

# Developing and Synthesising the EESG Factors of Electricity Producing Company in Malaysia for Its Sustainable Future: A Stakeholder Perspective

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## Abstract

**Purpose:** Sustainability development is one of the most prominent approaches to dealing with growing global disruptions including increasing the stakeholder demand. Stakeholder engagement analysis, on the other hand, is becoming an essential component for sustainable business. The main purpose of this paper is to explore, develop and synthesis the factors of each sustainability pillars (EESG) of Malaysian electricity producing company especially for TNB for their healthier engagement with the stakeholders.

**Design/methodology/approach:** From a methodological standpoint, this research employed a qualitative analysis for data collection based on desktop analysis through literature review followed by content analysis.

**Findings:** Throughout the extensive literature review, the researcher have developed and synthesised altogether 66 factors of EESG where, 12 factors for economy (E), 14 factors for environment (E), 20 each of social (S) and governance (G).

**Research limitations/implications:** Due to the time and situation constraints, this study focuses only desktop analysis through literature review.

**Practical implications:** The findings of this paper contribute to the understanding of the disclosure factors of each of the sustainability pillars in particular. Hence, the synthesised EESG factors will be beneficial and plausible guidelines for the Malaysian electricity producing company especially for TNB as TNB aspires to be one of the top ten electricity utility corporations in the world.

**Originality/value:** This research is a unique especially in Malaysian context as this paper is produced a synthesised list of sustainability factors which is not available in existing literature.  
**Paper type:** Research paper

**Keywords:** Sustainability, Electricity companies, Sustainability pillars, TNB, EESG factors

## **Introduction**

### ***Sustainability***

In recent years, the term "sustainability" has been used to describe advancements in a variety of areas, including overexploitation of natural resources, manufacturing operations, linear product consumption, investment direction, citizens' lifestyles, consumer purchasing behaviours, technology advancements or business, and general structural arrangements. Because of the environmental and socioeconomic issues that civilisations all over the globe are dealing with, the term "sustainability" has come to be used in a more particular context. These days, sustainability is defined as the methods and actions that prevent mankind from degrading the environment while maintaining an environmental integrity that does not negatively impact current advanced civilisations (Sustainability – What Is It? Definition, Principles and Examples, 2021). In policy-oriented research, the word sustainability has become prominent as a statement of what public policies should achieve (Brundtland, 1987). Most frequently, sustainability is viewed in terms of three dimensions: social, economic, and environmental (Wilderer, 2007; Ike, 1984; Fukuyama, 2008; Hotelling, 1931).

### ***Sustainability in Electricity Producing Company***

Companies are increasingly focusing on sustainability and responsible business performance in addition to financial performance (Leszczynska, 2012). There are significant variations in the techniques used by different companies to make business decisions (Lozano, 2012). The focus should be on the sustainability of entities as linked components rather than separate entities. It is still important to create a range of context-specific sustainability definitions, goals, indicators, and so on within each sector (Bell, 2008). Most businesses prioritise operations and procedures, management and strategy, and assessment and communication (Lozano, 2012). The linkages of economic, environmental, and social systems perplex enterprises in their activities and decisions on the path to sustainability (Garcia, 2016).

### ***Tenaga Nasional Berhad (TNB) Malaysian Electricity Producing Company***

In the United Kingdom, Indonesia, Saudi Arabia, Kuwait, Pakistan, Turkey, and India, Tenaga Nasional Berhad (TNB) is regarded worldwide as Malaysia's and Southeast Asia's largest electricity company (Copperleaf Technologies Inc, 2021). TNB has supplied electricity to 9.2 million people in Peninsular Malaysia, Labuan, and Sabah since its inception as the Central Electricity Board (CEB) on September 1, 1949 (TNB, 2020b). CSR Malaysia Honors, the Best Employer Brand Award, National Annual Corporate Report Awards (NACRA), Global HR Excellence Awards, and Asian Power & Energy Innovation Awards were just a few of the noteworthy recognitions TNB received in 2019 (TNB, 2019b). After a thorough assessment by London-based Brand Finance, the most lucrative utility brand in ASEAN will be announced on May 6th, 2020 (Brand Finance, 2020; Alrazi et al., 2020a).

National electric utility TNB controls production, transmission and distribution of power to its 9.2 million consumers via a vertically integrated business model that includes retail. There is just one business in Malaysia that provides energy to end users like industry and households. This is TNB. TNB refers to a company's power to set the price at which its product or service is sold (Falil & Nasir, 2021). To make the Malaysian Energy Supply Industry 2.0 2.0

programme a success, TNB has fully cooperated with the ministry's Power Electricity Reform (MyPower) initiative.

