



SIRIM *Link*

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Future-Proofing the Nation with ESG

As the popularity of the Environmental, Social and Governance (ESG) concept increases, the race to get Malaysia's local industry players to embrace it intensifies. It cannot be denied that ESG is going mainstream; in fact, it is now the new norm. As a part of this world, we don't live in isolation. If you want to keep up, if you want to grow, this transformation towards increased sustainability has to happen. **With Malaysia's 2050 net-zero target in the horizon, it is time to look forward. Embracing ESG is no longer an 'if', but a 'when' and 'how'.**

In our endeavours to support the government in upping the ESG game in the nation, SIRIM is here to help with the 'how'. We have been honing our expertise and knowledge in this area to ensure that we are well equipped to serve the needs of industry players in Malaysia, whether it is providing training and workshops, certifications or even technological innovations. As such, we urge you to take advantage of our offerings to make your transition towards being ESG-compliant smoother.

This is an opportunity for all of us to do our part to keep our planet healthy while championing progress and prosperity in all areas. The ball is now in our court. **Are you ready for the future?**

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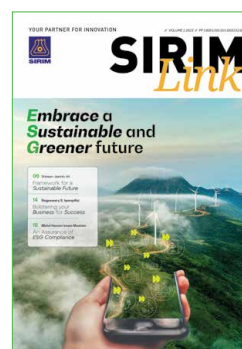
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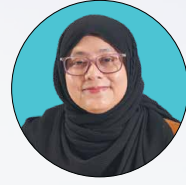
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Framework for a Sustainable Future

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Driving Sustainable Growth

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Bolstering your Business for Success

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An Assurance of ESG Compliance

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Leading the Change towards a Sustainable Future

Framework for a SUSTAINABLE FUTURE



What would happen if Malaysia were unable to keep up with ESG demands? The **Ministry of Investment, Trade and Industry (MITI)** is set to **unveil a framework** to ensure that this does not happen.



A session with

Shireen Jasmin Ali
 Director of Industry
 Environmental, Social
 and Governance,
 Ministry of Investment,
 Trade and Industry (MITI)

HISTORY OF ESG

- 1953 » The "Corporate Social Responsibility" introduced
- 2002 » 60 funds totaling RM4.9 million formed the first ESG investment-related effort
- 2004 » ESG foundation laid by UN Secretary General, Mr. Kofi Annan
- 2005 » The term "ESG" coined from the United Nations' Who Cares Wins report
- 2015 » Blueprint of Sustainable Development Goals (SDGs) rolled out
- 2018 » Sustainable and Responsible Investment (SRI) established by the Securities Commission Malaysia

* Who Cares Wins encourages business communities to adopt ESG in the long term

The Environmental, Social and Governance (ESG) pillars are not new. In actual fact, the ESG concept has been gaining traction in recent years. While many organisations, especially multinational companies, are already adopting ESG, small and medium enterprises (SMEs) in Malaysia, which constitute 97% of the nation's business establishment population, are lagging behind.

The reality is that no man is an island. All businesses, big and small, are interconnected within a delicate web that spreads across all four corners of the globe. By not adhering to ESG principles, industry players are at risk of being cut off the global value chain.

Presently, **Malaysia's top trading partners, including China, Singapore, the US and South Korea, place strict emphasis on the United Nations' Sustainable Development Goals (SDGs) and ESG compliance.** Among others, they have committed to net zero targets following the United Nations' 2021 Climate Change Conference in Glasgow and the Paris Agreement. Furthermore, the European Union, which is the country's fifth largest trading partner, has rolled out the Carbon Border Adjustment Mechanism (CBAM).

"Although the CBAM is being implemented gradually, it is, nevertheless, important for Malaysian organisations that are part of the global supply chain exporting to Europe to comply with ESG principles to avoid sanctions. The adoption of ESG is also essential in attracting investments and business opportunities as well as ensuring their survival," explained Shireen Jasmin Ali, Director of Industry Environmental, Social and Governance at the Ministry of Investment, Trade and Industry (MITI).



Although the CBAM is being implemented gradually, it is, nevertheless, important for Malaysian organisations that are part of the global supply chain exporting to Europe to comply with ESG principles to avoid sanctions. The adoption of ESG is also essential in attracting investments and business opportunities as well as ensuring their survival."

By doing so, organisations can not only avoid negative consequences such as product bans, seizures and reputational damage but also directly improve their financial performance while promoting ethical and sustainable practices in the industry. As such, large corporations have appointed ethical trade consultants to audit their facilities to eliminate detrimental losses while ensuring their reputation and consumer confidence are intact. This has led to a strengthened notion of ESG concern in Malaysia.

Malaysia's trading partners have also introduced a Trade and Investment Policy that emphasises ESG compliance. It aims to assist governments in creating proactive policies that equip the industrial sector to survive and enjoy continued commerce success.

"It is more important than ever for businesses in Malaysia, particularly those who are a part of the global supply chain, to comply with the sustainability requirements. Basically, if organisations in Malaysia do not want to be on board with the adoption of ESG, there is a risk of them not being able to export to countries that comply with ESG!" remarked Shireen.

Towards a Brighter Future

Malaysia's Top 10

TRADING PARTNERS

according to dollar value and percentage of exported local goods are

- | | |
|---|---|
| 
1. Singapore | 
6. Thailand |
| 
2. China | 
7. South Korea |
| 
3. United States | 
8. Indonesia |
| 
4. Japan | 
9. Vietnam |
| 
5. Hong Kong | 
10. Australia |



170 GOALS
169 TARGETS
247 INDICATORS

for a better and more sustainable future for all

by addressing the most urgent global sustainable challenges, including

- perfecting the environment
- mitigating climate change
- eradicating poverty & hunger
- reducing inequalities





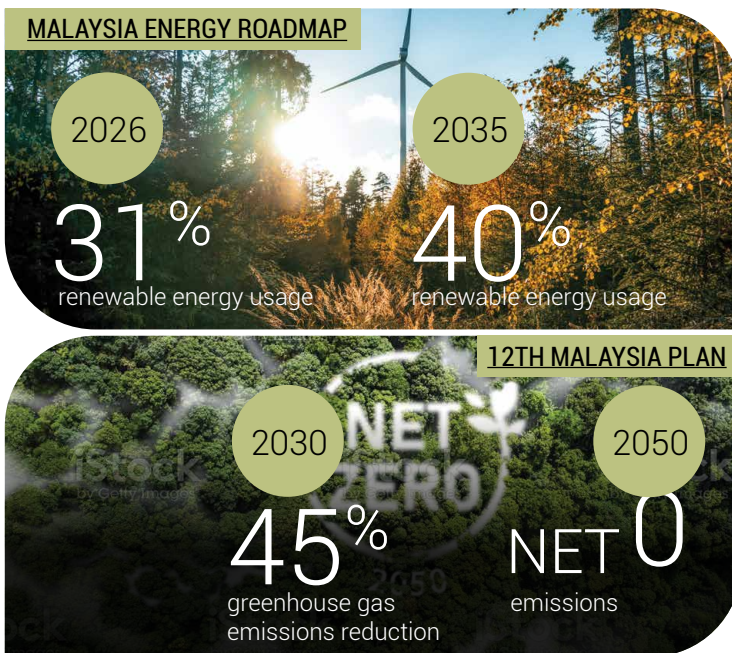
It is more important than ever for businesses in Malaysia, particularly those who are a part of the global supply chain, to comply with the sustainability requirements. Basically, if organisations in Malaysia do not want to be on board with the adoption of ESG, there is a risk of them not being able to export to countries that comply with ESG!"



While ESG has become an instrumental part of global trade, one of the objectives of ESG compliance is also to achieve the SDGs that were laid out in 2015. As such, it plays a key role in nurturing a brighter future.

