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The Influence of External Factors on Malaysian Green Technology Financial Scheme (GTFS)

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Abstract

The creation of the Malaysian GTFS is a strategy of the government to become a green society and to ensure that the nation will be sustainable. There is no doubt that the financing scheme has supported the green technology companies, and it is high time to know external factors may influence the impact on the companies' business performance. Therefore, this paper analyzed the influence of external factors on company recipients' business performance. Out of the GTFS's critical sectors, the researcher has chosen the energy sector to study. Qualitative methods have been used in this research, employing case studies and thematic analysis. Five companies have been selected and one official of the GTFS was interviewed. The research results showed that external factors have the most effects on the recipient companies. The identified external factors are government regulations and standards, external set objectives and processes by environmental certification agencies, global economy monitoring of green technology, and adopting new technologies and techniques. Consequently, there has been a notable improvement in the company's business performance. This research will allow new investors of green technology start-ups in the country to get an insight into the help they can get when they venture into the green technology business intending to join the sustainability development of the country.

Keywords: Green Technology, Green Investment, Green Technology Financial Scheme, Business Performance, Renewable Energy Producers

Introduction

There is a growing global realization that sustainable management of the planet's resources is imperative for future generations. The need for environmental protection has gained attention over the last century, and current global phenomena's such as climate change have

pushed these issues to the forefront. It is a way out of destruction, an approach to resuscitating the earth, and is obligatory to make sure that the earth will live on for a much longer time (Proudfoot and Kelley, 2017). Green technology has become a highly promising approach to mitigating environmental issues by promoting sustainable development practices and minimising adverse effects. The market for authentically green goods and services is expanding, and the number of businesses that might require green investment is rising (Scheer, 2011). Global environmental pioneers united to apply cutting-edge technology to address the world's most pressing issues (Visser, 2015). These environmental issues have prompted several nations to support sustainable development programs (Zaharudin, 2017). Therefore, the Malaysia Green Technology Financial Scheme (GTFS) was established to support this endeavour by providing crucial financial assistance to businesses in the green technology sectors. This scheme is essential for Malaysia's strategic goals of sustainability and long-term economic growth.

Despite the financial backing available through GTFS, the success of these companies does not depend solely on the funding provided. External factors such as regulatory frameworks, global economic trends, and technological advancements can profoundly influence the performance of recipient companies. Understanding how these factors affect companies under the GTFS is critical in ensuring the scheme's effectiveness in promoting green technology. A study by Zaharudin (2017), about the GTFS in Malaysia mentions the three financing competence gaps which are the different financing priorities of the stakeholders, bank knowledge asymmetry, and financial criteria for green technology. As part of the ongoing efforts to enhance the scheme, the Malaysian government announced in Budget 2023 an increase in the financing guarantee to RM3 billion, extending the scheme until 2025. The scope of the financing has also been expanded to include the electric vehicles (EV) sector, with a guaranteed limit of up to 60 percent, and up to 80 percent for the EV waste management sector (Tengku Zafrul, 2022). Putting up a business using green funds would mean that the businessman must focus on more than just the bottom line. This usually means including in their business statement the importance of taking care and securing the Earth and being socially responsible and conscious to all the inhabitants of the planet (Burkenholler, 2017).

The urgency to address environmental degradation, such as the increasing CO2 levels, melting polar ice, and other ecological concerns, makes green technology not only an environmental necessity but also a strategic business imperative. Investors and policymakers are now focusing on businesses that offer sustainable solutions, which aligns with the global push towards green technologies. There is still lacking research that focuses on entrepreneurial competency development for both the entrepreneurs and the bankers. Another research by Jin and Han (2017), stated, "Green economy needs green finance". In the case of China, it recognized the urgent need for a green economy, which is seen in its support for the development of green industries. China has supported green investment and financing projects, providing green credit support and a professional guaranteed mechanism. It has also established a national green development fund for green financial development. These green funds were invested in companies that were deemed socially conscious in their business deals or those that actively promote environmental and social responsibility. The research focus on the financial performance of China's green funds and analyzed the differences in allocations among the 96 green funds of China. The findings indicate that the performance of China green

funds is sensitive to the market factor. Nevertheless, this research does not measure the assessment of green funds on the business performance of the recipients.