TNB began Reimagining TNB in 2017 with the goal of becoming one of the world's top 10 power and utility companies by 2025. This initiative aims to keep TNB on its current growth trajectory. As a result, TNB is continuously reinventing itself in order to provide long-term value to all stakeholders. As a result, TNB places a high priority on business operations that meet the requirements and interests of their key stakeholders, as well as on providing open and detailed information about the company's commitment to improving sustainability (Tenaga Nasional Berhad (TNB), 2019).

### ***Tenaga Nasional Berhad (TNB) Sustainability Pillars***

Tenaga Nasional Berhad (TNB) is the nation's main electrical provider, serving approximately 9.2 million consumers in the residential, commercial, and industrial sectors. To achieve their goal of being one of the top ten utility companies in the world by 2025, TNB's strategy for 2016-2025, Reimagining TNB, is designed and built on continuing their current growth rate trajectory of the ball. They are dedicated to functioning as a socially and ecologically responsible organisation, developing world-class people, and leveraging innovation and technology for long-term success (TNB, 2019).

Investors will be able to make investment decisions based on the information provided by the EESG factors. The report of the four EESGs is also included in the indexing tool for both experienced and inexperienced investors (Garefalakis, 2017).

The UN Global Compact's "Who Cares Wins" programme originally suggested the phrase and idea in June 2004. In their basic examination of businesses, investors and analysts focus at EESG performance mostly because organisations that deliberately handle EESG problems are in a stronger position. Following EESG, TNB has created their own sustainability pillars;

Table 1: Factors of Sustainability Pillars

<b>Economy (Delivering with Purpose)</b> <i>The Future of Energy, Customer Centricity</i>	For a positive and progressive future, the Electricity Supply Industry (ESI) will continuously strive to deliver dependable and efficient energy in both the global markets.
<b>Environment (Environmental Stewardship)</b> <i>Minimising Environmental Impact, Climate Change</i>	In order to minimise their environmental effect, TNB has committed to provide it everywhere they undertake commerce.
<b>Social (Embracing Relationships)</b> <i>Unlocking People Value, Generative Safety Culture &amp; Brightening Surrounding Communities</i>	The focus is on how TNB builds long-term and genuine relationships with customers, workers, and communities in effort to expand their credibility.
<b>Governance (Spirit of Responsibility)</b> <i>Our Governing Principles</i>	To promote good corporate governance practices and a forward-looking culture inside the organisation.

### ***Problem Statement***

Stakeholder analysis is becoming an integral part of effective business change management as it has been proven to contribute to the success of business towards stakeholder engagement and management. But, the execution of stakeholder analysis will not be successful without a sound framework that governs the stakeholder management and engagement exercise (The United

Nations Environment Programme and Stakeholder Research Associates). While, Significant changes in TNB's operating environment with increased value at stake, putting higher demands on external and internal stakeholder engagements will need to be forward-looking, tightly arranged and across a broad set of stakeholders (Kearney, 2019). Hence, TNB is trying to fulfill the demand of stakeholders through their four sustainability pillars namely economy, environmental, social and governance (EESG) which has become widely accepted. But, the issues of EESG are not proactively and collaboratively identified, categorised and analysed especially longer-term issues. Therefore, this is important for TNB to study their valuable stakeholders' requirements and developing and synthesising the factors of their sustainability pillars to develop a sound framework that governs the stakeholder that may influence to shape the TNB strategy in facing the issues.

### **Literature Review**

Humanity is being pushed to embrace a more sustainable development model as a consequence of various international developments (Hirmer et al., 2021). The world is evolving at a fast pace as a consequence of international shocks such as fluctuations in monetary influence, fast technology innovation, increasing stakeholder demand, and a shifting regulatory environment.

#### ***Stakeholder Analysis and Sustainability***

Clarkson defines that stakeholder can be divided into primary and secondary where primary stakeholder groups indicate a company could not survive without stakeholder's continuous support (Clarkson, 1995). Shareholders, investors, workers, consumers, suppliers, the government, and communities are the key stakeholders. Therefore, a secondary stakeholder group such as non-governmental organisations (NGOs) and media is insignificant for a company to survive (Alrazi, Mat Husin, Jaffar, Mohd Khalid & Zainol, 2020a).

There has been extensive literature research examining stakeholder analysis disclosures. The basis of stakeholder analysis tools conceives to gather information by identifying key players in the decision-making process, clarifying the responsibilities of various stakeholders, and providing input on decision-making procedures and stakeholder interest (Hirmer et al., 2021). It also involves understanding stakeholders with different expertise and priorities due to the several groups of decision-makers will have individual acceptance and solutions to risks and uncertainties (Read, Madani, Mokhtari, & Hanks, 2017).

Managers, practitioners, stakeholders, and customers of today's businesses are all engaging with sustainability. According to the literature, sustainability can improve a company's competitive advantages. The characterisation of sustainability also can persist or adapt to changing conditions and has its roots in ecological and environmental systems. Sustainability allows current supply networks, particularly those in economic development (Rajesh, 2020).