As part of its contributions towards the SDGs, the Malaysian government has made a number of pledges within the Malaysia Energy Roadmap and 12th Malaysia Plan.

Malaysia's pledges



In a bid to help pave a smoother pathway for SMEs to embrace ESG, MITI is in the midst of developing a National Industry ESG Framework targeting the manufacturing sector.

"The conception of this framework resulted from the identification of ESG as a key overarching frame for the National Investment Aspiration, which we launched in 2022 to minimise the risks of non-adherence to ESG principles while capturing the opportunities related to ESG," shared Shireen.

In a nutshell, the National Industry ESG Framework is geared towards increasing business and investment opportunities for all Malaysian businesses. The framework will comprise four pillars: standards, capacity building, financing and market mechanisms. To realise the National Investment Aspiration, it will look into reviewing and aligning all the current ESG-related policies in the manufacturing sector to identify gaps.

Additionally, the framework serves to coordinate the roles and functions of various agencies in addressing ESG issues to avoid the duplication and redundancy of initiatives while also assessing the readiness of the manufacturing sector in embracing the principles. Besides that, the framework is also anticipated to build and strengthen a system that governs the adoption process of ESG and provide a set of tier-consistent and coherent guidelines for industries transitioning towards ESG compliance to ensure that they can implement the ESG practices in a systematic and effective manner.

Sustainability Matters

A very important part of ESG is the sustainability reporting. There are many reporting standards out there, such as the Global Report Initiative (GRI), Task Force on Climate-related Financial Disclosures (TCFD) and BURSA 11. The first two are very stringent, requiring comprehensive data collection and a much lengthier documentation process. However, smaller organisations, which might have fewer products and capabilities to fulfill these requirements, can opt for the Bursa 11 instead, as it has fewer adherence criteria.

According to Shireen, "Organisations will only need to choose one reporting standard for one buyer, as required by their buyer."



The conception of this framework resulted from the identification of ESG as a key overarching frame for the National Investment Aspiration, which we launched in 2022 to minimise the risks of non-adherence to ESG principles while capturing the opportunities related to ESG."



However, she acknowledges that this can be a challenge for SMEs, especially as they may not have the financial capacity to do so. While multinational corporations may have built-in sustainable divisions and sustainability officers to take charge of the reporting, SMEs may need to go for capacity building and other relevant training sessions, which will incur additional costs.

Nevertheless, with the guidelines provided in the framework, MITI hopes to assist the SMEs in understanding what sustainability is about and the steps they can take to produce their sustainable reporting.

Low Carbon Transition

FACILITY, FUNDS AMOUNTING TO AROUND RM2 BIL

Lack of finances is a strong factor that affects SMEs' ability to embrace ESG. To address this, Bank Negara recently announced the Low Carbon Transition Facility, which encompasses funds amounting to around RM2 billion, to help SMEs to adopt low carbon technology.

"We are also looking into the possibility of introducing ESG compliance as criteria for organisations that want to apply for government incentives," added Shireen.

This assessment is done by evaluating the organisation's current level of compliance against the framework's four pillars so that MITI can determine the most appropriate approach to support its transition to ESG practices.

Once the organisation's readiness has been assessed, MITI will provide the necessary support to build and strengthen the system governing the ESG adoption process. This may involve providing technical assistance, training and other forms of support to help them develop the necessary capacity and expertise to implement ESG practices effectively.



In today's rapidly evolving world, ESG is a strategic priority that allows organisations to capture business opportunities and address risks. Even businesses that are not exporting are a part of this, as long as they are working with organisations that are exporting. If you don't want to lose your business, you need to be ESG-compliant."

By providing a coherent set of guidelines and support mechanisms for transitioning organisations through the adoption and adaptation of ESG, the framework helps to ensure that these organisations can implement these practices in a consistent and sustainable manner. This, in turn, promotes sustainable development, enhances corporate social responsibility and helps to protect the environment and promote social welfare.

As this framework mainstreams ESG elements for the manufacturing sector, it will both identify gaps and align all current policies in the sector. Be it increasing stakeholders' engagement with organisational operations or choosing the right digital platform for ease of communication, it will help businesses to upgrade the technology they use while training their employees to have the relevant skills needed to carry out sustainable and profitable activities.

MITI is currently at the infancy stage of developing the framework, which is anticipated to be completed in the third quarter of this year. "It is an ongoing stage. Along the way we have started engaging with multiple stakeholders, including industry associations, academia, government agencies and industry players. We currently aim to gather as much input as possible and have received invitations to give talks and participate in engagement sessions with the industry to create awareness," said Shireen.

She further suggested that participation in road shows and aggressive social media outreach can be effective tools to spread awareness of ESG and SDGs.

Ultimately, SMEs will have to recognise that ESG is fast becoming a necessity. "In today's rapidly evolving world, ESG is a strategic priority that allows organisations to capture business opportunities and address risks. Even businesses that are not exporting are a part of this, as long as they are working with organisations that are exporting. If you don't want to lose your business, you need to be ESG-compliant," reiterated Shireen.

Malaysia

- * has a sustainability report rate of 99% and is one of seven Asia Pacific nations, territories and jurisdictions with a rate that is higher than 90%
- * ranks first among the top 10 nations for the proportion of top 100 firms that disclose sustainability data in their annual financial reports



Driving SUSTAINABLE GROWTH

Going green is the new gold for businesses in Malaysia, and SIRIM's Environment Technology Research Centre (ETRC) is paving the path towards a **sustainable future** by helping organisations with a very important first step – **measuring their carbon footprint**.

The development of the world economy is dependent on the state of the environment. After all, the industry ecosystem is based on the natural resources that the environment offers and transforming them into marketable and value-added products and services. Consequently, **a stable and healthy environment is fundamental for a thriving economy**. This, in turn, has led to a growing demand for a more stringent regulatory landscape to safeguard the environment at both national and international levels.



This significant evolution is necessitating a more comprehensive approach to environmental management. Environmental performance must be managed inclusively, covering both direct and indirect activities across multi-tiered value chains. This includes upstream and downstream supply chain activities, in addition to one's own business operations.

A session with

ChM. Wan Mazlina Wan Hussein
 Head – Environment Management Section of the Environment Technology Research Centre (ETRC), SIRIM Industrial Research

Governing environmental sustainability goes hand in hand with sustainable and holistic economic growth. Neglecting one's impact to the environment is no longer an option. An adverse environmental impact can be a huge financial risk to businesses and nations, with global repercussions being a high possibility."

"Governing environmental sustainability goes hand in hand with sustainable and holistic economic growth. Neglecting one's impact to the environment is no longer an option. An adverse environmental impact can be a huge financial risk to businesses and nations, with global repercussions being a high possibility," said ChM. Wan Mazlina Wan Hussein, Head – Environment Management Section of the Environment Technology Research Centre (ETRC) of SIRIM Industrial Research.

The issue of protecting the environment is a critical responsibility for all parties as it is the key to sustaining economic growth for future generations. Investing in environmental accountabilities beyond compliance can help businesses maximise growth, mitigate risks and create

efficiencies. In this regard, enhancing efficiencies, reducing resource consumption, and minimising waste generation and emissions to the air, water and land are crucial steps towards achieving environmental sustainability and, ultimately, sustainable economic growth.

Calculating Carbon Footprints

In upholding their roles as responsible stewards of the environment, it is important for businesses to be able to evaluate their environmental performance. One way this can be done is by measuring carbon emission intensity.

“For many forward-looking businesses, measuring their environmental performance is the first checkpoint to help them predict performance and proactively intervene to mitigate potential environmental risk. This gives them a sense of accountability. Upon measuring, they are able to proceed with reduction plans, initiatives and efforts towards decarbonisation strategies,” explained Wan Mazlina.

