



# TECHIES

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## MALAYSIA'S PUSH FOR CLIMATE RESILIENT BUSINESSES

By Ts. Bryan Paul, ESG Malaysia

Almost ten years ago, 196 nations, including Malaysia, adopted the Paris Climate Agreement to limit temperature increase to 1.5°C above pre-industrial levels, and to keep the rise in global average temperature well below 2°C above pre-industrial levels. However, recent reports, especially from the International Panel on Climate Change (IPCC), argue that we may not be on track to meet these targets, as current action plans remain inadequate.

### What Does this Mean for Businesses?

Climate change refers to a long-term shift in temperature and weather patterns over extended periods. In layman's terms, the weather is getting hotter over the years, with known schedules of rains and droughts no longer following their usual timeframes. Rather, they are becoming more intense.

As global temperatures continue to rise, the Earth slowly heats up. Global warming causes erratic weather patterns, including exacerbated periods of drought, floods, heatwaves, intense typhoons or cyclones, and rising sea levels. These phenomena are becoming more frequent in Malaysia, affecting the nation in terms of assets and financial losses, directly impacting economic activities, disrupting supply chains, and threatening livelihoods.

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**/chief editor's note**

Happy new year to all TECHIES readers!

As we step into 2025, the urgency of the environmental, social, and governance (ESG) agendas has never been greater. During COP29 in Baku last November, world leaders reinforced the need for stronger climate finance commitments, while Malaysia reaffirmed its role in shaping a sustainable future. This year is particularly significant as the country takes on the ASEAN Chairpersonship, setting the stage for regional collaboration on climate resilience and sustainable development. The challenge ahead is clear—how much are we truly willing to invest in building a future that is both environmentally sustainable and economically viable?

Bursa Malaysia's mandate for listed companies to include sustainability statements in their annual reports marks a major step toward corporate accountability. However, for many SMEs, compliance remains a challenge due to resource constraints and evolving regulatory landscapes.

The transition to ESG-driven business models requires not only commitment but also practical, technology-driven solutions.

Technologists and technicians are key to turning ESG principles into reality. From energy-efficient designs to AI-driven optimisation, their innovations drive real impact. Whether it is carbon tracking, waste reduction, or shaping regulatory policies, they are at the forefront of sustainability transformation. A sustainable future requires more than just commitment. It demands action. Let us make 2025 the year we move beyond words and create lasting changes. It is time to pivot from commitment to action.

Together, let us build a future that is scientifically sustainable, technologically responsible, and more.

A Common Responsibility, A Global Commitment!

*Zuraidah Mohd. Zain*

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Businesses that fail to adapt may face operational disruptions, increased costs, bigger regulatory pressures, and diminished market opportunities. Small and medium enterprises (SMEs), in particular, are therefore highly at risk if they do not adapt to changing climatic conditions. On the other hand, those that proactively embed climate resilience into their strategies stand to benefit from competitive advantages, enhanced market access, and better risk management. Thus, developing climate-resilient businesses is critical to mitigating climate risks and reducing vulnerabilities.

**Challenges Faced by Malaysian Businesses**

Understandably, Malaysian businesses face several challenges in their journey toward climate resilience. These include:

- **Limited Awareness and Knowledge Gap**  
Many businesses – SMEs and larger companies alike – still lack the technical expertise and resources to adopt climate-resilient practices.
- **High Upfront Cost**  
Transitioning to sustainability may require technological improvements and processes, often requiring significant investments that may deter businesses and affect their bottom lines.

- **Data Limitation**  
Reliable climate data for assessing risks and opportunities is generally purchase-based and not publicly disclosed. Hence, it is mainly inaccessible to many businesses.
- **Gaps in Policy and Incentive Implementation**  
There is often a disconnect and lack of communication in translating sustainability-related policies and available incentives down to the ground for businesses.