#### ***Malaysian Electricity Producing Company***

Energy is widely acknowledged as one of the driving forces behind all nations' economic progress. The task of continually providing power and meeting rising demand is putting great strain on both industrialised and developing countries' energy systems (Kaundinya et al., 2009). A reliable, affordable, and abundant supply of energy is the driving force behind modern economic progress (Mohd Drus et al., 2017; Mohamed & Lee, 2006; Ong, 2011). Malaysian government-linked companies (GLCs) who have implemented Knowledge Management initiatives are much more innovative, according to a recent report by the Malaysian Energy Ministry's aim is to reduce reliance on natural gas in the country's energy supply (Rahman, 2009; Ali et al., 2012).

Tenaga Nasional Berhad (TNB), Sabah Electricity Sdn. Bhd. (SESB), and Sarawak Electricity Supply Corp. dominate Malaysia's electrical power generation (SESCO). The overall generating capacity of the facilities is expected to be 26,265 MW till the end of 2010. Malaysia's Economic Planning Unit (EPU) estimates that Peninsula Malaysia's number of statutory will be sufficient at 25.4% in the near future, compared to the present level of 40 percent (Ali et al., 2012).

### ***Overview of Stakeholder's Engagement in the Electricity Industry***

Evaluating the electricity industry of each country concerning its sustainability dimensions can play a critical role in economic development and prosperity (Tavassoli, Ketabi, & Ghandehari, 2020). The lives of numerous stakeholder's influence by power companies' operations of generating, transmitting, and distributing electricity. A significant role in economic growth and prosperity may be played by evaluating the electrical sector of each nation in terms of its long-term viability and sustainability aspects. Companies may generate long-term value through stakeholder involvement, thus improving their long-term sustainability and profitability (Alrazi et al., 2020a).

A case study on project management research by exploring the effects of the Electricity Company of Ghana project involving stakeholders. The critical project failure on the key stakeholders itself is the effects of slow economic growth, loss of revenue, unemployment, cost escalation, and collapse of local businesses. This study also focuses on a questionnaire survey and a statistical data analysis approach (Adjabeng & Amoah, 2021).

### **Research Methodology**

Considering the purpose of this study, a qualitative approach through desktop study was used to develop and synthesise the factors of economy, environmental, social and governance (EESG) for the sustainable future especially in Malaysian Electricity Producing Companies. In this regard, the researchers have followed the following sequence to complete the entire process of data collection and analysis.

In beginning, the researchers have searched and finalise the relevant literature such as journal articles regarding the various stakeholders' requirements (SR) towards EESG. Then, the researchers have gone through an extensive review to find and compile all the factors pertinent to the EESG from the stakeholders' point of view. Once there are numbers of factors have developed and the researcher have found some of the factors are similar in nature and the meaning. Hence, the researchers have again worked on synthesising the factors of EESG. Finally, the synthesised factors were validated through literature review.

### **Analysis and Findings the Factors of Sustainability Pillars**

In the face of climate change issues and the global disruptions, increasing stakeholders demand, growing digitalisation, and a rapidly changing economic landscape, the need to address sustainability has never been more vital for industries to exploit opportunities. Aforementioned, the four sustainability pillars electricity were the studies for the factors engagement disclosure. Based on the studies, all of the pillars engaged with the factors in various ways.

### **Findings**

#### ***Economic***

##### *i. Contribution to the economy growth*

The increase in the collective market value of newly created consumer goods and services is often used to measure growth in the economy (Burja, 2013). When examining how EESG activity affects economic growth, it exhibits a positive relationship with both cash flows and



efficiency. EESG initiatives have the potential to amplify the variations in financial performance among competitors.

*ii. Reliable and efficient energy*

Energy efficiency decisions are economic decisions that trade off higher initial capital costs for unknown reduced energy running costs. It has been common practice in many countries since 1973 to track improvements in energy efficiency at the national level (Ang, 2006). Improvement in electricity and resource efficiency have an influence on one another, as well as the quantity of material needed for an optimum quantity.

*iii. Decent working environment*

A concept dispute resolution model was evaluated, with good work positioned as a predictor of mental and physical health via job need fulfilment. Good work substantially predicted survival, social contribution, and fulfilment of self-determination needs (Duffya, 2019). In terms of mental health, theories were mostly validated since all three need fulfillments moderated the relationship between good job and mental health (Duffy, 2016).

*iv. Role of eliminating poverty*

The Sustainable Development Goals (SDGs) and Millennium Development Goals (MDGs) of the United Nations (UN) place a strong emphasis on poverty alleviation (MDGs). China has been involved in three major battles or congressional candidates since 2017, with financial inclusion being one of them (Wan, 2021). Economic growth is the most potent tool for eliminating poverty and improving living conditions in developing countries (Building Jobs and Prosperity in Developing Countries, 2018).