Net-zero

PLANNING PROCESS

A decarbonisation strategy takes into consideration and consolidates all the key elements of the net-zero planning process to generate a high-level framework that guides an organisation's actions regarding carbon emissions and management.

Knowing the carbon footprint at the corporate level or product level can guide better decision-making. This information can help businesses identify their own operational activities as well as their upstream and downstream environmental impacts, prioritise areas for improvement, measure and track achievements, and ultimately reduce costs and environmental impacts throughout their operations and value chains.

Upholding the 'environmental' pillar is a multi-pronged approach. As environmental sustainability becomes an increasingly important factor for investors and customers, businesses need to focus on building a sustainable brand alongside their products and services.

“Industry players may need to assess their business operations to comply with or even be ahead of current market and regulatory requirements. They also have to be prepared to increase engagement with both upstream and downstream value chains to facilitate their efforts in achieving their environmental goals,” said Wan Mazlina.

Carbon footprints

ISO standards provide guidelines for the quantification of carbon emissions. While ISO standards offer principles and requirements that can be applied across various users, the step-by-step quantification process is normally provided by a selection of guidance documents developed based on the umbrella principle of ISO. For an instance, the widely used guidance document for carbon quantification is the Greenhouse Gas Protocol standards.

It is important to note that the term 'carbon footprint' can literally refer to both a product and an organisational level carbon emissions. When referring to a product, we use ISO 14067, while for organisational level carbon measurements, we use ISO 14064-1.



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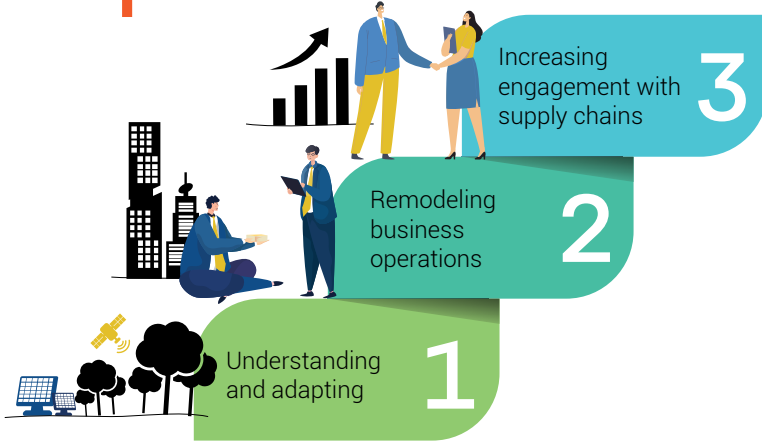
To address this, businesses must first understand and adapt accordingly. It is crucial that they define the actions they need to take to achieve their environmental goals. Businesses that cannot define their climate actions may risk damaging their reputation and business growth.

With awareness comes action; businesses can begin to transform their operations to prioritise environmental sustainability actions. By committing to specific areas for eco-improvements, they can gradually increase the environmental sustainability performance of their brand, products and services.

Effective communication is key to understanding and propagating climate-action based initiatives. Industry players must get involved with their supply chain to ensure that they are headed towards specific environmental goals. This approach will attract new customers and investors and ensure long-term business success.

UPHOLDING THE

'E' pillar of ESG



Carbon Value as a Performance Indicator for Business Eco-efficiency

With the quantified carbon emissions, businesses can also assess their operational eco-efficiency by extrapolating the results to gauge their productivity or efficiency ratio and carbon intensity ratio. These ratios are useful in business decision-making. A productivity/ efficiency ratio is measured based on business achievement against the resulted carbon impact. An increase in efficiency ratio indicates a positive performance improvement. On the other hand, carbon intensity ratio is measured by the carbon impact against per unit of physical or economic output. In this case, an increased carbon intensity ratio indicates a negative environmental performance.

An important factor that industry players should take into consideration is their current business activities in terms of energy intensity. "Both energy intensity and carbon intensity are interlinked indicators. In fact, energy intensity and carbon intensity-based metrics can go far in business decision-making," said Wan Mazlina.



With our expertise in technical evaluation and consultancy, we are able to play a vital role in promoting the uptake of ESG practices, enabling organisations to manage their environmental impact and facilitating the development of sustainable solutions."



Doing so, businesses will be able to obtain an indication of their operational efficiencies, which is measured with an environmental perspective. "This is where the organisation evaluates the total measured carbon emissions against the total units of production or total economic activity, allowing it to align its initiatives to reduce carbon emissions and decarbonisation strategies with its economic growth more effectively," she added.

While there are many ways to do this, the first step for the industry player to reduce carbon emissions is to identify emission sources in its business operations and prioritise actions to tackle carbon intensity contributors. This could include replacing fossil-based energy sources with renewable alternatives such as biomass, solar, wind and hydropower. Ultimately, a commitment to sustainability and environmental goals can attract new customers and investors while also driving economic growth.

Propagating ESG Commitments – the 'E' Aspect

As one of the technology research centres under SIRIM Industrial Research, ETRC offers a wide range of services from eco-material product supports and solutions, and environmental laboratory testing to technical environmental performance evaluation using lifecycle assessment (LCA) and carbon footprint (CFP) approaches. As such, it plays an instrumental role in propelling the adoption of ESG practices.

ETRC offers numerous services that help organisations evaluate their environmental impact. These include:

- * multiple environmental impact or ecological footprint analysis through LCA (ISO 14044)
- * single environmental impact assessment through product carbon footprint analysis (ISO 14067)
- * greenhouse gas emission accounting for organisational level measurement (ISO 14064-1)

These technical services help companies assess their environmental impact and identify opportunities for improvement. By identifying areas where they can reduce their environmental impact, organisations can make more informed decisions that align with ESG principles. In addition to this, ETRC also offers expertise in eco-material development, which supports companies to develop sustainable products that meet the growing demand for environmentally friendly products.

“With our expertise in technical evaluation and consultancy, we are able to play a vital role in promoting the uptake of ESG practices, enabling organisations to manage their environmental impact and facilitating the development of sustainable solutions,” shared Wan Mazlina.



Moving forward, I hope that all industry players will commit to conducting environmental assessments. This is the first step that needs to be taken before they can embark on their carbon reduction journey, as it will give them a baseline that measures their carbon emissions and, consequently, allow them to chart a quantifiable progress path towards reducing their carbon footprint.”



ETRC's service offerings are aimed at promoting and supporting environmental sustainability initiatives among industries and organisations in Malaysia. ETRC is involved in a cluster of collaboration projects with various companies on product carbon footprinting and corporate-level greenhouse gas emission accounting.

“We are working with Malaysian manufacturing companies from various industrial sectors such as metal industries, additives industries, oleo-chemical industries and others to support them in the evaluation and quantification of their carbon values,” explained Wan Mazlina.

At an international collaboration initiative between Malaysia and Germany, SIRIM, through ETRC, is one of the implementing agencies in the Collaborative Action on Prevention of Single-use Plastic in South-East Asia (CAPSEA) initiative. The project is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) through coordination by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) with the Malaysian Ministry of Economy overseeing it. Outputs from the project include findings and recommendations pertaining to stimulation of the plastic recycling market via circular economy policy support and improving the design of products and services through an eco-design policy framework.

Promoting environmental sustainability initiatives is crucial for the growth and success of businesses in Malaysia in keeping up with the current requirements for an environmentally sustainable market .

“Moving forward, I hope that all industry players will commit to conducting environmental assessments. This is the first step that needs to be taken before they can embark on their carbon reduction journey, as it will give them a baseline that measures their carbon emissions and, consequently, allow them to chart a quantifiable progress path towards reducing their carbon footprint,” said Wan Mazlina.