**Supportive Policies and Frameworks**

Malaysia's journey towards climate resilience is supported by a robust policy and regulatory framework. The National Policy on Climate Change (NPCC), recently updated to version 2.0, serves as a foundation for integrating climate actions across all sectors. It emphasises the transition to a low-carbon economy and positions climate and sustainability as engines for economic growth. To add, there are also the National Energy Transition Roadmap (NETR), which promotes a just energy transition towards a green economy, and the National Industrial Master Plan (NIMP), which drives technological investments and innovations for climate actions. Recently, the National Sustainability Reporting Framework (NSRF) was published to ensure that listed companies and large non-listed companies report their sustainability practices and climate-related information. Moreover, Malaysia is actively



**Flooding in Pasir Puteh, Kelantan:**  
**The Straits Times (2024). Floods displace close to 139,000 people in Malaysia with death toll at 4.**  
 Source: <https://www.straitstimes.com/asia/se-asia/floods-displace-122000-people-in-malaysia>

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**Strategies such as diversifying suppliers, pushing suppliers to embed sustainability into their vendor requirements, adopting circular economy principles, and investing in technology-driven resource optimisation help businesses mitigate climate risks while reducing operational costs and other financial risks.**

working on its Climate Change Act, expected to be enacted in 2025, to institutionalise climate governance and set binding targets for emission reduction. These policies aim to create accountability and foster an ecosystem where businesses are incentivised to align with national climate goals.

### Industry Initiatives for Climate Resilience

Some key industries and major players are already taking bold steps to align themselves with sustainability and climate resilience goals. Businesses in manufacturing, construction, logistics, oil and gas, and agriculture increasingly focus on building climate-resilient supply chains to ensure minimal disruptions to their operations and bottom lines. Strategies such as diversifying suppliers, pushing suppliers to embed sustainability into their vendor requirements, adopting circular economy principles, and investing in technology-driven resource optimisation help businesses mitigate climate risks while reducing operational costs and other financial risks.

Furthermore, the financial sector is accelerating climate transition by promoting green financing and incorporating climate risk assessments through the integration of sustainability into their borrowing criteria. Instruments such as sustainability-linked loans, green bonds, and environmental, social, and governance (ESG)- driven investment portfolios are becoming common tools to empower businesses to become climate-resilient.

### Opportunities and Conclusion

While challenges persist, the pursuit of climate resilience presents significant opportunities for Malaysian businesses. Companies that adopt climate-resilient practices are better positioned to ensure that their businesses continue to operate and manage the longevity of their assets against climate-induced factors. They can meet the demands of global trade, particularly with stringent sustainability regulations such as the export requirements to the European Union, enabling better access to financial and market opportunities. Overall, businesses that prioritise sustainability and climate resilience can build trust with investors, customers, and communities, as ESG compliance becomes a critical consideration for all involved.

Malaysia's push for climate-resilient businesses underscores its commitment to sustainable and inclusive economic growth. While challenges remain, the opportunities for innovation, competitiveness, and leadership are immense. By embracing climate resilience, Malaysian businesses can safeguard their future while contributing to a more sustainable and prosperous outlook.

Collaboration is crucial to driving systemic change, with public-private partnerships, knowledge-sharing initiatives, and international cooperation accelerating Malaysia's climate resilience efforts.

Organisations such as the Malaysia Board of Technologists (MBOT) and ESG Malaysia play vital roles in fostering innovation, bridging knowledge gaps, and equipping businesses with the tools needed to adapt to climate challenges.

Through unified efforts and strategic actions, the country can lead Southeast Asia in demonstrating that climate resilience forms the foundation for a sustainable economy and growth.

# ESG and AI in Civil Engineering

The terms ESG and sustainability have gained popularity in the civil engineering and construction industry. For civil engineers, it is important to align infrastructure development with ESG goals, of which technology plays a pivotal role. Generally, small and medium-sized construction projects in Malaysia tend to use traditional construction methods, which do not necessarily prioritise ESG and sustainability aspects. The engineers in charge normally aim to just complete the projects that give the best financial outcomes. Hence, pollution from dust, noise, and water – to name a few – is often rampant.