*v. Income and employment (reducing unemployment)*

Quantitative easing is a type of trickle-down economics (Watkins, 2014). Greece's unemployment rate, foreign direct investment, and economic development are investigated. The study found a significant unidirectional causation between economic development and foreign direct investments in both the short and long term. Findings provide new views and insight into strategies for long-term economic development (Stamatiou & Dritsakis, 2014).

*vi. Financial perspective and management*

Potential investors and leaders that recognise the need of a comprehensive EESG strategy in ensuring an organisation's ultimate success, as well as increased economic, environmental, social, and governance focus on the larger effect of businesses. The size of the investment inflow shows that EESG is much more than a passing trend in the financial world. Profitability of the firm grows as well. The vast amount of data suggests that firms that priorities economic, environmental, social, and governance issues do not face a profit restriction (Henisz et al., 2019).

*vii. Customer, Internal Business perspective*

Customer's success management is becoming increasingly realistic in business-to-business marketplaces (Prohl-Schwenke & Kleinaltenkamp, 2021). The majority of customers and employees want companies to expand in creating long-term improvements to the environment and society, rather than just complying with regulations, and they are passionate about providing companies that do this (PricewaterhouseCoopers, 2021).

*viii. Affordable tariffs*

Energy justice is a key to building sustainable future energy systems (Chapman et al., 2018). It is intended to represent the base tariff of fuel and electricity production, as well as the capital cost of all regulated businesses. Another part of the electricity tariff that serves as an adjustment mechanism to reflect changes in fuel and generating costs in the customers' tariff is the demand response component of the tariff (TNB, 2019; Kurian & Kojima, 2021).

*ix. Managing energy costs*

Improving energy efficiency has the potential to reduce individual utility costs, generate employment, and stabilise power prices (Tanoto et al., 2021). Reduced energy consumption, as well as reduced water consumption, may help to bring the costs down. A compelling environmental, economy, social, and governance (EESG) offer promotes companies in entering expanding global into current ones (Henisz et al., 2019).

***Environmental****i. Conservation of the natural world by minimising environmental impact*

Conservation refers to the preservation and biodiversity conservation in order to ensure that they are accessible for use by following generations. Preservation of species, genes, and ecosystems, as well as environmental functions such as nutrient cycling, are all part of the process. The concern for the protection of our natural resources, as well as the negative environmental impacts of garbage disposal, is increasingly expressed in proposed waste-reduction laws. Recycling waste goods is the recommended method.

*ii. Security/protection of natural resources*

The preservation of the natural environment is critical to the long-term viability of a community. Policies and methods for natural resource management that are not sustainable continue to exist, despite improvements (President's Council on Sustainable Development, 2020). It is necessary to strike a balance between economic and social objectives and the preservation of natural resources in order to guarantee sustainability. By bringing stakeholders together to identify and act on their shared interests, community disputes involving natural resource management may be avoided or at least mitigated (AQUAOSO Technologies PBC, 2021).

*iii. Climate change and carbon emissions*

Climate is firmly at the top of the list in terms of effect and significance when it comes to the wider investment issue of EESG (Pensions & Investment, 2021). When it comes to determining how these variables may impact their portfolios, environmental problems are the most important EESG issues for individual investors and intermediaries to consider (Baxter, 2021). It is considered climate change mitigation if an economic activity provides a significant contribution to avoiding greenhouse gas emissions, decreasing greenhouse gas emissions, or allowing others to avoid or decrease greenhouse gas emissions as a result of the activity.

*iv. Resource depletion*

Business-related environmental hazards affect air, land, water, ecosystems, and human health. Environmental activities include resource management, pollution prevention, and environmental reporting or disclosure. Energy and other efficiency improvements reduce expenses and boost profitability while decreasing regulatory, legal, and reputational risks (Innovations, 2021). Scarcity of resources has an impact on how much energy is available in the future (Mwiturubani & van Wyk, 2010; Downing et al. 2014). Recycling techniques that

recover all materials in high quality assist to minimise resource depletion (Peters & Weil, 2016).

v. *Deforestation*

Land use and biodiversity issues, particularly deforestation, have gained prominence in recent years. The COVID-19 pandemic has been related to deforestation and biodiversity loss, affecting people everywhere (Tollefson, 2020). With the sustainable progress of EESG investment, it is anticipated that investor interest in deforestation and biodiversity will expand (Dasgupta, 2021). Shareholders may help improve deforestation and biodiversity management by participating, voting, and divesting from businesses that threaten forests and biodiversity (Sarah & Kyle, 2019).

vi. *Gas exposure*

The mouth, nose, and throat are irritated by chlorine and ammonia fumes, which dissolve fast. When a person combines household ammonia with bleach-based cleansers, chloramine, an unpleasant gas, is produced (Lara, 2020). Each gas or chemical, as well as how deeply and how long it's inhaled, has different effects. Additional symptoms include irritation of the eyes or nose, cough, blood in the sputum, and shortness of breath (Lara, 2020).