To find out more about how you can measure your product and organisation's carbon footprint, kindly contact:

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Bolstering your Business for **SUCCESS**



A session with

Nageswary S. Iyampillai
Senior Consultant,
SIRIM STS Sdn Bhd
(SIRIM STS)



Gaining the **three pillars** of sustainable business means investing in a better future. Proper standards and training are essential stepping stones to encourage **Environmental, Social and Governance (ESG)** practices among Malaysia's local players.



Environmental, Social and Governance (ESG) is a concept that has gained immense popularity in recent years. As the world grapples with the effects of climate change, social inequality and business ethics, the importance of ESG cannot be overstated. That being said, the growing interest in ESG is not just a trend but a reflection of government policies and the need for sustainable business practices.

As a developing country and an instrumental part of the multinational and international supply chain, **Malaysia is committed to achieving net-zero emissions by 2050.** ESG is a crucial aspect of this goal. Thus, government agencies and ministries are working closely to provide appropriate benefits to businesses, particularly small and medium enterprises (SMEs), towards implementation of ESG to meet the evolving demands of the market.



Standards provide a consistent set of requirements that organisations can refer to for guidance and best practices. They are not only crucial for ensuring compliance with regulatory requirements but also for improving overall business operations. On the other hand, training is essential to help organisations understand and implement the requirements stipulated in the standard documents. Thus, standards and training complement each other, enabling any organisation towards implementation of ESG, regardless of size or industry, successfully."

Providing a Competitive Edge

At the heart of this are standards and training. According to Nageswary S. Iyampillai, Senior Consultant at SIRIM STS Sdn Bhd (SIRIM STS), "Standards provide a consistent set of requirements that organisations can refer to for guidance and best practices. They are not only crucial for ensuring compliance with regulatory requirements but also for improving overall business operations. On the other hand, training is essential to help organisations understand and implement the requirements stipulated in the standard

documents. Thus, standards and training complement each other, enabling any organisation towards implementation of ESG, regardless of size or industry, successfully.”

Currently, SIRIM STS is developing an industry standard to address the ESG framework that encompasses all sectors of the industry including SMEs. This standardisation process is carried out by a Project Committee that consists of interested stakeholders including SME Corp. Malaysia.

The ESG Management System encompasses two main segments: Requirement and Guidance, and Reporting. In accordance with this, there are 12 ESG indicators that SMEs need to be aware of. They include **water consumption, energy savings, pollution and forced labour**. In addition, developed countries in Europe, the US and Canada will soon impose taxes on companies that do not comply with ESG regulations. Thus, international supply chain organisations must comply to continue business in these countries where such regulations are strictly enforced. This move aims to ensure that all organisations take responsibility for their impact on the environment, society and overall governance.

2 TWO MAIN SEGMENTS

The Requirement and Guidance segment is applicable for all sectors. SMEs especially are welcome to utilise this document. Upon publication, the ownership of the document transfers to the respective organisations. However, those that require assistance in terms of consultancy and training can check with SIRIM STS.

The Report segment is scheduled to be out by the middle of 2023.



Rizal Nainy
Chief Executive Officer,
SME Corp. Malaysia

Synergistic Support

To improve understanding of ESG among SMEs, SIRIM and its partners, including SME Corp. Malaysia, have initiated numerous programmes while working closely with its stakeholders, financial institutions such as Bank Negara Malaysia and industry-related associations to encourage ESG compliance among SMEs.

PKSlestari is an initiative by SME Corp. Malaysia that aims to encourage and accelerate the adoption of ESG among SMEs by developing a sustainable ecosystem of SMEs. The ecosystem that is being developed will consist of

- (i) awareness & education programme;
- (ii) SME ESG Assessment;
- (iii) policy support;

4 FOUR MAIN BENEFITS OF EMBRACING ESG ARE:

Better Financing Options

Financial institutions now look to fund businesses that comply with ESG criteria with matching grants, approval of loans and provision of rebates, tax exemptions and other financing options. This results in better interest rates that lower overhead costs while giving a generous boost to the bottom line.

Production Cost

Closest to the heart of any entrepreneur, ESG compliance results in reduced costs, particularly utility and production costs, by promoting the use of recycled materials and implementing the Reduce, Reuse and Recycle principle. This long-term strategy will result in extensive cost savings for SMEs.

Access to Supply Chains

ESG compliance enhances the market access of SMEs as multinational firms, governments and large corporations are increasingly looking for suppliers that meet ESG criteria. This leads to improved business opportunities and better positioning in the market.

Workforce Retention

A solid commitment to ESG creates an improved reputation and branding among the new generations who are entering the workforce. Those in the GenZ category are more aligned with societal impacts and environmental concerns. Their passion for these issues plays a significant role in their inclination and decision to join and stay in a company.

- (iv) market access;
- (v) standards & compliance; and
- (vi) financing & incentives.

SME Corp. Malaysia has developed a self-assessment tool to assess the current adoption of ESG among SMEs, which will assist firms in finding their starting point and charts the way forward by identifying the gaps in management systems based on 12 selected ESG indicators. The firms will then be categorised into five levels, namely Have Not Started, Basic, Developing, Intermediate and Advanced. Apart from SIRIM, SME Corp. Malaysia is also working closely with other agencies such as the Securities Commission Malaysia to come up with ESG Disclosure Guide for SMEs.

"We recognise that it will take some time for SMEs to acquire the relevant knowledge and expertise to drive sustainability in their operations. Nevertheless, we should assist our SMEs to kick off their journey by taking small steps," said Rizal Nainy, Chief Executive Officer of SME Corp. Malaysia.



We recognise that it will take some time for SMEs to acquire the relevant knowledge and expertise to drive sustainability in their operations. Nevertheless, we should assist our SMEs to kick off their journey by taking small steps."



Meanwhile, since 2022, SIRIM STS has rolled out an Introductory Training Course on ESG for beginners (trainees, organisations and industries) that want to understand the basics and benefits of ESG. This training is scheduled four times a year and those who are interested can proceed to register online via the SIRIM STS website at <https://www.sirimsts.my/>

SIRIM via its subsidiary company SIRIM QAS International Sdn. Bhd. (SIRIM QAS International) had launched **IQNet SR10 Social Responsibility Certification**. SIRIM QAS International is the first certification body in Southeast Asia to offer IQNet SR10 certification, which further showcases the organisation's capabilities in providing ESG-related certification.

The IQNet SR 10 covers the following:

- * Environmental Elements:
Including energy and water efficiency, and waste management
- * Social Factors:
No child labour, set working hours, financial integrity and free association
- * Governance Statures:
Company board composition, employee compensation, anti-fraud, anti-bribery and other ethical policies



Overcoming Hurdles

Not all SMEs readily embrace ESG. Some are hesitant due to trepidation, while others prefer to adopt a “wait and see” attitude as it is not mandatory.

A recurring reason for this slow adoption is the current economic climate, where many SMEs are still trying to rebuild their industry after the COVID-19 pandemic. This includes addressing issues in the supply chain and impending inflation. On the other hand, new SMEs and start-ups may not view ESG as a priority due to a lack of funds and capital.

Besides that, SMEs may have the perception that ESG is costly when it is cost saving. Instead, ESG is a journey towards achieving sustainability. For example, the environmental element of ESG covers areas like energy and water efficiency. **“SMEs need to realise that ESG enables business sustainability in today’s world,”** explained Nageswary. Many households and SMEs have implemented sustainable practices such as energy efficiency and cost-cutting measures. Especially since the pandemic, we have been pushed towards virtual practices, which also aligns with ESG framework. The only difference is that these practices may have yet to be documented or organised structurally in line with the ESG framework. As a result, SMEs may need to be made aware that these practices align with ESG framework.



