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- **Citaglobal fuels a greener future:** Citaglobal and Keppel Decarb will convert palm oil and agricultural waste into bio-CNG, thereby strengthening Malaysia's circular economy model. **p04**

- **Powering the next leap:** A new electricity tariff structure was introduced in July 2025 to encourage efficiency and lower carbon use. **p08–09**

- **The silent carbon war:** Modern conflicts — from Ukraine to Gaza — emit greenhouse gases on a scale comparable to entire nations, yet war-related emissions remain excluded from international climate reporting and accountability frameworks. **p14–15**

Malaysia's GREEN TURN

Budget 2026 marks Malaysia's green awakening. Prime Minister Datuk Seri Anwar Ibrahim unveils a plan that fuses fiscal reform with climate ambition — introducing a carbon tax, boosting renewables, and embedding and embedding ESG and SDG principles. It's a roadmap for growth that sustains both prosperity and the planet. **p12-13**

@ESG

From Medals To Mother Earth

By developing a national eco-sporting roadmap - including green stadiums, carbon audits, and recognition programmes such as a Malaysia Green Sport Awards - the nation can align sports with its climate and ESG commitments. This alignment not only contributes to global sustainability efforts but also enhances Malaysia's reputation as a responsible and forward-thinking nation, redefining "winning" as protecting the planet for future generations.

When winning means saving the planet

- By developing a national eco-sporting roadmap - including green stadiums, carbon audits, and recognition programmes such as a Malaysia Green Sport Awards.
- From the BBC Green Sport Awards to global initiatives in green stadium design and carbon-neutral events, sustainability is now viewed as a core value in sports.
- Figures like Hector Pardoe and Hector Bellerín show how sports personalities can influence public behaviour and policy through advocacy, investment, and personal example. Their actions serve as a powerful reminder that every individual, regardless of their field, can contribute to the global sustainability movement.

By ADELINE ANTHONY ALPHONSO

As the world celebrates athletes like Hector Pardoe at the BBC Green Sport Awards 2025, Malaysia, too, has an opportunity to shape its own eco-sporting roadmap – one that merges athletic excellence with environmental responsibility.

Sport in Malaysia has long been a source of pride, unity, and inspiration. But as global awareness of climate change grows, there is increasing recognition that the sporting ecosystem itself – its facilities, events, logistics, and culture – must align with sustainability principles.

The challenge is also an opportunity: to make every sporting triumph a symbol not only of human achievement, but also of care for the environment that sustains it.

GREENING MALAYSIA'S SPORTS LANDSCAPE

A national eco-sporting roadmap could begin with the design of sustainable stadiums, powered by renewable energy and efficient water systems. Sports associations could implement carbon audits for significant events, encourage low-emission transport for spectators, and adopt recyclable materials for kits, signage, and merchandise.

Grassroots efforts are equally vital. Schools and local councils can host "Green Games", where environmental awareness is woven into every event—from waste segregation to reforestation pledges.

Elite athletes, meanwhile, could serve as ambassadors for sustainability, much like Pardoe and former Arsenal player Hector Bellerín, who use their platforms to advocate for eco-conscious living.

FROM POLICY TO PRACTICE

To make this vision real, Malaysia's sports and environment ministries, along with private sponsors, should collaborate to recognise and reward sustainability champions – athletes, teams, and organisers leading by example.

Creating a "Malaysia Green Sport Awards" would not only celebrate progress but also inspire an entire generation to see that true victory lies in safeguarding the planet. This award aims to recognize and reward individuals and organizations that demonstrate exceptional commitment to protecting the planet through their sporting endeavours, thereby encouraging more sustainable practices in the sports industry.

In this era, the scoreboard is not just about medals or rankings – it's about leaving behind cleaner air, greener fields, and a legacy future athletes can proudly inherit.

When progress turns paradox

- **Malaysia's digital leap, anchored by NETR and 12MP, positions technology as a critical enabler of its green transition.**
- **Energy-hungry data centres, rising e-waste, and unequal access threaten to erode sustainability gains.**
- **Collaboration, inclusivity, and moral responsibility — guided by the principle of amanah — are vital to ensuring digital progress aligns with environmental and social harmony.**

IN today's era of rapid digital advancement, technology is transforming nearly every aspect of human life — from the way we communicate and learn to how we work, produce, and consume. Among the many forces driving this transformation, digital innovation stands out as a powerful catalyst for sustainability.

For Malaysia, where environmental stewardship is firmly embedded within national policy frameworks, digital transformation offers a promising pathway to accelerate the country's green agenda. Yet, as with most transformative forces, it also introduces new complexities and ethical dilemmas.

Can digital transformation truly become a vehicle for environmental harmony, or will it generate new forms of inequality and ecological strain?