vii. *Industry headwinds*

The year of 2021 will go down in history as a genuinely unusual one. Headwinds are the elements that cause the economy or a company's value to fall or rise. The word headwind is used in finance to indicate situations that hinder or restrict advancement (Chen, 2020).

viii. *Carbon pricing/taxes*

Carbon tax is critical to the implementation of successful climate policy (Carattini et al., 2018). It is feasible to enact carbon/energy taxes, domestic emissions trading legislation, command-and-control laws, and other measures. Counterbalancing measures could counteract the negative distributional impacts of carbon prices. Alternative climate policy tools, such as renewable energy subsidies, can have comparable regressive impacts and may not generate enough income to offset them (Baranzini & Carattini, 2017).

## **Social**

i. *Consideration of people & relationships*

Ethical issues that can arise for novice researchers in institutions that do not have a firmly established qualitative research tradition are discussed. One's existence is marked by exclusion from education, employment, and social connections as well as possibilities to affect the world around them. In order to better understand how social interactions are formed and maintained, several ideas have been proposed to help (Lenton et al., 2021; Petrucelli, 2019).

ii. *Customer satisfaction*

Customer happiness is critical to the success of any organisation. Both traditional customer relationship management (CRM) and social media had substantial influence on consumer empowerment and happiness (Aldaihani & Ali, 2018). Corporate social responsibility corporates to greater customer satisfaction for big businesses (Sun & Price, 2016).

iii. *Data protection and privacy and security*

When it comes to protecting the digital assets and cyberspace from large-scale, sophisticatedly targeted offences and cybercrimes in the Internet era, the Internet presents a unique set of



challenges (Alazab, Hong, & Ng, 2021). In the case of a data breach involving personally identifiable information, serious cybercrime may be committed because not only does it impose significant costs on individuals and organisations, but it also deprives them of their "right to confidentiality, privacy, and integrity of their personal information." Resolving the issues that arise as a result of a data breach may be time-consuming and expensive (Karyda & Mitrou, 2016).

*iv. Empowering employees*

Employees who are empowered are more likely to be productive. Provide employees with the knowledge and tools they need to effectively manage or lead their own projects, work toward their goals, and drive their own careers has many advantages (Sievers et al., 2021). Workplace empowerment had a significant and favorable impact on employees' self-esteem and perceived trust in three of the four categories examined (Ma, 2021).

*v. Training and development (to people in the society)*

In terms of front line practitioners, social workers, youth workers etc. there are specific training outcomes that need to be undertaken before working. This increases job satisfaction and morale among employees, employee motivation and capacity to adopt new technologies and methods (Lenton et al., 2021; Ma, 2020).

*vi. Community development towards indigenous society*

Community development is significant because it serves as the basis upon which a city may build in order to enhance the lives of its inhabitants (Wang & Han, 2021). Strong environmental attitudes are required. Individuals with little environmental care are pushed to participate in sustainable activities by a need for community and other reasons, as well as social influence (Broska, 2021).

*vii. Social engagement and cohesions*

Experimentation on senior citizens who engage in social contact may find it easier to cope with stress and sorrow. Taking prosocial behavior has been shown to have a beneficial impact on mental health in senior citizens, but the explanations for this have received less empirical attention (Mackenzie, 2018). However, one of the reasons why involvement in social activity is beneficial to the mental health of older people is because of social engagement (Aisté Čapienė, 2021).

*viii. Community outreach*

Community outreach entails giving, donating, and assisting people who are unable to help themselves. Community engagement also enables us to persuade future generations to give back to the community (Fayez, 2021). Community outreach and engagement efforts at airports are critical to maintaining an airport's status as a dynamic transport facility and a local expanding economy (Li, 2021).

*ix. Affordable and reliable energy*

In the near future, renewable energy will be a major source of power generation since we can reuse these resources to produce useable energy (Kumar, 2020). It is possible that investments in renewable energy systems will result in the development of local jobs, better health, employment opportunities, earnings growth and the strengthening of social connections. Energy efficiency and greater use of renewable energy sources assist to reduce the effects of climate change and the danger of natural disasters (Affordable and clean energy, 2021).

*x. Human rights (internal and external)*

The economic need becomes the orientation of the enterprise management system to ensure sustainable growth, creating a foundation for expanding the firm's economic strength and tackling environmental and social challenges. The key areas of dynamic socioeconomic changes include raising the social standing of workers in businesses and satisfying the socially relevant requirements of the people (Glonti, 2020).

*xi. Labor standards*

A labor standard is the amount of time that is anticipated to be spent on completing an activity used in the budgeting and planning procedures to determine how many people to assign to a task. The coronavirus epidemic and ensuing recession have combined to produce a particularly hazardous period for low-wage employees (Fine et al., 2021). Making headway in reducing child labor requires value chain players to untangle the complex dynamics, context, and interlinkages that connect companies and farms at the local level (Busquet et al., 2021).