## The Civil Engineer's Role in Environmental Sustainability

In recent years, practices in civil and chemical engineering have given birth to a new discipline - environmental engineering. This new discipline focuses on minimising environmental impact and promoting environmental sustainability by analysing the estimated environmental effect the projects produce. Needless to say, mitigating all facets of the projects and what they produce is of prime importance.

Here are some major trends that support environmental sustainability:

- Advanced Building Materials**  
 Traditional construction materials, especially concrete made with cement and aggregates (stone crush), are major contributors to carbon emission. As such, efforts have been made to develop green concrete and recycle industrial by-products such as fly ash and slag from energy production. This has significantly reduced emission while maintaining structural integrity. Sarawak Energy Berhad, for example, collects fly ash from coal-fired plants in energy production to produce aerated concrete blocks for construction purposes.
- Digital Twin Technology**  
 This technology creates digital replicas of infrastructure projects that allow engineers to simulate and optimise the environmental performance and impact produced during the execution of the projects, which further enhance the analytical capabilities of building information modelling (BIM). By analysing energy

consumption, water usage, and material efficiency, engineers can design structures that align with sustainability goals and produce minimum material wastage.

- IoT and Smart Sensors**  
 Nowadays, sensors are often embedded in a building's infrastructure to provide real-time data on energy use, structural health, and environmental conditions. For example, smart water management systems in urban areas can optimise water distribution, reduce waste and energy consumption, and lessen wastage of resources to promote sustainability. The Smart Selangor initiative is an example, whereby, IoT technology is incorporated in its water management protocols, enabling the detection of leaks and optimising distribution, hence ensuring efficient use of water resources by real time monitoring and predictive analysis.
- Social Responsibility**  
 Beyond building structures, the civil engineers' social responsibility includes creating equitable, inclusive, and safe environments. For example:  
 Inclusive Design Software  
 Utilising tools such as BIM (Building Information Modeling) to visualise the project on hand for everyone - including those from non-technical backgrounds - ensures that the needs of all users, including those with disabilities, are taken into account. Virtual reality platforms allow stakeholders to experience designs before construction, guaranteeing accessibility, usability, and satisfaction.

- **Safety Management Systems**

Utilising wearable technology and AI-powered safety monitoring systems further enhance worker safety in construction sites. The systems can predict hazards and alert workers in real-time, minimising accidents from occurring. For example, in Malaysia, the Tun Razak Exchange (TRX) development implemented advanced safety monitoring systems which used IoT-enabled sensors installed within the building framework to track stress points, detect unsafe working conditions, and provide real-time alerts to site managers. This provided a safer working environment and allowed preventive measures before accidents occurred by the use of predictive analysis.

### Governance and Ethical Practices

AI is probably the most effective enabler to good governance and ethical practices. It can process vast datasets, including regulatory documents, environmental guidelines, and social impact requirements to ensure compliance throughout the project lifecycle. For example, AI can prepare a comprehensive checklist of project requirements before work commences. This reduces the likelihood of penalties and ensures alignment with both local and international ESG standards. To add, AI leverages data to make informed and ethical project decisions. All reports are recorded in a database that AI then uses to conduct job safety analysis prior to work, highlighting all possible hazards and the way to mitigate them.

### Challenges and Future Directions

Despite its potential, technology adoption in civil engineering still faces some challenges, including:

- **Barriers to Technological Adoption**

High costs, lack of expertise, and resistance to change are significant obstacles in the industry, especially for traditional construction works that prefer the traditional cost-wise approach. Bridging the gap requires investment in training and incentives for innovation, which are going to be a long run. In addition, building a workforce

equipped with digital and technical skills requires substantial investments in training and the creation of partnerships with relevant educational institutions.

- **Emerging Technologies**

Advances in fields such as robotics, AI, and sustainable materials are crucial in revolutionising the civil engineering industry. Technologies such as autonomous construction machinery, 3D printing, and nanomaterials are at the forefront of this transformation. However, embracing these technologies requires continuous research, pilot testing, and collaborations among numerous industry stakeholders in Malaysia.

