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An Independent Analysis of the 13th Malaysia Plan

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ABSTRACT

Malaysia's Thirteenth Plan (13MP) marks a shift towards balancing economic reform, social equity, and sustainability. Building on decades of five-year planning, it aims to harness digitalisation, artificial intelligence, and high-value investments to boost productivity while tackling cost-of-living pressures, inequality, and climate risks. However, lessons from previous plans highlight recurring issues like weak implementation, regional disparities, and limited inclusivity. This evaluation concentrates on three priorities: increasing the economic ceiling, strengthening essential services in health, education, and housing, and embedding sustainability across all sectors. The success of the 13MP will depend on accountability, closing digital divides, and ensuring development that is both resilient and inclusive, leaving no Malaysian behind.

EXECUTIVE SUMMARY

Purpose: This review evaluates the challenges of the 13th Malaysia Plan (13MP), focusing on how effectively it addresses Malaysia's urgent economic, social, and sustainability priorities. Its goal is to assess the extent to which objectives focused by the Malaysian government and to identify structural and institutional barriers that hinder progress, and highlight recurring challenges such as inclusivity gaps, fiscal constraints, and inconsistent implementation. By examining key sectors like artificial intelligence (AI), housing, education, healthcare, transportation, the review emphasises the importance of connectivity, equity, and sustainability as core elements of national resilience. Ultimately, it aims to bridge the gap between policy intentions and real-world outcomes, providing evidence-based recommendations to improve implementation, promote stakeholder inclusivity, and ensure that the 13MP delivers on its vision of a more prosperous, equitable, and sustainable Malaysia.

Content:

- Artificial Intelligence and Digitalisation: This review highlights AI and digitalisation as central levers to boost productivity, strengthen the labour market, and drive structural transformation.
- **Inclusive Development:** The review underscores the need for inclusive development to ensure that progress in health, education, and housing is equitably shared across society
- Sustainable Development: The review emphasises that sustainable development must remain a guiding principle to balance economic growth with environmental resilience and long-term prosperity.

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Advancing Growth, Inclusivity, and Sustainability: An Evaluation of the 13th Malaysia Plan

Malaysia's developmental trajectory has long been guided by a consistent tradition of five-year plans that adapt to shifting economic realities and social priorities. Over the decades, these plans have evolved from basic nation-building strategies into a comprehensive framework that balances growth, equity, and sustainability. Each phase in the planning timeline marks a distinct development logic:

- 1MP-4MP (1966-1985): Focused on rural infrastructure development, poverty reduction, and early groundwork for the New Economic Policy (NEP), which aimed at restructuring socioeconomic imbalances.
- **5MP–8MP (1986–2000)**: Marked a shift toward industrialisation, privatisation, and productivity-led growth through market liberalisation.
- 9MP-10MP (2001-2015): Prioritised innovation, human capital development, and competitiveness, with the 10MP explicitly aiming to achieving high-income status, together with inclusivity and sustainability.
- 11MP-12MP (2016-2025): Emphasised inclusiveness, environmental sustainability, and digital economy transitions. The 12MP aligned with Sustainable Development Goals and introduced frameworks such as the National AI Roadmap and Digital Economy Blueprint, though implementation encountered coordination challenges.

The 13th Malaysia Plan (2026–2030): A Balanced Vision

The Thirteenth Malaysia Plan (13MP), themed "Melakar Semula Pembangunan" (Reshaping Development), signals a structural shift in Malaysia's planning paradigm. It advances a dual agenda: driving economic transformation while strengthening social well-being. Economically, it seeks to accelerate structural reform, digitalisation, and global competitiveness. Socially, it addresses cost-of-living pressures, enhances social mobility, and reduces regional disparities. Grounded in integrity, accountability, and more efficient public service delivery, the 13MP sets a practical roadmap for building a Malaysia that is more prosperous, equitable, and globally competitive.

Malaysia enters the 13th Malaysia Plan (13MP) period facing significant structural challenges, including an aging population that will strain healthcare and pension systems, along with fiscal constraints that limit the government's ability to fund crucial social and growth initiatives. The nation

also confronts mounting climate risks, from rising sea levels to more frequent floods, which threaten both economic resilience and social stability. At the same time, transformative technological advances in artificial intelligence (AI), digitalization, and high-value investments present a clear opportunity to reshape industries, enhance productivity, and strengthen Malaysia's global competitiveness. Ultimately, the 13MP is more than just a vision; it is a strategic blueprint that will direct how limited resources are spent to balance today's needs with the long-term goal of national transformation.

In this report, our evaluation concentrates on three key themes. First, the **economic ceiling**, where we examine how artificial intelligence (AI), digitalisation, and high-value investments can raise productivity, strengthen the labour market, and transform the overall economy. Second, the **social dimension**, where we consider how development can be shared by all, with some of the key sectors discussed including health, education, and housing, which are crucial in people's daily lives. Finally, **sustainable development**, where we discuss Malaysia's future trajectory in balancing growth with environmental sustainability. While the 13MP encompasses many areas, our analysis narrows in on these three priorities as central to Malaysia's long-term resilience and prosperity.

Review of Key Areas

1.0 Intelligence: The 13th Malaysia Plan and the Digital Turn in Developmental Planning

The 13MP marks a turning point in Malaysia's development strategy. While earlier plans centred on infrastructure and redistribution, the 13MP highlights digitalisation, artificial intelligence (AI), and high-growth, high-value (HGHV) sectors such as high-value electronics, technology and digitalisation, and energy transition as engines of future growth. Under this plan, Malaysia is not just adopting digital tools, but about reshaping governance itself to steer the country to be more data-driven, adaptive, and citizen-focused.