*xii. Employee's wellbeing*

The primary goal of current occupational health and safety (OHS) regulation is to provide a healthy and safe workplace. OHS is seen as a critical issue that must be governed by legislation in both China and the EU (Liu, 2019). The researchers find key contextual variables in the terminals' labor relations and regulatory settings that impact practice and outcomes (Walter, 2021).

*xiii. Employee relations & diversity*

The study investigates the influence of top management and staff diversity on business performance. The findings indicate to unique elements of the dynamics of service businesses that should be investigated further. Findings could lead to new ways of looking at how workers can improve their performance in the future (Curado, 2021). To improve business performance, business owners should create a systematic incentive and reward program (Coleman, 2021).

*xiv. Pleasant working conditions*

The techniques are focused on and instruments for measuring worker satisfaction (Villani et al., 2021). There is a broader approach model of employee satisfaction that takes into account, adaptable technology and workplace conditions. When designing an automated system, it includes a lot of factors such as psychological and physical working conditions, as well as system features. The study of work satisfaction has grown in importance because of its impact on faculty and society (Kakada & Deshpande, 2019).

*xv. Practice CSR*

- Corporate social responsibilities (economic, legal, ethical, discretionary)

Using the function of intellectual capital efficiency as a mechanism supporting the CSR–firm performance relationship, we explore the influence of CSR on company performance. On the other hand, the corporate performance and governance criterion are taken into account while using the value-added intellectual capital co-efficient (Shahzad et al., 2021).

- Corporate social responsiveness (defense, reaction, accommodation, pro-action)

People's responsibility to contribute to their community or nation in a manner that benefits the community and environment for others around them is defined as social responsiveness (also known as social responsibility), indicates that the CSR engagement strategy had a good impact

established through factor analysis: company, community, and workers (Lim & Greenwood, 2017). Only company and community goal attainment were favorably related with the responsiveness strategy (Bohas, 2016).

- Social issues (consumers, environment, product safety, employee discrimination and shareholders)

Foresight approaches such as horizon scanning are used to evaluate the potential, challenges, and prospects of information and communications technology (ICT) in the context of health and ageing. The main ethical and social issues include the elderly being seen as a collection of diseases, privacy and informed consent, autonomy, stereotyping of older people, and general concerns about information and communications technologies (ICTs) (Flick, 2020).

*ix. Employee welfare and issues*

Employee welfare refers to the numerous services, perks, and facilities provided to employees (Ben-Nasr, 2018). Findings support the agency theory thesis: high levels of employee welfare requirements add to the probability of a stock price fall. Employee well-being is shown to be beneficial for manufacturing companies, as seen by their improved innovativeness (Wei, 2020).

*x. Social impact of products and services*

Microfinance social businesses must meet both financial and social criteria. Critics say that there is a shift away from the social goal, which has prompted the establishment of social grading organisations to improve the corporate ethics of microfinance companies (MFIs) (Beisland, 2020; Levrenenko, 2021).

## **Governance**

*i. Standards operation procedures*

Corporate Governance Standards (management standards) provide solid foundations for the effective implementation of key management principles. The principles of corporate governance established by the Organisation for Economic Cooperation and Development (OECD) serve as the foundation for the standards. Heavily dispersed ownership is common for established companies with a significant dispersion of ownership (Morrison, 2016; Miskin & Šnjegota, 2017).

*ii. Employee compensations*

In the field of human resource management, employee compensation is seen as essential to the operation of an organisation since it lies at the heart of a connection between an employee and his or her employer. (Gupta & Shaw, 2014.). If certain sectors and their efforts are especially sensitive to pay rather than other motivating cues such as promotions or development, the impact of remuneration on performance may be even more significant (Hong & Soo, 2020). Managers have daily personal encounters with employees in addition to the norms of safety, remuneration, and pensions (Morrison, 2016).

*iii. Compliance with other agencies/government*

The corporate world and CEOs are increasingly being expected to demonstrate a high level of moral and ethical leadership in their respective fields (Sarah, Georges, & Daniel, 2017). These reasons have compelled businesses to examine their health and safety, environmental, and broader human rights policies more carefully in order to guarantee compliance not just with applicable law, but also with evolving moral and ethical expectations and standards.

iv. *Corporate governance system*

EESG issues are becoming more important to investors. In addition, investment analysts who understand corporate governance (and EESG in general) can better grasp the significance of EESG issues in investment decision making. The corporate governance structure rewarded businesses to generate and accept excessive risks for short-term profit maximisation (Pirson & Turnbull, 2011). They will accept fewer risky initiatives and will shun riskier ventures with a positive net present value (Mao & Zhang, 2018).

v. *Avoid conflict of interest and political contributions*

Political conflict has grown more visible to the public in recent years as a result of a greater emphasis on conflict in media coverage. Several articles emphasise the often-overlooked 'micropolitics' of transition processes (Pel, 2015; Chilvers & Longhurst, 2016). A more comprehensive knowledge of 'the political' leads to the development of a new repertoire of transition strategies and tactics (Hoffman & Loeber, 2015; Kenis et al., 2016).