Therefore, Malaysia's GTFS is an excellent program to ensure a sustainable green nation for Malaysia. However, some constraints need to be verified and checked to make sure of the sustainability and effectiveness of the system. Compared to some developed and developing countries, Malaysia is quite new to the green investment area. As such, there are still gaps that need to be filled policy-wise. Some issues need to be solved and risks to be mitigated. Because of this, a check and balance process are needed to assess the impact of GTFS on the recipient companies with regards to their business performance on both non-financial and financial performances. Thus, the impact of external factors on companies benefiting from green financing schemes remains underexplored, especially in Malaysia. Hence, this study seeks to bridge that gap.

Significance of the Study

This study is crucial for several stakeholders involved in the green technology sector in Malaysia. First, for government policymakers, the findings of this study will provide insights into how the Green Technology Financial Scheme (GTFS) can be refined to accommodate external factors that influence the performance of funded companies. By understanding the impact of factors such as government regulations, technological advancements, and the global economy, policymakers can create more robust strategies to ensure the success of green technology companies.

Second, for businesses and investors, especially green technology start-ups, this research offers valuable insights into how external factors can either enable or hinder business performance. Entrepreneurs can use this knowledge to navigate challenges in the regulatory environment, adopt new technologies more efficiently, and adjust to changes in the global economy. This study can also help new investors understand the risks and opportunities associated with green technology investments.

Third, this research contributes to sustainable economic development in Malaysia. As Malaysia strives to meet its Vision 2025 goals, promoting a green and sustainable economy becomes a national priority. By identifying external factors that influence the performance of green technology companies, this study supports national efforts to reduce carbon emissions, create green jobs, and promote renewable energy.

Ultimately, this research fills a critical gap by exploring the external factors influencing the success of green technology businesses. It offers a framework for assessing the effectiveness of green financing initiatives and guides future improvements in policy and business strategy.

Literature Review

The Malaysian Clean Technology Policy, dubbed the National Green Technology Policy (NGTP) was launched in July 2009 by Asia Pacific Integrated Model. The policy statement is, "Green Technology shall be a driver to accelerate the national economy and promote sustainable development." This definition of green technology is the development and application of products, equipment, and systems used to conserve the natural environment and resources,

which minimizes and reduces the negative impact of human activities. The criteria covered in the Green Technology policy are decrease in the degradation of the environment; low to zero greenhouse gases (GHG) emission; safe healthy: improved environment for all forms of life; conservation in the use of energy and natural resources; and promoting the use of renewable resources. NGTP has four major areas under its policies. They are energy, environment, economy, and social areas (Asia-Pacific Integrated Model, 2020).

According to Netherlands Embassy, Malaysia should recognize that for them to achieve a sustainable economic development, green technology implementation as a key role to play in for them to have a good national economic growth (Netherlands Enterprise Agency, 2017). The article also observed that Malaysia is determined to become a major player in green technology and renewable energy. This has realized many opportunities for Dutch expertise in these fields. Three areas were identified: water management, clean energy, and biomass.

The Ministry of Finance (MOF) approved an extension of the GTFS known as GTFS 2.0 with a financing amount earmarked up to RM 5.0 billion precisely, this was done in April 2018. This systematic plan was later launched on 3rd May 2018 in Kudat, Sabah. However, after the 14th General Election in May 2018, the new Government administration decided to discontinue the Scheme. Later, on 6th March 2019, MOF had the approval to restore GTFS 2.0 with the earmark of RM 2.0 billion for a specific period that is, January 2019 until the end of 2020. The scheme, which will last for two (2) years would offer a 2% p.a. interest/profit rate subsidy for the first seven years with 60% government assurance to finance the project (Green Technology Financing Scheme (GTFS), 2018).