Multidisciplinary collaborations among engineers are crucial in this case, which emphasise the need for coordinators with knowledge across various fields. Universiti Teknologi Petronas (UTP) is launching a Bachelor of Integrated Engineering program with Honours in 2025. The program interconnects various engineering disciplines, aiming to address current challenges and foster innovative solutions. This signals a promising future for emerging technologies in the field of engineering.

### Closing

The integration of technologies into ESG principles in civil engineering marks a pivotal shift towards a more sustainable, inclusive, and ethical industry. While Malaysia's construction sector often prioritises cost over sustainability, the adoption of advanced technologies such as green materials, IoT, and AI holds the potential to revolutionise the industry if they can provide cost effective alternatives while complying to ESG standards. However, much effort is needed in overcoming barriers to technological adoption, fostering multidisciplinary collaboration, and equipping engineers with the necessary skills and knowledge.

By fully embracing ESG principles and leveraging technology, the civil engineering industry could meet both current demands and safeguard resources and opportunities for upcoming generations, paving the way for sustainable future ahead.

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# Empowering ESG with Technology: A Path Forward for Malaysian SMEs and Technologists

*an interview with*

**YBhg. Tan Sri Abdul Wahid Omar**

Chairperson of the Bursa Malaysia



**How do you perceive technology's role in advancing ESG practices among Malaysian companies, especially SMEs?**

Thank you for having me on this edition of Techies. Before diving into ESG, let's take a step back and look at the relationship between technology and sustainability. In the past, technology was often seen as the cause of environmental damage, as shown by the I=PAT formula, where I is the environmental impact, P represents population size, A represents affluence or wealth (per capita consumption), and T represents technology (impact per unit of consumption). Technology has been seen as a driver of resource depletion, pollution and waste.

Today, with the rise of the green economy, I believe this view has changed. Technology is now seen as a powerful enabler of sustainable progress. Green technologies – such as renewable energy, energy-efficient systems and digital tools – are helping to tackle environmental challenges and accelerate the transition to a low-carbon economy.

Now let's turn to ESG – environmental, social and governance factors – which are the actionable steps that bring the broader idea of sustainability to life. ESG factors focus on measurable outcomes, such as reducing carbon emissions, improving labour practices and strengthening corporate governance. In this way, ESG builds a bridge between big sustainability goals and tangible actions.



Photo Credit: Bursa Malaysia

Beyond compliance, technology helps SMEs unlock value by identifying energy efficiencies, reducing operational costs, and improving transparency, which can attract investors and partners who prioritise ESG commitments. As Malaysia advances towards a more sustainable future, integrating technology will ensure that all businesses, regardless of size, can contribute meaningfully to this collective goal.

**Can you share examples where technological solutions have effectively addressed ESG challenges within organisations?**

Technology has become a vital enabler for addressing ESG challenges across all industries. For SMEs in Malaysia, digital tools and platforms play an important role in making sustainability more accessible and actionable. For example, low-cost solutions such as cloud-based carbon calculators and digital ESG reporting platforms enable SMEs to measure their environmental impact and engage in sustainability initiatives without making significant upfront investments. The Prime

Minister raised this point at the Sustainable Development Goals Council meeting in December 2024, whereby he stated solutions must be affordable for SMEs so that they do not have to depend on consultants. There are tools now that democratise ESG adoption and enable even companies with limited resources to track metrics, report transparently and make informed decisions.

In manufacturing, IoT sensors and AI-powered analytics are extensively used to monitor energy consumption and predict equipment maintenance. This significantly reduces energy waste and prevents costly disruptions. Building information modelling (BIM) is also helping companies reduce waste by optimising design and material usage.

Another notable example is the use of blockchain technology for supply chain transparency. Companies in industries like palm oil use blockchain to trace raw materials from source to final product and ensure compliance with sustainability standards and ethical

practices. This technology has effectively overcome social and environmental challenges associated with complex supply chains, strengthening accountability and trust.