***Development of Sustainability Factors***

Based on the above discussion, the researchers have developed a details list of sustainability factors, and, all the factors are parked under the four TNB sustainability pillars namely, economic, environment, social and governance. Hence, altogether, 14 factors under economic, 31 factors under environments, 40 of social and finally, 43 factors of under governance were developed. The researcher then found many factors are similar or synonyms each other in meaning, therefore, the researchers further have developed a categorised and synthesised list of sustainability factors which is shown in Table 2.

Table 2: Categorised and Synthesised Factors of Sustainability

Sustainability Pillars	Code	Critical Factors
<b>Economy EC (12 items)</b>	EC-1	Contribution to the economy growth
	EC-2	Reliable and efficient energy
	EC-3	Decent working environment
	EC-4	Role of eliminating poverty
	EC-5	Income and employment (reducing unemployment)
	EC-6	Immediate marketplace and the broader economy
	EC-7	Financial perspective and management
	EC-8	Customer, Internal Business perspective
	EC-9	Sound production capacity according to demand and supply
	EC-10	Affordable tariffs
	EC-11	Innovation in technology
	EC-12	Managing energy costs
<b>Environmental EN (14 items)</b>	EN-1	Conservation of the natural world by minimising environmental impact
	EN-2	Security/protection of natural resources
	EN-3	Climate change and carbon emissions
	EN-4	Resource depletion
	EN-5	Deforestation
	EN-6	Waste management and promoting recycling
	EN-7	Gas exposure
	EN-8	Industry headwinds
	EN-9	Carbon pricing/taxes

	EN-10	Air and water pollution
	EN-11	Energy mix management
	EN-12	Cleaner Energy
	EN-13	Green Supply Change Management
	EN-14	Emphasising on renewable energy
<b>Social SL (20 items)</b>	SL-1	Consideration of people & relationships
	SL-2	Customer satisfaction
	SL-3	Production Responsibility
	SL-4	Social Impact of products and services
	SL-5	Data protection, privacy and security
	SL-6	Risk management
	SL-7	Empowering employees
	SL-8	Employee's wellbeing
	SL-9	Employee retirement plan
	SL-10	Training and development (to people in the society)
	SL-11	Community Development towards indigenous society
	SL-12	Social engagement and cohesions
	SL-13	Community outreach
	SL-14	Affordable and reliable energy
	SL-15	Human rights (internal and external)
	SL-16	Labour standards
	SL-17	Employee relations & diversity
	SL-18	Pleasant working conditions
	SL-19	Practicing CSR
	SL-20	Conflict management within society
<b>Governance GV (20 Items)</b>	GV-1	Standards operations procedures
	GV-2	Board compositions and their role (company's leadership)
	GV-3	Employee compensations
	GV-4	Transparency of accounting and audit procedures
	GV-5	Enforce ethical business practice
	GV-6	Top management's commitment (internal and external)
	GV-7	Forward looking culture
	GV-8	Political lobbying/ managing political interventions
	GV-9	Corporate governance system
	GV-10	Executive remuneration
	GV-11	Support a company's long-term strategy
	GV-12	Responsibilities and expectations between different stakeholders in the governance of corporations
	GV-13	Compliance with other government agencies
	GV-14	Engaging with legal practices
	GV-15	Avoid conflict of interest and political contributions
	GV-16	Management and internal controls
	GV-17	Implementing a robust and transparent system of governance
	GV-18	Strict policies aligned with national safety regulators
	GV-19	Inadequate continental and global agreements
	GV-20	Inadequate institutional capacities



The researcher then develops the following conceptual framework based on the Table above (Table 2).