We know that there is a long list of requirements and standards for ESG internationally, but when it comes to Malaysian SMEs, we need to ascertain that there are elements that they can comply with and not just give them a huge list that would burden them. We need something that is relatable to the Malaysian market.”



My advice to SMEs is to not be intimidated by ESG as it is essentially a matter of documenting and systematising what they are already doing. By doing so, SMEs can reap the benefits of ESG and translate the data for reporting purposes.”

“My advice to SMEs is to not be intimidated by ESG as it is essentially a matter of documenting and systematising what they are already doing. By doing so, SMEs can reap the benefits of ESG and translate the data for reporting purposes,” said Nageswary.

“We know that there is a long list of requirements and standards for ESG internationally, but when it comes to Malaysian SMEs, we need to ascertain that there are elements that they can comply with and not just give them a huge list that would burden them. We need something that is relatable to the Malaysian market,” added Rizal.

Another issue that needs to be addressed is talent shortage in the ESG field. ESG talent development is still at the infancy stage, with universities having only begun to implement Master’s courses on sustainability in the past two years. Adding to the talent shortage, there are



fewer graduates from the science, technology, innovation and engineering courses, where ESG covers a vital part of its curriculum. Nevertheless, as the government and relevant authorities encourage tertiary education in these fields to bridge the gap, SMEs should be able acquire the needed ESG consultants who will directly contribute to their growth with ease in the near future.

"Whatever business you are conducting, whether you are an SME or a multinational enterprise, you are part of a supply chain. To ensure business continuity, you need to be able to comply with the ESG framework. It's just a matter of time before it becomes a necessity," advised Nageswary.



to ensure
business
continuity
comply
with
ESG

SME Corp. Malaysia

SME Corp. Malaysia is the central coordinating agency (CCA) under the Ministry of Entrepreneur and Cooperatives Development (KUSKOP) that coordinates the implementation of development programmes for SMEs across all related ministries and agencies. It acts as the central point of reference for research and data dissemination on SMEs and entrepreneurs, as well as providing business advisory services for SMEs and entrepreneurs throughout the country.

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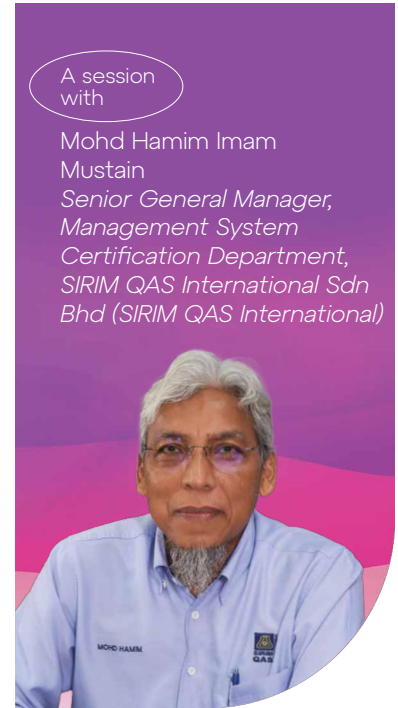
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An Assurance of ESG Compliance

With the Environmental, Social and Governance (ESG) concept gaining prevalence in the global business realm, many organisations are **prioritising imbuing the principles into their daily operations.**



A session with

Mohd Hamim Imam Mustain
Senior General Manager, Management System Certification Department, SIRIM QAS International Sdn Bhd (SIRIM QAS International)



ESG reporting is a necessary step forward for organisations to show that their commitment to the ESG principles is genuine, and not merely a lip service or greenwashing attempt. Once it is ready for public consumption, the verification process will assure both the organisation and its stakeholders of the accuracy and reliability of the information presented in the report."

As more and more organisations pour their resources into incorporating Environmental, Social and Governance (ESG) elements in their core strategies, there has also been an increase in ESG reporting. There are many benefits to this. In addition to demonstrating their commitment to being ethical and responsible, organisations are also utilising ESG reporting as a way to appeal to their stakeholders, including consumers, investors, potential business partners and regulators.

ESG reporting refers to an organisation's disclosure of its ESG data. This not only highlights its ESG activities but also improves its transparency. ESG reports typically encompass information regarding the three key entities, i.e.:

ENVIRONMENTAL – what the organisation is doing to safeguard the environment
 e.g. reducing carbon emissions and waste, preserving biodiversity, responsibly using its resources, decreasing environmental pollution, combating climate change

SOCIAL – how the organisation is improving lives
 e.g. embracing a diverse and inclusive culture, nurturing talent, enhancing its communities and surroundings, adhering to human rights and labour standards

GOVERNANCE – how the organisation is reinforced against corruption
 e.g. internal controls such as policies, procedures, leadership, committee structure, anti-bribery stance, political contributions, whistle-blowing programmes



In a bid to showcase an organisation's sincerity in its ESG reporting, third-party assurance of the veracity of the contents can go a long way. According to Mohd Hamim Imam Mustain, Senior General Manager of the Management System Certification Department of SIRIM QAS International Sdn Bhd (SIRIM QAS International), "ESG reporting is a necessary step forward for organisations to show that their commitment to the ESG principles is genuine, and not merely a lip service or greenwashing attempt. Once it is ready for public consumption, the verification process will assure both the organisation and its stakeholders of the accuracy and reliability of the information presented in the report."

Engaging an independent auditor can enhance an organisation's reliability as these auditors:

- * adhere to applicable independence standards
- * maintain quality control
- * possess extensive experience in understanding business processes as well as assessing and responding to risks
- * have sound knowledge of compliance with established standards and frameworks
- * have specialist expertise in audit procedures when needed
- * adhere to continuing professional education ethics and experience requirements
- * are proficient in evaluating internal systems and processes as well as information for making capital allocation decisions

As an independent third-party verifier of sustainability reports, **SIRIM QAS International carries out the verification task based on the material topics identified by the organisation and according to the proper reporting guidelines.** After the verification process is completed, an assurance statement is issued to the organisation. This can be integrated with the final version of the organisation's Sustainability Report.

"The verification process conducted by us will apply to all the sustainability performance information. As our team would not be involved in preparing the organisation's Sustainability Report or Integrated Annual Report, the objectivity and impartiality of the Sustainability Report are assured," continued Mohd Hamim.

Sustainability Report

The verification of an organisation's **Sustainability Report** is conducted by **SIRIM QAS International** via the following methodologies:

- * Reviewing and verifying the traceability, consistency and accuracy of the information collected
- * Verifying data presented, including a detailed review of the sampled data
- * Interviewing key personnel responsible for producing the Report



The verification process conducted by us will apply to all the sustainability performance information. As our team would not be involved in preparing the organisation's Sustainability Report or Integrated Annual Report, the objectivity and impartiality of the Sustainability Report are assured."



Facilitating ESG Compliance

Kumpulan Perangsang Selangor Berhad (KPS Berhad) is a Malaysian organisation that takes sustainability and responsible business practices seriously. It is constantly working to improve its disclosure practices and ESG reporting. Recently, KPS Berhad made a commitment to establish its carbon baseline by 2025. This has brought attention to areas of reporting and disclosure that require careful attention. To address these challenges, KPS Berhad turned to ESG reporting, which has helped it to develop a strategy for scenario planning in the face of different climate change issues. SIRIM QAS International was subsequently engaged to ensure the accuracy of the data submitted in its ESG report.

Zulkifli Mawardi
 Director, Investor Relations,
 Sustainability and
 Communications,
 KPS Berhad



Conformity assessment services are also essential for a business to stay relevant and meet expectations. We must take action to ensure we can make a positive impact."



