# THE AWARENESS IN APPLICATION OF GREEN ACCOUNTING AMONG SMES IN MALAYSIA

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## SUPERVISOR'S APPROVAL

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The thesis is submitted in partial fulfilment of the requirements for the award of Bachelor of Technopreneurship With Honours

Faculty of Technology Management and Technopreneurship Universiti Teknikal Malaysia Melaka

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## **DECLARATION OF ORIGINAL WORK**

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## **DEDICATION**

I would like to dedicate the appreciation to beloved parents who supported me from spiritually and financially. A special thanks to my supervisor and panel who guided me throughout this research and even thanks to my friends that helped and assisted me through the journey of research.

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Next, I am sincerely thanks to the researchers that they have previously conducted the similar study and published online. Although the research topic of the study was different, but the theory and knowledge provided were useful as a reference in this final year project.

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#### ABSTRACT

The rising of environmental awareness bring impact to the management of corporation. The traditional accounting approach that record daily business operation usually dint' include environmental information into accounting. This is when green accounting comes in handy, it is a type of accounting method that convert environmental information into monetary value and physical data. Green accounting later to be discover as tool to establish long-term sustainability of an organization. However, few researches suggested that most of the companies in Malaysia are only still in developing green accounting report stages. Thus, this research aims to discover the awareness in application of green accounting among SMEs. This study is an explanatory research and the result will be collecting by using quantitative method. Convenience sampling method will be using in this research and questionnaire will be distributed to the target respondent which is the owners of SMEs in Melaka to acquire the result for the study. The ideal sample of respondent will be around 150 SMEs owner around Melaka. The collected data will then be analysing with Statistical Package for Social Science (SPSS). With the inspection of independent variable (Authority Legal Pressure, Environmental Awareness, Economic Motives, and Social concern) with dependent variable (Green Accounting awareness). Only authority legal pressure and environmental awareness proves has a significant relationship with green accounting awareness. This research paper provides overall concept of green accounting awareness status among SMEs to Malaysia authority as a reminder for government the importance of sustainability. The research limitations are convenience samples which may not prove to be a valid samples based on some research. Some extended concepts are suggested for further studies.

Keyword: Green Accounting Awareness, Sustainability

#### ABSTRAK

Peningkatan kesedaran alam sekitar membawa impak kepada pengurusan korporat. Pendekatan perakaunan tradisional yang merekodkan operasi perniagaan harian biasanya 'termasuk maklumat alam sekitar ke dalam perakaunan. Ini adalah apabila perakaunan hijau berguna, ia adalah sejenis kaedah perakaunan yang mengubah maklumat alam sekitar menjadi nilai kewangan dan data fizikal. Perakaunan hijau kemudiannya dijumpai sebagai alat untuk mewujudkan kelestarian jangka panjang sesebuah organisasi. Walau bagaimanapun, beberapa kajian mencadangkan bahawa kebanyakan syarikat di Malaysia masih dalam peringkat pembangunan perakaunan hijau. Oleh itu, kajian ini bertujuan untuk mengetahui kesedaran dalam penggunaan perakaunan hijau di kalangan PKS. Kajian ini adalah penyelidikan penjelasan dan hasilnya akan dikumpul dengan menggunakan kaedah kuantitatif. Kaedah sampling kemudahan akan digunakan dalam kajian ini dan soal selidik akan diedarkan kepada responden sasaran yang merupakan pemilik PKS di Melaka untuk memperoleh hasil kajian. Sampel responden yang ideal akan menjadi sekitar 150 pemilik PKS sekitar Melaka. Data yang dikumpulkan kemudiannya akan dianalisis dengan Pakej Statistik untuk Sains Sosial (SPSS). Dengan pemeriksaan pemboleh ubah bebas (Tekanan Undang-undang Pihak Berkuasa, Kesedaran Alam Sekitar, Motivasi Ekonomi, dan keprihatinan Sosial) dengan pemboleh ubah yang bergantung kepada (Kesedaran Perakaunan Hijau). Hanya kuasa tekanan undang-undang dan kesedaran alam sekitar membuktikan mempunyai hubungan yang signifikan dengan kesedaran perakaunan hijau. Kertas kajian ini memberikan konsep keseluruhan kesedaran perakaunan hijau di kalangan PKS kepada pihak berkuasa Malaysia sebagai peringatan kepada kerajaan tentang kepentingan kemapanan. Keterbatasan penyelidikan adalah sampel kemudahan yang tidak dapat dibuktikan sebagai sampel yang sah berdasarkan beberapa kajian. Beberapa konsep lanjutan dicadangkan untuk kajian lanjut. Kata kunci: Kesedaran Perakaunan Hijau, Kemampanan

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#### **CHAPTER 1**

#### **INTRODUCTION**

#### **1.0 Introduction**

In chapter 1, the background of this study will be discussed, thus further explanations of recent trendiness of the industry as regard to the study. Moreover, there are some issues and problem yet currently faced by the industry will also be stated in this study. Subsequently, research objective and research question will be build based on the problem statement. Significant of study and scope of this research will also be fixed in this chapter.