**Bursa Malaysia has introduced platforms like the ESG Reporting Platform and the Centralised Sustainability Intelligence (CSI) Solution to facilitate ESG reporting. Could you elaborate on how these platforms assist companies, particularly SMEs, in their ESG reporting journey?**

To effectively report on ESG targets, companies must collect data from internal departments such as Finance, IT and HR, and external business partners, including contractors and energy suppliers. This requires collaboration across the entire supply chain to ensure comprehensive ESG reporting.

To support this, Bursa Malaysia has introduced platforms such as the Centralised Sustainability Intelligence (CSI) solution and the ESG Reporting Platform, each tailored to meet different ESG reporting needs.

The ESG Reporting Platform is primarily for publicly listed companies (PLCs) that must disclose their ESG data. It helps PLCs meet the rising expectations of investors and regulators by streamlining reporting processes and ensuring alignment with global sustainability standards such as the IFRS S1 and S2.

On the other hand, the CSI solution is broader in scope and includes SMEs. It facilitates the collection of ESG data and reporting across the entire value chain and enables SMEs to participate as suppliers or partners of PLCs. This approach creates a comprehensive ecosystem for sustainability reporting in which ESG principles are adopted throughout the supply chain.

The CSI platform includes carbon emission calculators and automated reporting capabilities. These simplify compliance with ESG frameworks and provide accurate climate reporting, including emission data and risk assessments aligned with international standards. In addition, through partnerships with financial institutions, CSI connects SMEs with financial incentive programs, improving access to sustainable finances.

By utilising the CSI platform, SMEs can efficiently manage their ESG data, strengthen their sustainability credentials, and access better financing and new market opportunities. Ultimately, this will improve their competitiveness and position them for growth in the green economy.

**With Bursa Malaysia launching platforms like the Centralised Sustainability Intelligence (CSI) Solution, how do you see these tools benefiting technical companies, especially those employing technologists and technicians?**

CSI is a digital tool that allows companies to track ESG metrics such as carbon emission, resource consumption and supply chain sustainability. Manual collection of ESG data is both time- and labour- intensive and often does not accurately reflect a company's ESG performance. In



**By utilising the CSI platform, SMEs can efficiently manage their ESG data, strengthen their sustainability credentials, and access better financing and new market opportunities. Ultimately, this will improve their competitiveness and position them for growth in the green economy.**

contrast, the CSI platform's data and insights improve technologists' and technicians' ability to drive innovation in energy efficiency and waste minimisation. To add, it enables technologists and technicians to leverage their expertise and promote a culture of sustainability in technical organisations while improving reporting accuracy and compliance with international standards.

The CSI solution provides significant added value for technical companies, especially those that employ professional technologists (Ts.) and certified technicians. These professionals are essential for developing, implementing, and maintaining organisational technical systems. They are also central to identifying efficiencies, optimising processes, and driving innovations that align with sustainability goals.

**What advice would you offer to technical companies in developing ESG reports that not only comply with regulations but also highlight the contributions of their technological workforce?**

Companies should showcase their diversity, equity, and inclusion (DEI)

policies alongside corporate governance practices to highlight the workforce's contribution. They should use case studies as powerful tools. For example, they can highlight specific examples of how technologists or technicians have developed solutions that reduce energy consumption, optimise resource use, or reduce emissions. In addition, they can include measurable outcomes such as energy savings or emission reductions, to build credibility.

Companies can also highlight technological innovations by showcasing proprietary technologies or sustainable designs developed by their teams, such as green manufacturing processes. In addition, the reports should illustrate how employees' contributions positively impact stakeholders – whether by increasing product value, reducing costs or meeting growing customer demand for sustainable solutions. Highlighting these cases will motivate the featured employees and inspire others to emulate the success shown by their colleagues.