As a result of their ESG reporting efforts, KPS Berhad has gained the trust of local communities and attracted interest from ESG investing compliant investors and media companies like the École polytechnique fédérale de Lausanne (EPFL).

KPS Berhad is a global investment holding company with a value chain in about 90 countries serving various electrical and electronic-related sectors. The organisation's focus on sustainability is evident through its emphasis on ESG practices in all its subsidiary companies.

According to Zulkifli Mawardi, the Director of Investor Relations, Sustainability and Communications from KPS Berhad, "Conformity assessment services are also essential for a business to stay relevant and meet expectations. We must take action to ensure we can make a positive impact."

ESG reporting and disclosure are becoming increasingly important for organisations looking to attract investors and gain community support. Organisations like SIRIM QAS International play an essential role in ensuring the accuracy of the information provided in their ESG reports.

SIRIM QAS International has developed expertise in verifying ESG disclosures, which has paved the way for companies like KPS Berhad to develop proper ESG disclosure reports that comply with reporting requirements and promote sustainable practices. Its contribution to the ESG reporting ecosystem in the area of verification services is invaluable in ensuring the credibility of ESG reports, enabling organisations to achieve sustainability goals and build trust with stakeholders.

Forging Forward with Fortitude

Pharmaniaga Berhad (Pharmaniaga), a Malaysian pharmaceutical company, has made great strides in environmental, social and governance compliance (ESG). To affirm its endeavours, it turned to SIRIM QAS International for an ESG verification audit.

Pharmaniaga Berhad (Pharmaniaga) is one of Malaysia's largest integrated pharmaceutical organisations, involved in research and development, manufacturing, logistics, distribution, and sales and marketing. It has a team of almost 100 scientists and 384 registered products. Pharmaniaga's regulatory affairs department ensures that all medical and pharmaceutical products or systems applications comply with regulatory requirements.

Pharmaniaga is committed to decarbonisation endeavours, targeting zero carbon emissions from 2020 to 2050. It has stopped using non-renewable energy sources in some manufacturing plants, transitioning to all solar-powered facilities. It has also engaged professionals to help reduce carbon emissions and improve environmental and occupational safety and health.

Zulkifli Jafar, Deputy Chief Executive Officer of Pharmaniaga, said, "We give 100% commitment to ensure that ESG is adhered to and complied with. The verification services offered by SIRIM QAS International have facilitated our investor relations and communications. Investor interest and community support will increase by assisting organisations to stay compliant and enhance their ESG reporting."



Zulkifli Jafar
Deputy Chief Executive
Officer, Pharmaniaga



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To date, **Pharmaniaga has already obtained six certifications via SIRIM QAS International, including Anti-Bribery Management System (ABMS), Customer Relationship Management (CRM), Information Security, Customer Contact Centre Certification, and Environmental and Occupational Safety and Health, which has helped the organisation in reflecting ESG principles.** As such, the organisation has no qualms in recommending SIRIM QAS International to other companies in a similar industry due to SIRIM QAS International's mission-based approach and local knowledge.

Pharmaniaga's commitment to ESG compliance shows that organisations can prioritise environmental and social responsibility while achieving business success. By being audited by SIRIM QAS International, the organisations can ensure that the reliability of their reports is subsequently enhanced.

"We are extremely pleased with the involvement and results achieved upon obtaining verification from SIRIM QAS International. We are already seeing positive results from our ESG efforts. In addition to improving our management systems, we were able to rise to a higher level," enthused Zulkifli Jafar.

By engaging SIRIM QAS International, Pharmaniaga has attained numerous achievements, including:

- * **implementation** of a "do it right" culture
- * **provision** of healthcare products and services to those below a certain income level
- * **increase** in productivity
- * **investment** in technology
- * **improvement** of environmental and occupational safety and health



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Achieving Global Excellence

As a leading conformity assessment body in Malaysia, SIRIM QAS International offers independent attestation that an organisation meets the relevant standards and has the mechanisms to mitigate ESG risks, thus providing assurance to businesses and stakeholders. This includes helping the organisations ensure that their products and services, or even their operations, meet the necessary quality and safety standards as well as supporting them in improving their ESG practices.

In order to incorporate ESG principles into their management systems, businesses can adhere to standards such as ISO 14001:2015 and ISO 50001:2018 for environmental and energy management systems, ISO 45001:2018 for occupational health and safety management systems, and SIRIM 50 for social accountability. SIRIM QAS International is offering services against these standards.

"We provide a wide range of ESG compliance solutions to help businesses manage their policies, procedures, implementation measures and monitoring in line with their business objectives. Besides that, our management system certification will help to establish a systematic framework for establishing, maintaining and continually improving their own systems," shared Mohd Hamim.

When it comes to ESG Disclosure Verification Services, it involves the independent and professional verification of the accuracy of the ESG disclosure or reporting made by clients. This encompasses ensuring that the information provided by the client is reliable and consistent with the relevant guidelines and standards.

The output of this service is an ESG assurance statement, which serves as a tool for the client to demonstrate their commitment to ESG principles. As an independent third-party body, SIRIM QAS International is able to execute its services with professionalism, impartiality and transparency.

Additionally, SIRIM QAS International can assist organisations to quantify their greenhouse gas (GHG) emissions via standards such as ISO 14064 and ISO 14067 to help Malaysia achieve its net-zero carbon emission target by 2050. In terms of the Social pillar, for example, the SR10 Social Responsibility certification measures how a business, particularly the exporter, addresses social aspects. Meanwhile, for the Governance pillar, SIRIM QAS International is able to certify an organisation's anti-bribery management system, ensuring they have integrity practices and can avoid bribery risks.

SIRIM QAS International provides 46 management certification services covering wide sectors, including forestry, plantation, manufacturing, facility, assets, transportation, logistics, food, medical and public and private services as well as non-government organisations (NGO) services. It also offers lifestyle services such as hospitality, spa and adventure tourism certifications.

Organisations with renewable components can obtain their certification within two to four months, while those with minimal components generally will take up to three to six months.

"By engaging SIRIM QAS International, businesses can ensure they remain on track with their ESG practices, mitigate potential risks and gain a competitive advantage in the marketplace. Ultimately, businesses can contribute towards a more sustainable future while meeting their obligations to stakeholders," said Mohd Hamim.

Engaging

SIRIM QAS INTERNATIONAL WILL HELP BUSINESSES TO:

- * identify and address areas for improvement, develop and implement effective ESG strategies, and continuously monitor and improve ESG performance
- * achieve their ESG goals and contribute towards a more sustainable future
- * obtain independent attestation that they meet relevant standards and have all the mechanisms to mitigate and minimise ESG risks
- * improve their reputation and gain a competitive advantage in the marketplace




We provide a wide range of ESG compliance solutions to help businesses manage their policies, procedures, implementation measures and monitoring in line with their business objectives. Besides that, our management system certification will help to establish a systematic framework for establishing, maintaining and continually improving their own systems."



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To find out more about the certification offerings provided by SIRIM QAS International, kindly contact:

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Profit with PURPOSE



A session with

Ts. Ajmain Kasim
Chief Executive Officer,
SIRIM Tech Venture
Sdn Bhd (STV)



Profit or sustainability – does it have to be one or the other? Both can, and should, be interrelated to achieve a **balanced economic landscape**.

As the business ecosystem continues to evolve, **organisations are increasingly integrating environmental, social and governance (ESG) considerations into their business models for sustainable practices**. This not only benefits the planet and society but can also lead to increased profits and success ethically.

While firms are enthusiastically starting to implement various ESG strategies, there are important factors that lead to its success, namely; leadership commitment, culture and mindset, long term sustainability plan and impact measurement.