The current group is to support the Energy Service Company (ESCO) to finance investment or assets related to energy-efficient projects and/or energy performance contracting. All applications of the scheme are channeled to the Malaysian Green Technology and Climate Change Corporation (MGTC) on which conducts the incipient screening and certification before applying for financing from financial institutions. The scheme is made usable until 31st December 2025 or upon reaching a total financing/funding approval amount of RM 2.0 billion whichever is earlier or any subsequent extension on the availability date expected to facilitate the growth of local green businesses and generate new markets and job creation. MGTC and Credit Guarantee Corporation Malaysia Berhad (CGC) are the agencies tasked with administering the Scheme. MGTC is responsible for the promotion, assessment, and certification and monitoring of Producers, Users & ESCOs under the Scheme, while CGC administers the rebate payments (MGTC, 2024).

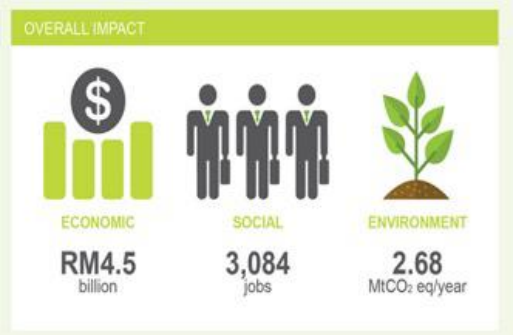

Figure 1 Green technology funding's overall impact 2017
(Source: MTGC, 2017)

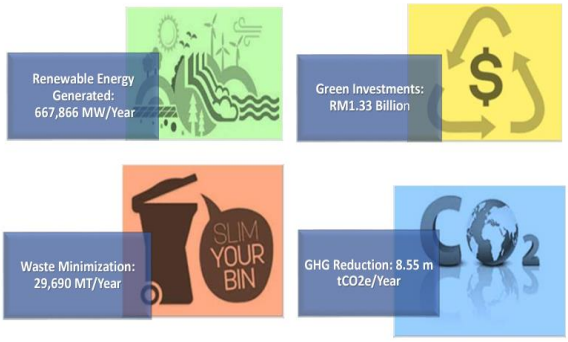

Figure 2 Green technology funding's overall impact 2019
(Source: MTGC, 2019)

Figure 1 shows the overall impact of GTFS in year 2017, where it has increased economic income to RM 4.5 billion, it has a social impact such that it has created 3, 084 green jobs, and a decrease in carbon emission in the environment with 2.68 mtCO2 eq/year. While Table 2, shows the significant contribution of GTFS towards Malaysia's sustainability goals by generating 667,866 MW of renewable energy annually and supporting RM1.33 billion in green investments. Additionally, the scheme has facilitated the minimization of 29,690 metric tons of waste each year and achieved a notable reduction of 8.55 million tons of CO2 equivalent in greenhouse gas emissions. These achievements highlight the scheme's critical role in promoting environmental sustainability and driving the green economy forward. The New Strait Times specified in their article entitled, "Government paying special attention to green technology", has a very bright expectation of GTFS for the green technology players when it discussed in its article that they are looking forward to the more than 3,000 green jobs that will be created because of the scheme (The New Straits Times, 2015).

GreenTech Malaysia has specified an international agency organization for Economic Cooperation and Development (OECD), an international agency promoting policies that improve the economic and social well-being of the people around the world, stated that GTFS is one of Malaysia's success stories. It is anticipated that by 2030, green businesses will contribute approximately 1.5% to the nation's Gross Domestic Product (GDP) or equivalent to RM60 billion from RM7.9 billion in 2013 (GTMP, 2017). A paper by Ahmad-Ludin et al (2013), assessed and identified the issues and challenges in financing green technology projects and some alternative financing choices to realize green technology projects in Malaysia. The study considered the clean development mechanism (CDM) as alternative financing for projects on renewable energy as well as energy efficiency financing. The paper has suggested policies and measures for the financing options. The issues that they highlighted in the paper are about the knowledge and technology transfers into business through reduction of risks in using financial schemes. They have proposed a solution which is to understand the needs of the technologies to have the right direction on technology transfers before utilizing financial schemes.