INTEGRATION

Digital transformation refers to the integration of technologies such as artificial intelligence (AI), the Internet of Things (IoT), and big data analytics into social and economic systems. Its strength lies in improving efficiency, enhancing transparency, and enabling data-driven decision-making. For Malaysia's sustainability agenda, these qualities hold immense potential.

Through the National Energy Transition Roadmap (NETR) and the Twelfth Malaysia Plan (12MP), the government envisions technology as a central driver of sustainable energy use and low-carbon development. The NETR outlines a clear commitment to achieving net-zero carbon emissions by 2050, with renewable energy targets of 31 per cent by 2025, 40 per cent by 2035, and 70 per cent by 2050.

These milestones represent more than numerical goals. They embody Malaysia's intent to balance growth with environmental responsibility that delivers real environmental and social outcomes.

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THE PROMISE

Digital transformation is already making a tangible impact across multiple sectors in Malaysia. In the energy sector, smart grids enable real-time monitoring and adaptive distribution. In agriculture, precision technologies help farmers conserve water and fertilisers while increasing productivity. In urban areas, digital platforms enhance traffic management, waste collection, and public services.

These innovations demonstrate how technology can make sustainability actionable and measurable. They enable policymakers, businesses, and citizens to track carbon footprints, evaluate performance, and foster accountability in environmental governance. The real promise of digitalisation, therefore, lies not merely in technological advancement but in its ability to connect people, data, and decision-making toward shared sustainability goals.

At the same time, the success of these initiatives depends on how effectively they are integrated into Malaysia's broader socio-economic fabric. By embedding digital tools within industry practices and public systems, Malaysia is gradually transforming sustainability from a policy aspiration into a daily practice.

GREEN AGENDA

Digital transformation can support Malaysia's sustainability agenda in various interconnected ways:

- **Smart Energy Management: IoT-based systems for energy providers (e.g.,**

(Malaysian Investment Development Authority (MIDA), 2024).

Meanwhile, the Twelfth Malaysia Plan (12MP) identifies digitalisation as a key enabler of national resilience and sustainability.

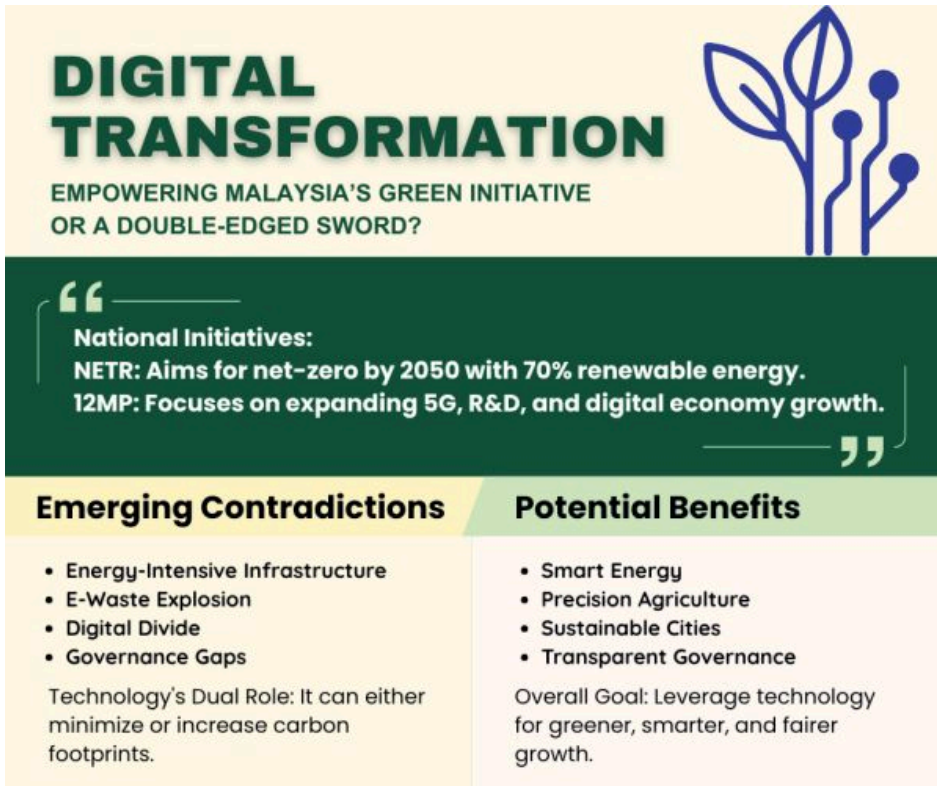
Under Policy Enabler 2: Accelerating Technology Adoption and Innovation, Malaysia aims to achieve full 4G coverage in populated areas, expand 5G accessibility, increase research and development (R&D) expenditure to 2.5 per cent of GDP, and enhance the contribution of e-commerce (10.5 per cent) and the digital economy (25.5 per cent) to national output (Kementerian Ekonomi, 2021).