Nevertheless, it is crucial to have buy-in from the respective organisations and ensure compliance with ESG guidelines. While the environmental aspect is easy to implement, the social and governance aspects require more efforts. However, focusing on transparency, having a clear set of criteria and using the proper technologies can help enforce these strategies.

MORE SUSTAINABLE BUSINESS PRACTICES CAN LEAD TO AN IMPROVEMENT IN THE WELLBEING OF COMMUNITIES, THE ENVIRONMENT AND BUSINESS BOTTOM LINE.



JOB **Creation**

Reduced POLLUTION 



Efficient WASTE MANAGEMENT & MONITORING

Additional REVENUE 

Technology Docket



▲ Fish Aggregating Device



▲ Solar Street Lighting



▲ Dermatocide Botanical Antifungal Cream



▲ Bio-Natural Gas



▲ Filament Winding Technology



▲ Anaerobic Digester System



Implementing ESG strategies undeniably requires costs, but investing in sustainable business practices can lead to a more promising future. Giving incentives and recognition to those who comply with ESG strategies can be helpful, as would making aspects of ESG adoption mandatory, such as the introduction of government procurement policies that require ESG compliance."



SIRIM TECH VENTURE SDN BHD

SIRIM Tech Venture Sdn Bhd is the commercialisation arm of SIRIM, offering ethical and sustainable technologies in various sectors, including healthcare and wellness, energy and environment, medical devices, and others. Among others, the organisation's strategies include promoting technologies that benefit the environment and society, creating business opportunities that benefit the society.

"Implementing ESG strategies undeniably requires costs, but investing in sustainable business practices can lead to a more promising future. Giving incentives and recognition to those who comply with ESG strategies can be helpful, as would making aspects of ESG adoption mandatory, such as the introduction of government procurement policies that require ESG compliance," said Ts. Ajmain Kasim, the Chief Executive Officer of SIRIM Tech Venture Sdn Bhd (STV).

Our strategy is to promote technologies that are ready to be commercialised. Importantly, we ensure that we are offering ethical technology that encapsulates the ESG elements. All technology offerings are kept in what we call a 'Technology Docket', which is a virtual briefcase of a technology depository that have been assessed its maturity."

Compliance with ESG standards is essential to reduce risks and ensure sustainable practices. Transparency is also crucial in upholding the governance aspect of it. Defining the elements that make up transparency can be challenging. Established criteria for selecting vendors and training employees are important to ascertain that the organisation evolves in the right direction.

Taking the first step is not easy, especially for start-ups and organisations looking to embark on new product offerings in supporting ESG action plans. The research and development process are often an arduous task. Having to thoughtfully incorporate ESG principles may make things tougher.

The unique business model of STV eases this essential step. "Our strategy is to promote technologies that are ready to be commercialised. Importantly, we ensure that we are offering ethical technology that encapsulates the ESG elements. All technology offerings are kept in what we call a 'Technology Docket', which is a virtual briefcase of a technology depository that has been assessed its maturity," added Ajmain.

A Green Innovation

STV has a few knacks up its sleeve when it comes to ethical technology offerings. One of the technologies that STV is promoting is the anaerobic digester system for organic waste management, which turns organic waste into renewable energy that can be used as electricity or gas for cooking, as well as producing bio-fertiliser.



By utilising the anaerobic digester system to turn waste into a energy, this innovative technology has revolutionised waste management, offering a more efficient and sustainable solution. To date, the organic waste management system has been successfully implemented in Kedah, and has contributed to less pollution and efficient waste management and monitoring. This also benefits the environment."

"By utilising the anaerobic digester system to turn waste into a energy, this innovative technology has revolutionised waste management, offering a more efficient and sustainable solution. To date, the organic waste management system has been successfully implemented in Kedah, and has contributed to less pollution and efficient waste management and monitoring. This also benefits the environment," explained Ajmain.

STV's technologies can be cost-effective in the long run. For instance, implementing the organic waste management system will lead to cost savings for businesses by reducing their waste disposal costs.

According to a study by the National Renewable Energy Laboratory (NREL) of United States of America (USA), anaerobic digestion of organic waste can reduce greenhouse gas emissions by 2,000 to 3,000 pounds of carbon dioxide equivalent per ton of organic waste processed. This is instrumental in endeavours to reduce carbon footprint and improve air quality.

Recently, STV has commercialised an innovation called 'portable procedure station' that collects the dressing of patients hygienically and efficiently in hospitals' trauma centres. "When it comes to an injury or trauma, the hospital will typically encounter biological hazards contained in blood. The 'portable procedure station' will centralise the wound dressing workflow and minimise contamination while complying with Malaysia's healthcare and medical requirements as well as ensuring other patients' safety," explained Ajmain.

STV has also taken active participation in discussion on hydrogen economy. "As a country, we have to look into possible alternative sources of energy. While it will be challenging, we are looking forward to developing hydrogen in Malaysia, especially since this will be an important step in championing green energy," shared Ajmain.

The hydrogen economy refers to the usage of hydrogen for the purpose of decarbonising economic sectors by decreasing or eliminating dependency on non-renewable energy, such as fossil fuels.

To do this, STV has been actively pursuing business linkages related to the hydrogen economy where potential players are linked to the product development team in SIRIM in leveraging the technical competencies for the potential of a localised hydrogen storage system.

By investing in hydrogen technologies and infrastructure, organisations can reduce their carbon footprint and promote sustainable practices, ultimately enhancing their environmental and social performance. The increasing demand for clean energy sources like hydrogen also creates new market opportunities and can contribute to long-term financial growth.

As a country, we have to look into possible alternative sources of energy. While it will be challenging, we are looking forward to developing hydrogen in Malaysia, especially since this will be an important step in championing green energy."



The market is selling composite materials, but those are not truly green. Ours is environmentally friendly, has a wood finishing resembling white oak that does not require painting and is easier for installation purposes."



Additionally, STV has adopted industry 4.0 technologies to offer integrated solutions for a high-value commodity traceability system, harness natural raw materials for cosmetic products and develop composite products from agricultural waste.

Long-term Benefits

One of STV's goals is also to uplift the industry by providing consultancy in product development processes. While doing this, it also has potential of creating additional revenue streams for the society as well. The composite products produced from the agricultural waste can be used as a sustainable alternative to wood, a common material in the furniture industry. This reduces deforestation and offers a new market for farmers to sell their waste, reducing open burning practices that pollute the environment. STV has a technology on composite materials in its docket to be offered to any interested parties.

"The market is selling composite materials, but those are not truly green. Ours is environmentally friendly, has a wood finishing resembling white oak that does not require painting and is easier for installation purposes," Ajmain revealed.

ESG is about taking responsibility for the impact of business activities on society and the environment. The adoption of advanced technologies that contribute to ESG has positive impacts such as promoting job creation, improving living standards, ensuring transparency and accountability, and reducing carbon footprints.

"It's a win-win situation for businesses, society and the environment!" declared Ajmain.

To find out more about STV's ethical technology offerings, kindly contact:

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Vertical Farming



Composite Technology

Leading the Change towards a **SUSTAINABLE FUTURE**



Going green is an essential step for a **sustainable future** that every individual needs to make. SIRIM's fourth strategic thrust aims to pioneer a **sustainable revolution** that begins from within. Of course, all are welcome to join in its efforts.

Environmental concerns have been a hot topic for the past few decades. In fact, it is perhaps the most visible among the three Environmental, Social and Governance (ESG) pillars. After all, we only have one home – Earth. In addition to being able to do our part to conserve the wellbeing of the planet, **going green also offers cost-saving benefits**. For small and medium enterprises (SMEs) looking to grow their profit margin, one small step forward in this direction can go a long way.