Another issue has come up in a study by Boon et al (2013), where it was stated that generally, sustainable or green energy projects pose problems in acquiring normal credit facilities in Malaysia due to the high risks involved in these ventures. Accordingly, the problem encountered is due to the absence of good techniques to be adopted among the sponsors to

correctly assess these high-risk ventures. These issues are the basis of GTFS in putting in place policies, such as rebates on interests and government guarantees, and technical evaluation mechanisms. The study by Sunil (2018), highlighted the aims of Malaysia to promote green jobs and skills in ASEAN. This is in conjunction with GTFS's promotion to create a target of more than 14 thousand green jobs by 2020. The government is also trying to develop policies to enhance the labor sector through upgrades for green jobs and skills.

External factors

External factors are the influences from outside that can impact companies or the organization. These are the factors from the outside environment that can affect the business performance of green technology companies. These factors can influence the performance of an organization which is economy, politics, competitors, customers, and even the weather are all uncontrollable factors and so forth (Jesse et. al., 2019). The external factors studied in this research are government regulations and standards, compliance with external environmental standards, globalization, and adaptation of new technologies and processes. These external factors are uncontrollable and unforeseeable. A business establishment's stability and profitability are symbiotic in its capability to identify and respond quickly to external environment changes. The ability to deal with unforeseen market reforms may affect the life-and-death situation for an organization. Tax reform by the government may have an effect that is significant on a business, or an offer of support, such as the GTFS, may become a critical success factor (CSF).

Seo and Lee (2019), conducted a study that identified the effect of external factors on the business performance of (small and medium-sized enterprises) SMEs in Korea. In their findings, they showed that policy changes and the support of the government play a very important role in small ventures. Moreover, the authors also showed that the innovation system of start-ups, specifically, the improvement of the innovation system is deemed important in the company's growth. A study by Mahmutović et al (2017), revealed the impact of globalization on the performance of companies in Bosnia and Herzegovina. The results show that there is a positive effect of globalization in the companies of the countries. It also showed that the negative effects of globalization are felt more by SME's and lesser by larger companies.

Economies that concentrate more on basic research can remain ahead of other economies only by creating new businesses through inventing new technologies (Kukreja, 2016). They should be ready to invest in businesses that are currently excelling because other economies will catch up with them and existing economies will not be able to charge premium prices for their products. New technologies will help in the production of new products and services. This will help to increase revenues and profits of companies. History has it that technologies have created new businesses like automobiles, railways, telephones, computers, and more. Thus, organizations also use new technologies to do business differently and more effectively. For instance, by using the Internet Dell can earn greater profits by serving only the most profitable customers. Some companies have used the power of the Internet to create virtual design teams.

According to Song et. al. (2018), there are two types of technological progress in opening a new research perspective regarding the biases of technological progress. The results indicate that enterprise productivity could be stimulated if firms input in R&D. Therefore, for firms that endeavor to save energy and reduce emissions on the premise of following national ERs, governments should grant certain incentives and subsidies by which social investment and technological resources could be guided to these firms at a certain extent and finally realize a win-win situation regarding environmental protection and corporate profit growth. These external factors have a great impact to the organization's objective of the green concept.

Business Performance through Green Funding

Business performance is determined by the strategies an organization foresees and implements. Therefore, when business performance is in question, a neighbor concept business strategy requires close attention and elaboration. Business strategy can be defined as the sum of the decision-making processes in terms of selection, implementation, and assessment of alternative means to achieve and sustain competitive advantage within a competitive environment. In other words, the success of business performance expresses the degree of fulfillment of managerial goals in business practices and their realized outputs by the end of a certain period (Porter, 1991).