#### 1.1 Background of study

After the industrial revolution, the increased human activities, mainly due to the burning of fossil fuels caused the greenhouse effect to be happened, which is the phenomenon of the existence in the atmosphere of harmful particle such as carbon dioxide that absorb in the infrared part of the spectrum, causing the surface of the Earth warmed up (Hester & Harrison, 2002). Humanity's economic growth dramatically increased due to the technology developed, machinery has replaced most hard labor job and its consistency and efficiency in production has caused more material consumption in production in the industrial. According to National Aeronautics and Space Administration (NASA) report, the carbon dioxide ( $CO_2$ ) level (parts per million) has never pass the safe line (which is 300) for past centuries, but right after the year 1950, the  $CO_2$  level dramatically increase from 300 to 400 in the current level (NASA, n.d.). Despite all the potential health risk risen due to the greenhouse effect, the global public concern and alertness toward climate change are vary greatly from region to region due to various reason such as experiential, physical, psychological and socio-cultural factors (Lee, Markowitz, Howe, Ko, & Leiserowitz, 2015). Ultimately, Malaysia is one the country that fell into the group of "75% aware of climate change".

The concept of industrial metabolism is growing has supported by (Krausmann, et al., 2009), the research shows that industrial consumption of raw minerals over the century radically increasing, such minerals consist of construction minerals, ores and industrial minerals, fossil energy carrier, and biomass. The depleting and exploiting usage of natural minerals caused serious issues like environmental degradation has arouse international alertness in protecting the environmental in worldwide scale (Baldivieso, Anderson, & Chuvileva, 2017).

Due to the public aware of environmental concern, the business can't be avoid to deal with the environmental affected by their business operation, and with plenty of external factors influencing the business operation from the external, the management level should view the issues from different level of organization, including accounting in order the company to stay sustainability stage (Yang, Dong, Jiang, & Liu, 2019). Mentioned about sustainability in company, it is a strategy where business consider creating a long-term value by considering how manage business operation in the ecological, social and economic environment, sustainability strategy allows to foster the company longevity.

It has been around three decades after the Brundtland Report in 1987 has been publish, still the development of strategy toward sustainability remains uncertain for both individuals and company, and the big organization claims that continue aware of practicing and implementing the related environmental related initiatives (Egan & Tweedie, 2018). Based on (Shakkour, Alaodat, Alqisi, & Alghazawi, 2018) green accounting allows the organization to achieved sustainability stage and function as a more confidential and internal annual report compare to additional management accounting, as the information of green accounting provide more detail regarding environmental and social welfare. Besides of assisting organization to achieve sustainability strategy, green accounting function as a tangible tool in fulfill legal requirement. As the concept of Corporate Social Responsibility (CSR), the corporate cannot ignore their contribution to the society, otherwise may lead to any consequences (Beredugo & Biobele, 2015). A good example of company failed to view CSR as a matter is Volkswagen, as they produce a design that means to circumvent emissions control, and the particular design that will poisoning the planet and reject of any ethical standards in engineering lead to the resignation of the Volkswagen CEO and also Audi's head of R&D and Porsche's engine chief. The case proof that company should always consider CSR as one of the key elements in business operation. Green accounting also functions as tool in proof that company implement CSR by recording the cost incurred by the company in CSR funds.

The theory of green accounting originally discover back in 60s and the 70s, the professional literature of these terms only emerging back in 90s (Hyrslova, Beckova, & Kubankova, 2015), however, only until recently, the release of System of Environmental-Economic Accounting 2012 (SEEA 2012), there are no formalize development of framework or approach function as guideline in implementing green accounting before, proving that the lack of awareness of public in discovering the need to implement green accounting in their organization (Balana, 2013).

(Balana, 2013) also prove that most of the developing countries has aware the need of green accounting as most of them develop environmental related accounting issues, few example such as: Norway, record the pollution of air and energy resources into physical accounts; France, stated natural patrimony accounts where the country record the state and changes in natural environmental; The Netherlands developed Material Flow Accounts (NAMEA), is a accounts that records waste, water, energy and environmental expenditure, air and water emissions; Australia, accounts for energy and emissions, fisheries, minerals, and water; Canada, develop the natural resource stock accounts; Germany, the material and energy flow accounts; United Kingdom, record in account of atmospheric emissions, energy, oil and gas consumption.

Many developed countries and an increasing number of developing countries have implemented green accounting, or some of the components of green accounting as in order to continue supplement their national accounting systems, however, based on the record, there has no current countries that has fully developed the green accounting and full set of account based on the framework of SEEA.

#### **1.2 Problem Statement**

As from a broader view, green accounting is helpful when it used to identify the part of the gross domestic product (GDP) that reflect the costs necessary to compensate for the negative impacts of economic growth, that is, the defensive expenditures. While narrow down to company side of views, green accounting allows the management to establish a linkage between Physical Resource Accounts and Monetary Environmental Accounts that allows company to ensure additional cost is recorded to prevent system leakage. This also enable management to assess to environmental costs and benefits which gain ability to account for the maintenance of tangible resources.