**For technical companies looking to adopt sustainable practices, where should they start, especially if they are new to the ESG framework?**

The first step for technical companies that have not yet engaged with sustainability frameworks is to understand their impact on stakeholders. A materiality assessment helps to identify the most important ESG factors to the business. This will assist companies to ensure that their efforts are prioritised and aligned with industry expectations.

The next step is to focus on data collection by tracking key metrics such as energy consumption, emission, waste, and workforce diversity. Tools such as carbon calculators or platforms like Bursa Malaysia's CSI solution make this process more manageable.

Upskilling employees, especially technologists and technicians, is also important so that they can effectively integrate ESG principles into daily operations. Finally, companies should



Photo Credit: Bursa Malaysia

align with global frameworks by starting small. Focus on one or two key areas, such as emissions reduction or supply chain sustainability, and build progressively. It is essential to celebrate early successes as they will demonstrate commitment and drive more adoption of sustainable practices.

**What are the common pitfalls you have observed among technical firms attempting to integrate ESG principles, and how can these be avoided?**

A common pitfall is over-reliance on consultants and implementing the transition in prolonged periods. While consultants provide valuable expertise, relying too much on them without building internal capacity can hinder long-term progress. Companies should focus on training their employees, especially technologists and technicians, to embed ESG principles into daily operations and ensure that sustainability becomes a core competency.

Another issue is the tendency to view ESG as a compliance exercise rather than a strategic opportunity. Some companies focus solely on meeting reporting obligations without aligning ESG with their core business strategy. Indeed, embracing sustainability in one's strategy and business operations is no longer something nice to have. Rather, it is a necessity for business survival and longevity. Conducting a materiality analysis to identify areas of greatest impact can help businesses integrate ESG into their broader objectives.

**Reflecting on your leadership in promoting ESG in Malaysia, are there any specific industries or technologies that you believe have untapped potential to drive ESG efforts?**

Malaysia's economic structure offers diverse potential to drive ESG efforts, especially through industries like manufacturing, plantation, renewable energy and consumer lifestyles. Technologies like AI, data analytics, IoT, and precision farming – to name a few – remain underutilised across these industries. These technologies are essential not just for achieving compliance but for creating long-term value.

Another area that has great potential is the development of energy storage, especially low cost but efficient battery technology. If the cost of battery is reduced significantly, then combining it with solar power will enable widespread usage of distributed renewable energy that will support Malaysia's target of 70% renewable energy by 2050.

**What advice would you offer to technologists and technicians aiming to contribute to Malaysia's ESG goals?**

Technologies and technicians are the backbone of Malaysia's industrialising economy. My advice would be for everyone to truly embrace the spirit and intention of the ESG, comprehend the issue, be pragmatic, appreciate the need for continuous learning and stay updated on emerging technologies that intersect with sustainability. Collaboration is also key, hence it is crucial to undertake engagement with various stakeholders across industries to implement solutions that address both sustainability challenges and business needs. It is also important to ensure that in coming up with solutions, opportunity costs must be taken into account. For example, ground-mounted solar panels deprive vast areas of land from other potential uses. So please continue to innovate and think outside the box or employ the Blue Ocean Strategy when coming up with valuable ESG solutions.

# NEWLY RELEASED!



## PROFESSIONAL SERVICES STANDARD FOR TECHNOLOGISTS AND TECHNICIANS

The Malaysia Board of Technologists (MBOT) has published the Professional Services Standard for Technologists and Technicians. In line with the Technologists and Technicians Act 2015 (Act 768), this standard serves as the primary reference for technologists and technicians to ensure compliance with the scope of services and professional practices for technologists and technicians.



Visit [www.mbot.org.my/professionalguidelines](http://www.mbot.org.my/professionalguidelines) or scan the QR code to download the Professional Services Standard for Technologists and Technicians.

### Professional Technologists (Ts.)

Technology services in respect of any operation relating to product:



### Certified Technicians (Tc.)

Technical services in respect of any operation relating to product:



## Objectives of the Professional Services Standard for Technologists and Technicians

01



### For MBOT Professional Members

To guide Professional Technologists (Ts.) and Certified Technicians (Tc.) in conducting verification and evaluation of technology and technical processes. This ensures that the verification processes are systematic and adhere to established standards.