Business performance is an important measure and is defined as the quantification of the capabilities of a business organization's operations for functionality and quality. Kellen and Wolf (2003), stated that the focus of business performance measurement is on the way the business is conducted to help them survive and thrive. It is a way to recognize good achievements and to identify further needs for improvement (Kopczynski and Lombardo, 1999). It will also help in the development of business objectives and give feedback on the progress of objective attainment. Other activities also depend on business performance, budget formulation, motivating employees, and resource allocation (Daud and Mohamed, 2007).

A previous study on green economy and green finance by Jin and Han (2017), found the urgent need for a green economy, which is seen from its support in the development of green industries. China has supported clean investment and financing projects, providing green credit support and a professional guaranteed mechanism. It has also established a national green development fund for green financial development. These green funds were invested in companies that are deemed socially conscious in their business deals or those who actively promote environmental and social responsibility. This paper studied the financial performance of China's green funds and analyzed the differences in allocations among 96 green funds of China. The findings indicate the performance of China's green funds is sensitive to the market factor. It plays a key role in supporting the main direction of Chinese industrial changes and upgrades for the reason of achieving new rivalry in the business arena. Individually, green funds show importance in manufacturing industries, showing that China's green funds have a characteristic of industry concentration instead of diversification. It consistently states that green funds' industry preference has a positive correlation with innovation indicators, showing that innovation and R&D activities of enterprises are what drive the new economy. In addition, green funds are the financial powers that would support

green technological innovation for the industrial sector. Green funds would especially benefit SMEs with upcoming smart and green technologies.

Theoretical Framework

This research bases its model on two theories the Belief-Action-Outcome (BAO) Model to explain the green technology transition of the businesses and the Fiedler's Contingency Theory to explain the external factors and the business performance. The 'belief' element explains the opportunity of transitioning from a traditional business to a green technology business through the GTFS and the belief that this transition will help in the sustainability of the environment and the businesses itself.

Based on Dias et al (2017), environmental beliefs will influence the companies in transitioning into the green technology business concept. The 'action' element is the use of the scheme to improve on the green technology business itself and it is also the act of the GTFS is offering the scheme to the companies who will choose to transition or start-up into the green technology business. The 'outcome' element is the improved business acumen of the companies through positive business performance and environmental sustainability which is the basic reason for the green technology program.

The external factors are influenced by Fiedler's Contingency Theory such that all good practices are shaped or guided by factors that they are faced with. Depending on the influence of external factors, good management practices, specifically in the business performance of the companies, will succeed at varying levels. This means that the financial and non-financial performances of the companies are influenced by factors outside of the company or the external factors. Just like the research of Amara and Benelifa (2017), where the accounting practices of their subjects were influenced by the accounting systems as explained by Fiedler's Contingency Theory.

Methodology

In this research, the focus is on the Green Technology Fund of Malaysia or the GTFS. The impact of the external factors is studied on the business performance of its company recipients. Out of the key sectors of GTFS (energy, water, waste, transport, and building) and GTFS 2.0 (energy, manufacturing, transport, building, waste, and water), the research has chosen the energy sector to study. The reason why this sector is chosen is because this is where most funding applications were received. 461 target companies have been considered or received financing in the energy sector of the GTFS. However, the research only considered the companies that can be contacted as respondents of the study because many of these recipient companies do not have contact information.

The methodology used in this paper is multi-method qualitative research. There were two data gathering techniques used in the study, that is, in-depth interview, and document analysis. For the interview, a semi-structured interview guide was developed which was used for all five companies. The semi-structured interview guide was tested for validity. The interview data was analyzed and converted to case studies. These case studies were processed using case analysis and cross-analyzed with the document analysis which was followed by a thematic analysis.

Results and Discussion

The information shown in Table 1 is the summary of the basic GTFS profile. Two types of green technology business ventures applied for the loan, GT users and GT producers. Among the recipients, the producers of green technology are more than users of green technology. Out of the four sectors of clean technology (energy, water, waste, building and township, and transportation), energy has the highest number of applications in GTFS while the least is transportation. This shows the imbalance of applicants for the different sectors. Applications for the scheme were dominated by the energy sector with almost three-quarters of the applicants being users and producers of green energy.