Together, these frameworks provide more than strategic direction. They lay the foundation for a new wave of digital innovation that is reshaping industries and communities alike. The next challenge lies in translating these ambitions into practical solutions. The one

TNB) to improve efficiency through smart meters, predictive analytics, and renewable integration.

- Sustainable Manufacturing: Guided by the Industry4WRD policy, Malaysian manufacturers are embracing automation and data systems that minimise waste and optimise energy consumption.
- Green Governance: Digital platforms reduce reliance on paper-based processes and enhance public sector efficiency. Initiatives such as MyDigital ID exemplify Malaysia's commitment to sustainable digital governance.
- Circular Economy Models: Digital platforms also facilitate recycling, reuse, and resource sharing — key principles of the circular economy.

Collectively, these initiatives demonstrate how digital transformation can align economic growth with environmental integrity. Yet, to sustain progress, Malaysia must also address the hidden costs and vulnerabilities that accompany digital expansion.



COMPLEXITIES

As the nation embraces digitalisation, several challenges warrant careful consideration. One pressing issue is the energy intensity of digital infrastructure. Data centres, vital to Malaysia's growing digital economy, consume significant electricity, potentially offsetting carbon reduction efforts if powered by non-renewable sources.

Another concern is e-waste. The proliferation of digital devices has outpaced existing recycling systems, creating environmental risks associated with the disposal of electronics. Without comprehensive waste management policies, the benefits of digital transformation may be undermined by its physical footprint.

The digital divide also persists. While urban centres such as the Klang Valley enjoy strong connectivity, rural communities in Sabah and Sarawak remain at a disadvantage. Without equitable access, the green transformation risks deepening social inequalities rather than bridging them.

Moreover, the success of digital transformation depends heavily on skilled human capital, regulatory coherence, and institutional coordination. Weak governance or fragmented implementation could dilute Malaysia's capacity to achieve a truly sustainable and inclusive digital economy.

Recognising these challenges is not a setback. It is a call to act deliberately and collectively. True sustainability in the digital age requires more than advanced tools; it demands ethical stewardship, cross-sector collaboration, and a shared sense of responsibility.

ETHICAL STEWARDSHIP

Addressing these challenges requires cooperation that extends beyond traditional boundaries. Partnerships between government agencies, universities, research institutions, industry players, and civil society are essential to ensure that digital transformation benefits both people and the planet.

Initiatives such as the Malaysia Digital Climate Action Pledge (MDCAP) represent significant efforts to promote sustainable practices within the digital sector. The MDCAP is a corporate pledge designed to build capacity and increase the adoption of sustainability and climate action among businesses across the digital economy.

It was jointly developed by the Malaysia Digital Economy Corporation (MDEC), the country's lead digital economy agency, in partnership with the United Nations Global Compact Network Malaysia and Brunei (UNGCMYB) (Ministry of Communications, 2022).

Collaboration also extends to research and energy partnerships. Universities and energy providers such as Tenaga Nasional Berhad (TNB) are advancing studies in renewable energy, green standards, and sustainable digital technologies. These partnerships bridge policy ambitions with practical innovation, driving Malaysia's transition toward a low-carbon economy.

At the same time, efforts to expand inclusive digital access, led by bodies such as the Malaysian Communications and Multimedia Commission (MCMC) through programmes like Jalinan Digital Negara (JENDELA), ensure that digital progress reaches communities nationwide. Inclusive access is a vital part of sustainability, ensuring that no one is left behind in the country's technological transformation.

Ultimately, ethics must guide collaboration, innovation, and a sense of responsibility. In Islam, the principle of amanah (trust) reminds humanity of its moral duty to safeguard the earth and use knowledge responsibly. As the Qur'an teaches:

"And cause not corruption upon the earth after its reformation. And invoke Him in fear and aspiration. Indeed, the mercy of Allah is near to the doers of good." (Surah Al-A'raf, 7:56)

This verse highlights that progress must be guided by conscience as much as by innovation. Technology, therefore, should be harnessed not solely for material gain but for the preservation of life and the balance of creation.

THE INTERSECTION

Malaysia's digital transformation stands at a defining intersection—between progress and prudence, innovation and ethics. Its ultimate success will depend on whether technological growth remains guided by inclusion, integrity, and foresight.

If approached wisely, digital transformation can strengthen Malaysia's green initiative by merging efficiency with empathy and growth with responsibility.

Through responsible innovation, inclusive participation, and values-based governance, Malaysia can demonstrate that technology and sustainability are not opposing forces. On the contrary, they are complementary paths toward a just, balanced, and resilient future.

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