### Conceptual Framework

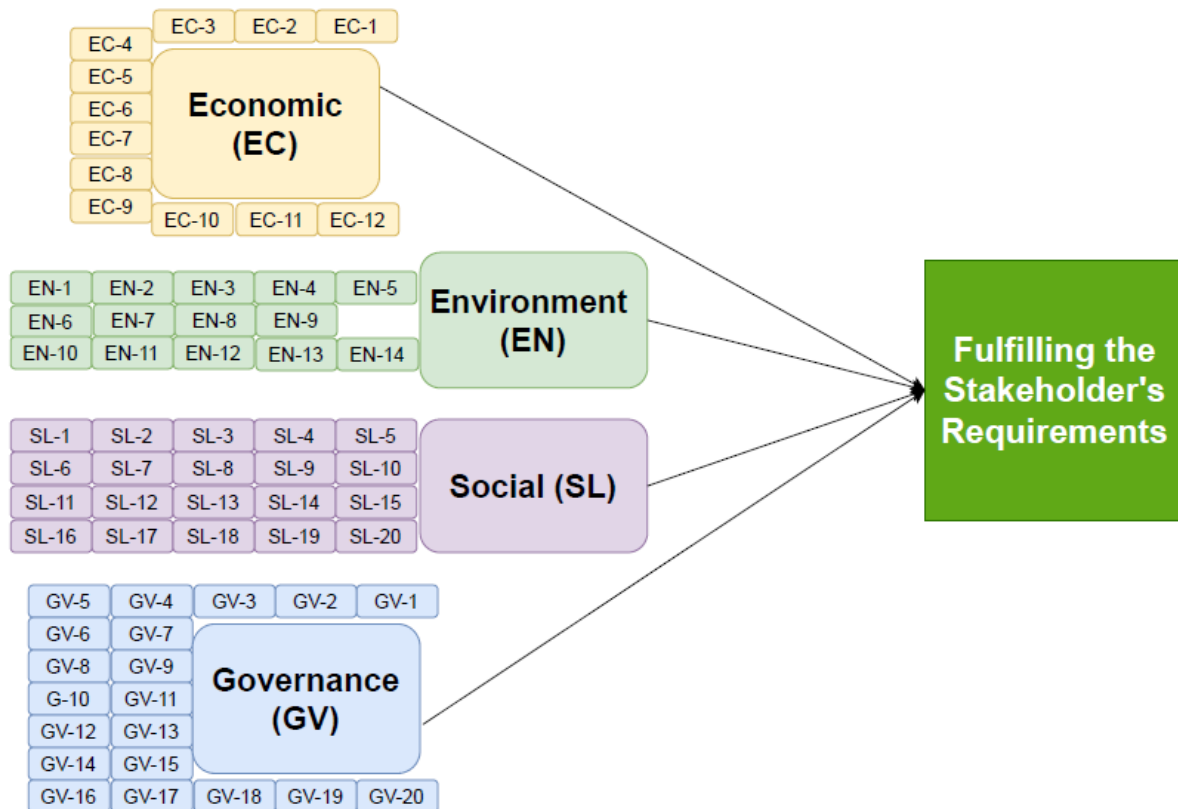


Figure 1: Conceptual Framework

### Discussion and Conclusion

A set of requirements for a company's operations known as the sustainability pillars; Economic, Environmental, Social, and Governance (EESG) criteria is used by socially aware investors to assess possible investments. This research examined the sustainable factors of the four sustainability pillars of electricity producing company in Malaysia. This paper contributes to the understanding of the disclosure of developing and synthesising the EESG factors among electricity companies in particular. Each pillar holds its own sustainable factors and criteria on a stakeholder perspectives and strategies for their sustainable future.

Throughout the entire research, the researchers have developed a synthesised list of EESG factors through an extensive literature review which was shown in Table 2. Altogether, 66 factors were developed and synthesised. Where, 12 factors for economic, such as; contribution to the economy growth, role of eliminating poverty, ensuring income and employment, internal business perspective, affordable tariffs, innovation in technology, managing energy costs.

While, total 14 factors were developed after synthesising for the environment point of view which are; conservation of the natural world by minimising environmental impact and security and protection of natural resources, climate change and carbon emissions, waste management and promoting recycling, emphasising on environment friendly energy mix, cleaner energy, green supply change management and renewable energy.

On the other hand, 20 factors social pillar were synthesised, such as; consideration of people & relationships, customer satisfaction, production responsibility, social impact of products and services, risk management, empowering employees and their wellbeing, training and development to people in the society to develop an indigenous society, human rights, labor standards, employee relations & diversity, pleasant working conditions, practicing CSR, conflict management within society.

At the end of the study, 20 governance factors were synthesised, including the following: standard operating procedures (SOPs), employee compensations, transparency of accounting and audit procedures, enforcement of ethical business practices, top management's commitment (both internal and external), forward-looking culture, support for long-term strategic approach, obligations between various stakeholders in corporate governance, and compliance with other government agencies.

### ***Theoretical Implications***

The findings of this research will be contributed to body of knowledge in the field of academy and possible guidelines for the managers in particular to the electricity producing company in general.

### ***Practical and Social Implications***

And, the stated EESG factors also attract investors to avoid companies' greater financial risk. This means that while we go forward in the direction of sustainable energy, we must also consider the need to enhance and preserve the well-being of stakeholders and communities in the process.

### ***Limitations and Suggestions for Future Research***

However, if this research was done using empirical study instead of desktop study due to time constraints and the global pandemic scenario, the outcomes would be different. Hence, future researchers have the option of doing an empirical study on that particular electrical utility company, and they can go for further testing based on the above framework which might provide better guidance to the present Malaysian company.

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