Table 1
Summary of GTFS profile

Items	Description	Specification
GTFS Versions	GTFS	Rebate 2%
	GTFS 2.0	Rebate 2% Government guarantee 60%
Types of Business Ventures	Users	58 companies
	Producers	566 companies
Green technology Sectors	Energy	461 companies
	Water and Waste	128 companies
	Building and township	21 companies
	Transportation	16 companies

Despite the issues and the challenges, GTFS showed a positive performance and is gaining popularity and a good reputation. This is evident through the extension of the program with the introduction of GTFS 2.0. All areas of the government, even with the change of government leadership supported the program in 2018.

Among the respondents, the demographic profile was also taken. The company representatives who were interviewed are all in executive positions and are all decision-makers and are knowledgeable about the processes, procedures, and performances of their companies, meaning they have full knowledge of the operations, specifically on the company's linkage with GTFS and the business performance of the company.

Only one of the companies is new and the rest have existed before, so they are either retrofitting or the rest are expansion. The expanding companies either added new buildings, new factories, or new plants while the retrofitting companies added new technologies by purchasing new equipment or adding new products through a new technology, which is producing renewable energy. All the companies are producers of green technology, specifically, renewable energy, which is biogas, biomass, and solar energy.

In Yatim et al (2017), it is discussed how GTFS considers companies that apply for financing in the government agency. They said producers of the green technology can receive maximum financing of up to RM 100 million, while users of the green technology are eligible to apply for

a maximum of RM 10 million. The CGC provides a 60% guarantee of the approved financing amount and a 2 % rebate on the interest rate charged by the participating financial institutions according to Green Tech Malaysia.

Three out of five companies are producers of solar energy, which is 60% of all the companies interviewed. One reason why companies produce solar energy is because the source of energy is free, and it will incur modest costs for operations and maintenance costs and the capital investment cost is very low. The total cost of solar electricity will pay off the capital investment very fast. Based on Weisberg and Roth's (2011), research on green energy through biogas, reveals the potential and benefits of using a green technology approach. The study states that aside from its sustainability potential. It would also create at least 300 permanent full-time jobs and reduce annual greenhouse gas emissions by 800,000 metric tons of carbon dioxide-equivalent emissions, almost 5% of the reductions it needs to meet its 2020 greenhouse gas emissions goals. The policies also help realize this opportunity for rural economic growth and environmental stewardship according to them. Moreover, solar photovoltaic (PV) projects are bankable which means that it is easy to get financing because the projects are consistent, predictable, and safe when the process is well executed (Ahmad-Ludin et al., 2013).

The most popular reason among the companies is new business opportunities. Also, the reason they want to do business with green technology is they want to reduce the risk of being turned down by financial institutions because of the viability of the green technology business concept which makes approval quicker, other reasons are they want to take advantage of the 2% rebate; they wanted to improve the physical structure of the company; and, want to build credit for the future, to fund the company expansion, and to purchase machinery and equipment.

The author identifies the number of employees because it also specifies the size of the entrepreneurship, whether micro, small, medium or large. According to the SME Corporation of Malaysia, a company that has less than 5 is considered a microenterprise, 5-29 is a small enterprise, 30-74 is a medium enterprise and 75 and above is a large enterprise (SME Corp Malaysia, 2019). From the number of employees that the companies have, it shows that the companies are mostly in small and medium-sized enterprises (SMEs). Only one is a large enterprise.

The financial institutions that are most popular among the recipients are OCBC, CIMB MDV, and Maybank, which is corroborated by the GTFS database (2019). Although the companies are themselves green technology producers, they are also supposed to implement green technology policies within their organization. Most of the companies implemented more than 50% but two of the companies are still not implementing that much. This is because the companies not implementing are still starting and have implemented in their sister companies.