“Setting standards, ensuring excellence”

02



### For Organisations/ Employers/ Project Owners

To assist organisations in identifying components or areas within projects and operations that can be certified, ensuring compliance with recognised technical standards. This includes identifying roles in technology and technical functions that require accreditation to enhance quality and safety in their operations.

“Certifying quality, elevating safety”

03



### For Government/ Regulators

To serve as a reference in developing policies related to technical and technological work, ensuring that policies align with current industry developments and meet technical requirements. This supports the advancement of professionalism within the technology and technical sectors.

“Policy guidance for a progressive industry”

04



### For MBOT

To be used as a foundational document in the registration, evaluation and accreditation processes for members involved in technical and technological fields. This standard will help MBOT ensure that qualified members meet the competency standards and professional ethics required.

“Building a framework for professionalism”

**A1**

**Formal and Informal Education**



**A2**

**Congress/ Conference/ Seminar/ Symposium (Local / International)**

**A3**

**Fellowships/ Attachment/ Study Tour (including practical and skills courses)**

# Types of MBOT CPD ACTIVITIES



**A4**

**Committee or Project Member**



**A5**

**Technology and Technical Related Meetings**



**A6**

**Technical Paper Presentation at Official Function/ Seminar/ Meetings (Presenter/ Speakers)**

**A7**

**Publication Of Articles in Journal/ Chapters in Book / Technical Reports**



**A8**

**Appointed as MBOT's Assessors**  
 • Professional Assessor Panel  
 • Accreditation Assessor Panel  
 • Accreditation visits

**B1**

**Contribution for Technology and Technical Aspects Development**

**B2**

**Online Platform Related to Technical and Technology**

**B3**

**Mentoring/ Coaching/ Judges/ Consultation Related to Profession**



**D1**

**Hands-On/ Special Project & R&D Activities Related in Technical & Technology**



**D2**

**CSR Program and Relevant Voluntary Work**



**D3**

**Soft-Skills Related to Leadership and Management, Interpersonal Skills and Professional Conduct**



**PUTRAJAYA, 7 JANUARY 2025** – In an effort to develop talent in the fields of technology and technical skills, the Ministry of Science, Technology and Innovation (MOSTI), through the Malaysia Board of Technologists (MBOT), has established the Technology and Technical Professional Development Council (TPDC). Officially launched by YB Tuan Chang Lih Kang, Minister of Science, Technology and Innovation, the TPDC aims to uphold quality assurance and certification standards for short-term courses in technology and technical fields, addressing the growing demand for a highly skilled workforce in the industry.

## THE ESTABLISHMENT OF THE TECHNOLOGY AND TECHNICAL PROFESSIONAL DEVELOPMENT COUNCIL (TPDC)

In his opening remarks, YB Tuan Chang Lih Kang stated that the launch of the TPDC is a testament to Malaysia's commitment to advancing the science, technology, and innovation sectors, in line with the National Science, Technology and Innovation Policy (DSTIN) 2021-2030, which aims to make Malaysia a high-tech nation.

This initiative is also part of a strategic collaboration between MBOT and Human Resource Development Corporation (HRD Corp), which plays a



crucial role in ensuring that the workforce in technical fields acquires quality and recognition.

The ceremony was attended by YBhg. Dato' Ts. Dr. Hj. Aminuddin bin Hassim,

Secretary General of MOSTI, YBhg. Professor Emerita Datuk Ts. Ir. Dr. Siti Hamisah Tapsir, President of MBOT, and representatives from MOSTI, HRD Corp, several government agencies, and numerous training providers.

/mbot registration

57,468



Graduate Technologists

12,376



Qualified Technicians

24,946



Professional Technologists

3,468



Certified Technicians

98,258

Total MBOT Registrants

(As of February 2025)