Based on the data ASEAN cooperation of environment (About ASEAN and the Environment, 2019), ASEAN region are fill with countries that endowed with rich natural resources, this contribute to the world essential life support system in terms of sustainable. These natural resources function to be sustaining a wide range of life activities, environmental and livelihoods, also providing water, food, and energy. However due to the population and economic growth in this region, the region suffers from environmental degradation, which also led to more natural resources consumption and waste generation, resulting in unsustainable development. Therefore, ASEAN is facing enormous challenge in maintaining the environmental sustainability and economic development.

ASEAN has rich forestry, the forest of ASEAN cover around 211,172,000 ha in 2012, and consists of 432,563,000 ha, its total cover 14% of total land mass. Beside of forestry, in terms of freshwater resources, ASEAN region also endowed with 4,986 billion cubic meters of internal renewable water resources. Taking account in biodiversity, three mega countries that consist of 90% of global biological diversity, Indonesia, Philippines and Malaysia.

ASEAN is also highly populated, the region consists of 11.6% of global population, which is around 629million of people, with 142 people per square kilometer, the number is around three times higher than the global average which is at 56.63 people per square kilometer. Talking about urbanization, Malaysia is one of the countries in ASEAN that already high urbanized as it has more than 75% of population living in urban areas.

Compare with the other developing countries, Malaysia has higher rate in terms of industrial development and urbanization, in order to achieve the Wawasan 2020, which is to make Malaysia as one of the developed countries by the year 2020. However, with such rapid development comes in some consequences, such as the pollution in several conurbations. The urban agglomerations basically occur in three main conurbations, Klang Valley, Greater Penang, and Iskandar Malaysia. With limited comprehensive data on emission pollution, the research suggested that mobile sources is one of the main contributor (70-75%) for air pollution (Shin, Chin, Pretto, Thuppil, & Ashfold, 2019).

Based on the official statistic for 2013, respiratory illness is the second highest reason who people are getting hospitalization (12.4% of the case) and mortality (21.7%) (MoH, 2013). According to (Abidin, Semple, Rasdi, Ismail, & Ayres, 2014), the air pollution has impacts on Malaysia majority on health related to respiratory organs which cause disease like asthma and etc. Research also show a positive correlation between the illness like asthma, acute respiratory infection, and conjunctivitis and pollution level (R, MN, & NA, 2003).

In general, green accounting allow more companies to realize the important of consider environmental issues as part of the business operation, working toward for sustainable environmental. After doing so, the environmental will be preserved, and a healthier living ecosystem will be provided for the future generation. However, due to the unaware of Malaysia company toward green accounting (Ariffin, 2016), this

research is conducted to investigate the level of awareness of green accounting among SMEs in Malaysia and the factors possibly affect such awareness.

## **1.3 Research Question**

To investigate how aware is Malaysia SMEs toward the implementation of Green Accounting in their business field. Then analyze the potential factors that affect the business owner to generate such awareness toward green accounting.

- What is the awareness level in application of green accounting among SMEs in Malaysia?
- What does the reason affect such awareness level toward green accounting among SMEs in Malaysia?
  - What is the effect of Authorities Legal pressure on awareness level toward green accounting among SMEs in Malaysia?
  - What is the relationship between environmental awareness with awareness level toward green accounting among SMEs in Malaysia?
  - What is the impact of economic motives on awareness level toward green accounting among SMEs in Malaysia?
  - What is the role of social concern between awareness level toward green accounting among SMEs in Malaysia?

## 1.4 Research Objective

- To investigate the awareness level in application of green accounting among SMEs in Malaysia
- To determining the effect of Authorities Legal pressure on awareness level toward green accounting among SMEs in Malaysia
- 3. To figures out relationship between environmental awareness with awareness level toward green accounting among SMEs in Malaysia?
- 4. To explore impact of economic motives on awareness level toward green accounting among SMEs in Malaysia
- 5. To find out the role of social concern between awareness level toward green

accounting among SMEs in Malaysia.

#### 1.5 Significant of Study

Currently, based on the latest United Nations estimates, Malaysia has reached the population of 32,412,581 in 2019, the amount is approximately 0.42% of global population, the population density in Malaysia is 99 per km<sup>2</sup>, and the urbanization of population is 77.1%, around 25,029,766 people. Based on statistic, with such large population in Malaysia and high rate of urbanization, there are already a moderate rate of air, drinking water, sound and light pollution and a high rate of water pollution in Malaysia (NUMBEO, 2019).

Due to such concern, (Mei, Wai, & Ahamad, Environmental Awareness and Behaviour Index for Malaysia, 2016) has conducted research among Malaysian about the environmental awareness and environmental behavior on water pollution, air pollution, waste management and climate change, the resulting is interesting due to Malaysian are well aware, absolute attention and worry about the imperfection concerning Malaysia environment and quality of life. However, related to environmental behavior, Malaysia has low environmental behavior, as for example, most of Malaysian still fail to practice car-pooling or public transport due to the individual convenient.

Regarding the citizen well aware to environmental practice but still not doing action, some of the Malaysian companies putting effort into communicating business operation with environmental information, granting the company transparency of accounting information in their annual report to the public. However, there is a research suggested that not all of the company well aware of the need to implement green accounting.