External Factors of Recipient Companies

Follow government regulations and standards on green technology

All the companies follow government regulations and standards on green technology and Company 2, and Company 4 said their companies follow strictly. For Company 2, however,

when asked about external services to periodically measure environmental compliance via external policies, the company does not use any external policies. They only concentrate on government and local authority policies to comply with. They do not follow other external regulations. They only satisfy environmental regulations imposed by the government.

According to company 3, even the environmental regulations imposed by the government are satisfied by the company in terms of solar farms. Governments all over the world take active roles in Green ICT and actively consider environmental factors as part of its ICT programs. In Indonesia, the government endorses mandatory environmental standards for use in relevant ICT acquisitions through the Ministry of Communications and Information Technology (MCIT). A mandatory environmental standard refers to the application of an eco-label or criteria in agency procurement processes to achieve a minimum level of environmental performance. The environmental standards assessed as mandatory should be described in the plan and implemented by Indonesian Government agencies in their ICT procurement processes. The purpose of selecting mandatory standards for ICT acquisitions is to mitigate and/or minimize significant environmental impacts of ICT and/or significantly improve whole-of-government. The Government of Indonesia provides an incentive for manufacturers to develop and produce more ecologically sustainable goods and services.

Compliance with External Set Objectives and Processes by Environmental Certification Agencies

Company 1, Company 2, and Company 4 do not comply with external set objectives. Company 1 is not even sure if they would later go for certification. Company 3 and Company 5 have environmental certificates from external agencies. Company 2 said that for ISO and other certifications, they would later consider applying for them but now, they do not have any certification. Company 3, on the other hand, said, there are external services that they follow but it is the technical department that do so between 6 months to 1 year. The company currently has no environmental certification like ISO and others. Company 5 has ISO 14001 certification but not 14004. Company 2 would apply for a certification because they know the importance of it. But currently, they do not have it yet.

Global Economy Monitoring in Terms of Green Technology

Three out of five companies, Company 1, Company 2, and Company 3 have no global economy monitoring in terms of green technology. Company 1 added that they monitor only Indonesia and Malaysia because they are dealing with the palm oil industry and the neighboring countries have a lot of palm oil with a big market share, they are thinking of how they can expand their business with them. Company 2 and Company 3 have global economy monitoring. Company 2 follows the environmental authority of Malaysia whatever the imposition they have on the global economy. Company 3 subscribes to all the newsletters on the global economy that support clean and green product services and marketing. Furthermore, they said, they follow global requirements and policies related to green technology.

Adoption of New Technology and Processes for the Company's Production

All the companies adopt new technologies and processes for company production. Company 1 asserted that they would adopt new technologies if it would be working for them. Currently,

all the technology they are using has been in existence and is not new. They also have optimized processes to reduce solid waste, air pollution, and noise pollution. But they focus more on-air pollution. For company 2 the new technology and processes for the company's production are the same ones that they have been using so far. They just follow what they have now, but it is not considered new. The boiler they are using has been upgraded to increase its quality. Previously, most companies were just using boilers to generate steam, but dust would go into the air. Now after the upgrade, dust no longer goes into the air because of the installation of a new filter into the equipment. The company has a few systems to reduce air pollution, for the solid waste, they collect them and sell them to the fertilizing plant to be used for other things. Company 3 adopts new technology and processes for solar farms. This is because the new technology is more effective, it can provide them with a productive routine. Company 4 and Company 5 use new technology and new processes because the product dictates that they should.