Realising that it is important for the change to start from within, SIRIM is walking the talk with its fourth strategic thrust, **Greener SIRIM for Greener Malaysia**, which forms part of its **10-year Strategic Plan** that began in **2018**. With a laser focus on green innovations and carbon footprint reduction, SIRIM is paving the way for a brighter future. This all-encompassing effort extends to every aspect of their operations, from research and development to industry partnerships and community engagement, and sets new standards for responsible business practices.

To achieve its objective of reducing its environmental footprint and contributing to a sustainable Malaysia, SIRIM has set its sights on reducing its environmental impact, developing innovative solutions and enhancing its overall image.

"The focus on creating a sustainable business environment led to the establishment of a dedicated Sustainability Department tasked with promoting ESG and a sustainability work culture while also reducing SIRIM's carbon footprint. By embracing ESG as a new culture of quality, high productivity, efficiency and work-life balance, SIRIM is poised to achieve a win-win situation for all stakeholders," said Ir. Mohd Salleh Drus, the General Manager of SIRIM's Asset Management Department (AMD).

A session with

Ir. Mohd Salleh Drus
General Manager,
SIRIM Asset Management
Department (AMD)



The focus on creating a sustainable business environment led to the establishment of a dedicated Sustainability Department tasked with promoting ESG and a sustainability work culture while also reducing SIRIM's carbon footprint. By embracing ESG as a new culture of quality, high productivity, efficiency and work-life balance, SIRIM is poised to achieve a win-win situation for all stakeholders."



Contributing to a Greener Malaysia

SIRIM is dedicated to **reducing carbon emissions** in support of Malaysia's aspirations to becoming a **carbon-neutral nation by 2050**. "Our overarching goal is to align SIRIM's efforts with the national agenda of a greener Malaysia, increase overall eco-sustainability and promote the diffusion of green technology through our subsidiary, SIRIM Industrial Research," shared Mohd Salleh.

SIRIM's green initiatives and technology development not only promote environmental sustainability but also create long-term economic and social value by taking into consideration ecological, social and economic factors.

To achieve these objectives, SIRIM has been implementing several projects and initiatives. These include a recent collaboration with GSPARX, a subsidiary of Tenaga Nasional Berhad (TNB), to install solar photovoltaic systems (PV Systems) at Jalan Lada Sulah and Jalan Pahat. These zero-cost investment businesses include a 110kWp solar system and a 55kWp solar system, both of which have been fully operational since 2022.

Another contract has been secured for the installation of Building Integrated Photovoltaics (BIPV) in SIRIM's Shah Alam headquarters (551kWp) and National Metrology Institute of Malaysia (NMIM) (331.2kWp) by September 2023. The BIPV will involve installing covered car parks that utilise solar panels.

For the Environment and Economy

The benefits of energy conservation technologies are vast and extend to both the environment and the economy. For the latter, these technologies can significantly lower the cost of operation.

Citing the solar PV system installation at Jalan Lada Sulah and Jalan Pahat as examples, Mohd Salleh shared, "With the integration of solar PV panels at Jalan Lada Sulah and Jalan Pahat, SIRIM achieved savings ranging between RM300 and RM900 per month from May to December 2022, while energy consumption from the solar panels ranged between 17% and 88% per month, depending on machine utilisation and daily weather."

Another project undertaken by SIRIM AMD is the installation of a rainwater/groundwater harvesting system for planting and running water features around the building. This system has been in place since 2022 and is currently being used at *Rumah Tamu* and the surau for a car wash centre, water pond and fountain. Additionally, the system is also employed to water plants at *Taman Herba* and *Taman Haruman* for *Rumah Alumni*, Open Area Test Site (OATS) and *Rumah Tamu*. When fully functioning, the project is expected to result in a 10% savings in water utilisation, amounting to RM20,000 per month for plant watering and water jet cleaning.

Other projects that SIRIM has conducted under its

GREENER SIRIM FOR GREENER MALAYSIA thrust include:

- * installing solar street lighting with internet of things (IOT) technology at the car park as an exhibition platform to showcase the system to industries and the public
- * participating in the Shah Alam City Council (MBSA) Low Carbon City 2030 programme
- * implementing SIRIM Green Procurement for air conditioning, painting and cleaning services
- * hosting SIRIM Green Day 2019 and 2022, which encompassed e-waste and old clothes recycling and tree-planting (inclusive of herbal and fruit trees) activities
- * improving energy performance for specific areas, processes, equipment and facilities





Our overarching goal is to align SIRIM's efforts with the national agenda of a greener Malaysia, increase overall eco-sustainability and promote the diffusion of green technology through our subsidiary, SIRIM Industrial Research."

"These efforts not only lower living expenses for building occupants but also have a lower overall carbon footprint impact, making a significant contribution to sustainable development goals and a greener Malaysia," added Mohd Salleh.

Plans are currently underway to attain a Green Building Certification via GreenRE for SIRIM's buildings.

According to Mohd Salleh, "We are now already 30% to 40% underway with our first building (Block 17). Our target is to achieve compliance by the year 2025. As part of our efforts, we have started benchmarking to create a base for calculations and future actions."

The certification process encompasses six categories that need to be complied with. Each of these categories are expected to contribute to future savings of 5% to 10%.

Among others, various electrical appliances will be replaced with more eco-friendly ones. This includes the installation of LED bulbs that will facilitate energy savings. The compliance committee will also be looking at the building's ventilation and an environmentally friendly water system. Using the non-drinkable water collected from the rooftop for its pump-related systems such as the toilets, fountains and car wash facilities, SIRIM AMD's rainwater harvesting system will become an integral part of the project.

Other elements that will contribute towards the Green Building Certification compliance are the building's surrounding greenery such as its gardens, the type of paint used throughout the infrastructure, as well as increasing the efficiency of the highest electricity load – the air conditioning system.

Upon getting this building certified, SIRIM will shift its focus to Block 15 and eventually Block 5, the tallest building within the premises.

The implementation of energy conservation technologies and the Green Building Certification aims to not only reduce operating costs but also contribute to sustainable development goals and a greener Malaysia.

SIRIM AMD is also working towards examining energy consumption and ensuring the efficient use of energy in its premises. The institute has planned energy audits for Block 5, Block 17, Block 19 and Block 25 to scrutinise and focus on the energy consumption of the specified buildings.

To facilitate this, SIRIM AMD is hooking up its systems to smart meters that help in monitoring energy consumption. As a step towards making smart meters a norm for all buildings, the institute is collaborating with TNB to provide five smart meter units for their programme. In the future, SIRIM AMD plans to buy more smart meters to make it easier to monitor energy consumption nationwide. This effort is part of the Shah Alam City Council's (MBSA) Low Carbon City 2030 programme, which aims to provide a platform for industry players to measure and monitor their carbon footprint and create awareness through inter-industry sharing sessions about successful carbon footprint reduction projects.

"We recognise that reducing emissions is a Herculean endeavour, but the adoption of ESG practices can help speed up the transition towards a sustainable business environment and culture," said Mohd Salleh.


In this fast-changing world, pivoting business strategies to become sustainable has become a challenge. However, SIRIM AMD believes that change always comes with opportunity. **By adopting sustainable practices, businesses can reduce their environmental impact and increase their long-term profitability.** SIRIM AMD aims to continue its efforts towards promoting sustainable living, and it hopes to inspire other corporations and individuals to join the movement towards a more sustainable future.



We recognise that reducing emissions is a Herculean endeavour, but the adoption of ESG practices can help speed up the transition towards a sustainable business environment and culture."

To find out more about ways to inculcate a greener culture in your organisation, kindly contact:

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