looking into the betterment of the environment helps the companies to gain the attention of the stakeholders and at the same time this ensures availability of the resources in future.

REFERENCES

- [1] Streimikiene, Dalia, et al. "Sustainable tourism development and competitiveness: The systematic literature review." Sustainable development 29.1 (2021): 259-271.
- [2] Hanaysha, Jalal Rajeh, et al. "Impact of innovation capabilities on business sustainability in small and medium enterprises." *FIIB Business Review* 11.1 (2022): 67-78.
- [3] Lin, Woon-Leong, et al. "Does firm size matter? Evidence on the impact of the green innovation strategy on corporate financial performance in the automotive sector." *Journal of Cleaner Production* 229 (2019): 974-988.
- [4] Welbeck, Emerald Edem Sabah, et al. "CSR in the telecom industry of a developing country: employees' perspective." *Journal of Accounting in Emerging Economies* (2020).
- [5]. Hunaid, Muhammad, Araib Ahmed Bhurgri, and Asad Shaikh. "Supply Chain Visibility in Leading Organizations of the Shipping Industry: Supply Chain in Shipping Industry." South Asian Journal of Social Review (ISSN: 2958-2490) 1.1 (2022): 8-20.
- [6]. Wang, Xiaofeng, and Zhenshun Cheng. "Cross-sectional studies: strengths, weaknesses, and recommendations." *Chest* 158.1 (2020): S65-S71.
- [7]. Correani, Alessia, et al. "Implementing a digital strategy: Learning from the experience of three digital transformation projects." *California Management Review* 62.4 (2020): 37-56.
- [8]. Yu, Jongsik, et al. "Can environmentally sustainable development and green innovation of hotels trigger the formation of a positive brand and price premium?." *International Journal of Environmental Research and Public Health* 18.6 (2021): 3275.
- [9]. Mahdavi, Meisam, et al. "Role of hydrocarbons and renewable energies in Iran's energy matrix focusing on bioenergy." *IET Renewable Power Generation* 16.15 (2022): 3384-3405.
- [10]. Yanamandra, R., and Haitham M. Alzoubi. "Empirical Investigation of Mediating Role of Six Sigma Approach in Rationalizing the COQ in Service Organizations." *Operations* and Supply Chain Management: An International Journal 15.1 (2022): 122-135.
- [11]. Jaganmohan. M, 2022. Worldwide investment in clean energy 2004-2019. *Statista*. Available at: https://www.statista.com/statistics/186807/worldwide-invest ment-in-sustainable-energy-since-2004/ [Accessed on 26th



December, 2022]

- [12]. Bode, Christiane, Michelle Rogan, and Jasjit Singh. "Sustainable cross-sector collaboration: Building a global platform for social impact." *Academy of Management Discoveries* 5.4 (2019): 396-414.
- [13]. Varriale, Vincenzo, et al. "The unknown potential of blockchain for sustainable supply chains." *Sustainability* 12.22 (2020): 9400.
- [14]. Lariccha. F, 2022. Global green technology and sustainability market size 2021-2030.statista. Available at: https://www.statista.com/statistics/1319996/green-technolog y-and-sustainability-market-size-worldwide/ [Accessed on 26th December, 2022]
- [15]. Khan, Syed Abdul Rehman, et al. "Industry 4.0 and circular economy practices: A new era business strategies for environmental sustainability." *Business Strategy and the Environment* 30.8 (2021): 4001-4014.
- [16]. Borowski, Piotr F. "Innovative processes in managing an enterprise from the energy and food sector in the era of industry 4.0." *Processes* 9.2 (2021): 381.
- [17] Mohtashami, Z., Aghsami, A. and Jolai, F., 2020. A green closed loop supply chain design using queuing system for reducing environmental impact and energy consumption. *Journal of cleaner production*, 242, p.118452.
- [18] Massari, S., Principato, L., Antonelli, M. and Pratesi, C.A., 2022. Learning from and designing after pandemics. CEASE: A design thinking approach to maintaining food consumer behaviour and achieving zero waste. *Socio-Economic Planning Sciences*, 82, p.101143.

- [19] Kazancoglu, Y., Ekinci, E., Mangla, S.K., Sezer, M.D. and Kayikci, Y., 2021. Performance evaluation of reverse logistics in food supply chains in a circular economy using system dynamics. *Business Strategy and the Environment*, 30(1), pp.71-91.
- [20] Velenturf, A.P. and Jopson, J.S., 2019. Making the business case for resource recovery. *Science of the total environment*, 648, pp.1031-1041.
- [21] Yusoff, Y.M., Omar, M.K., Zaman, M.D.K. and Samad, S., 2019. Do all elements of green intellectual capital contribute toward business sustainability? Evidence from the Malaysian context using the Partial Least Squares method. *Journal of Cleaner Production*, 234, pp.626-637.
- [22] Jaganmohan. M. 2022. Leading actions taken up by companies as part of sustainability efforts worldwide 2021 statista. Available at: https://www.statista.com/statistics/1323546/major-global-sus tainability-actions-by-companies/ [Accessed on 26th December, 2022]
- [23] Nayal, P., Pandey, N. and Paul, J., 2022. Covid-19 pandemic and consumer-employee-organization wellbeing: A dynamic capability theory approach. *Journal of Consumer Affairs*, 56(1), pp.359-390.
- [24] Sharma, A., Adhikary, A. and Borah, S.B., 2020. Covid-19's impact on supply chain decisions: Strategic insights from NASDAQ 100 firms using Twitter data. *Journal of Business Research*, 117, pp.443-449.