Conclusion

The year 2025 is just around the corner. All efforts are needed to attain Malaysia's target of a fully developed country by that year through Vision 2025. One indication of being developed is through a stable green and sustainable society. To attain this, the government has shown a lot of effort and one of its brainchildren is the GTFS implementation to promote green technology start-ups in the industry. It is undeniable that green funding is becoming increasingly important even in these times of economic crisis. It is apparent from the findings that GTFS has made a good mark on the sustainability and green society plans of the country. The recent enhancements announced in Budget 2023, including the increase in financing guarantees and the expansion into the EV sector, are likely to accelerate these positive impacts, ensuring that Malaysia remains on track to meet its sustainability targets by 2025 (Tengku Zafrul, 2022). The recent enhancements announced in Budget 2023, including the increase in financing guarantees and the expansion into the EV sector, are likely to accelerate these positive impacts, ensuring that Malaysia remains on track to meet its sustainability targets by 2025 (Tengku Zafrul, 2022). The profile of GTFS shows stability, especially the indicators of further improvement. The continuity of implementation from 2010 to 2020 indicates the sustainability of the scheme and that it is effective in encouraging companies to venture into green technology.

There are good indicators of the effects of the GTFS on external factors of the companies. The research has identified that compliance with government regulations is the top factor that indicates progress in green technology financing for companies. And more attention should be given to external certifications. Globalization is also something that companies need to be aware of. Companies need to monitor global indicators for their business concept for green technology and green business. There is a strong impact of GTFS on the business performance of the companies as seen in the results. Green financing has become a diving board for companies to improve and expand their business for those who have been in existence before the loan, and it has also become the push for start-ups. The GTFS has a strong impact on the improvement of financial performance because it has helped with capital expenditures and shows the improvement in assets, revenues, and profits of the companies. It also showed that the companies only have one common customer, which is TNB. This situation implies strong support from the government sector in a win-win situation through the FiT program where

their products are being bought by the customer and they are given a long contract to supply it.

For the Malaysian government agencies that are directly or indirectly connected with GTFS, the results of the study are important because an assessment of the financial scheme will help improve the policies governing it. It will fill up the gaps that are still surrounding the program because of its early stages of implementation. The results will give some views that otherwise have not been considered by normal operations. It will strengthen the program by considering strategies that will be recommended by this research. This is likewise, important to the present company recipients of the fund because they will be able to know their business progress and get confirmation whether their decision to get financing for their business is the right one. An evaluation of their business performance will enable them to know what needs to be improved, how to move forward in their business venture, and how to continue with their quest of helping in the sustainability development of the environment through green technology business. For new investors of green technology start-ups in the country, this research will allow them to see how to go about getting green financing for their business ventures, how to choose options for financing, and whether it is worth it or not. It will give them an insight into the help they can get when they venture into the green technology business to join the sustainability development of the country. This research is significant to the author as it is his interest to work on green sustainability and green technology.

Recommendations

GTFS needs to restructure its policies regarding the sectors. The results of the analysis show an overwhelming weight for the energy sector and a very low turnout for the building and transport sectors. The following recommendations are developed based on the results of the analysis:

Internal factors such as management commitment and accountability should be built up. Since top management are the ones who initialize and decide on important ventures of the organization, organizations need to develop and ensure the commitment and accountability of their executives. This will not only make for a smooth operation in the organization but will also boost the morale of their employees, which will lead to better productivity.

There should be a quota for each sector to discourage a cumulative and large number of applications into one sector. Each sector should be represented equally in the industry to prevent an imbalance of production and sustainability in the general industry. This would ensure the development of all sectors, not just energy. Since a sector is deemed less applied in, i.e. transport and building and township, more promotion and propaganda should be made in these sectors to attract more companies to apply to it.

Open the scheme to more private investors in the low application sector and promote these to give more incentives for companies to work on projects that these private investors need. Add more sectors that are relevant in green technology such as organic farming, green agriculture, and the like, to attract more companies who are more inclined in the areas of green technology and to boost growth in these sectors. More propaganda for green

technology should be done to reach out further to interested parties for awareness and participation in this government effort for a greener and sustainable Malaysia.

Consider the extension of the GTFS beyond 2020 so that businesses that are just starting will have the motivation to change their business concepts to green technology. Business schools must consider including in their curriculum the offering of green business, green investment, green financing, sustainable production, green accounting, etc. so that at the academic level, they are already oriented about integrating their business with sustainability.

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