In this vision, digitalisation and AI are framed both as enablers of governance reform and as catalysts for economic upgrading. Despite the support from industrial roadmaps and initiatives like the National Digital Economy Blueprint and the New Industrial Master Plan (NIMP) 2030 to build a more competitive, high-value economy, the critical question of who truly benefits still needs to be addressed. While large firms may gain first, smaller businesses and vulnerable workers risk being left behind. The sections that follow explore how this how this digital—HGHV agenda affects governance, industry, and the labour force, and whether it can truly deliver inclusive growth.

1.1 AI and Digitalisation: A Governance Technology, Not Just an Industry

While the 12MP introduced the National AI Roadmap and the MyDigital Blueprint, the 13MP takes a bolder step by repositioning AI and digitalisation from being merely an industry to the core instrument of governance. The emphasis is no longer limited to driving adoption by businesses; instead, it is embedded into how ministries function, services are delivered, and citizens interact with the state. This includes the development of enterprise architecture to align government processes and technologies, strengthening of digital identity through MyDigital ID for secure access to services, and establishing the Malaysia National AI Office to coordinate strategy and implementation across sectors.

The 13MP also advances GovTech initiatives to promote transparent and citizen-centric service delivery. A single public sector gateway will be introduced under the "Government-as-a-Platform" model, integrating multiple services into one accessible platform for citizens, businesses, and agencies. Complementing this is the National AI Action Plan 2030, which aims to institutionalise AI use in public administration to enhance service delivery, accelerate data-driven decision-making, and strengthen cybersecurity. Together, these initiatives demonstrate that the 13MP sets out a comprehensive agenda for advancing digitalisation and AI as central pillars of governance in Malaysia.

However, translating this vision into practice presents several challenges. First is the need for coordination. A "Government-as-a-Platform" approach only works if ministries, departments, and agencies align, otherwise, it risks creating confusion rather than solutions. In this sense, the Malaysia National AI Office will be critical in ensuring coherence and communication across government before rolling out services to the public.

Second, public trust is essential. AI-driven welfare and governance decisions must be seen as fair, transparent, and open to appeal and criticism. If citizens are wrongly denied aid or flagged as ineligible without explanation, confidence in government systems will worsen. International best practices, such as algorithmic impact assessments in Finland and Canada¹, show the value of regularly reviewing how AI systems make decisions and whether they risk bias or unfairness. Similar practices should be explored to ensure the transition to AI governance is smooth.

Third, international examples from other countries are important to serve as a starting point. For example, Estonia have embedded AI into their national platforms to automate benefit eligibility and

¹ Nicholas Kluge Corrêa et al., 'Worldwide Al Ethics: A Review of 200 Guidelines and Recommendations for Al Governance', *Patterns* 4, no. 10 (2023): 100857, https://doi.org/10.1016/j.patter.2023.100857.



streamline bureaucratic processes.² Singapore, through its Smart Nation initiative, has deployed AI for municipal services and eldercare.³ The United Kingdom has implemented AI tools in its welfare department to detect fraud and streamline benefits.⁴ We can learn and adapt these experiences while tailoring them to our local needs.

Fourth, digital inequality remains a crucial barrier. While over 80% of households had mobile broadband in 2022, states like Kelantan, Kedah, and Sabah still lag behind urban areas.⁵ Besides, reliable access matters as well. It is common among lower-income households where several members often share a single digital device, limiting their ability to fully benefit. Improving this digital gap is critical for inclusive AI and digital driven governance.

Fifth, it is not just about of access, but also of trust and digital literacy. Recent controversies around PADU highlighted public concerns over data security, and the same concern would arise for AI or digital governance system. Without strong safeguards, digitalisation risks widening inequalities as only a portion of population have access to government services. This is particularly true for seniors who already struggle with online banking or health apps. Countries like Singapore have addressed this by pairing digital systems with strong human support, such as helpdesks and training programmes for seniors. Malaysia will need similar offline "safety nets" to ensure no one is left behind.

In short, the 13MP represents a significant leap, reframing AI and digitalisation from a mere economic driver to an integral part of the machinery of government. For the rakyat, this promises faster services, quicker welfare payments, and smarter infrastructure. But it also raises risks of mechanism decision-making, surveillance, and unequal access. The central challenge is not drafting another plan but ensuring that Malaysia implements AI and digitalisation in ways that genuinely improve lives across cities, towns, and kampungs alike.

⁶ Abhijit Visaria et al., 'Digital Technology Use, in General and for Health Purposes, by Older Adults in Singapore', *Aging and Health Research* 3, no. 1 (2023): 100117, https://doi.org/10.1016/j.ahr.2023.100117.



² Tanel Kerikmäe and Valentin Feklistov, 'Estonia and Automated Decision-Making: Challenges for Public Administration - e-Estonia', 2025, https://e-estonia.com/estonia-and-automated-decision-making-challenges-for-public-administration/; Ismail Alani, *From Citizen Experience to Empowerment* (KPMG, 2025); Richard Dreyling et al., 'Navigating the Al Maze: Lessons from Estonia's Bürokratt on Public Sector Al Digital Transformation', preprint, SSRN, 2024, https://doi.org/10.2139/ssrn.4850696.

³ Diganta Das and Berwyn Kwek, 'Al and Data-Driven Urbanism: The Singapore Experience', *Digital Geography and Society* 7 (December 2024): 100104, https://doi.org/10.1016/j.diggeo.2024.100104; GovTech Singapore, 'Smart Nation 2.0: Initiatives in Singapore | Government Technology Agency (GovTech)', 2024, https://www.tech.gov.sg/technews/our-enhanced-smart-nation-vision-paving-the-way-for-a-new-digital-era.

⁴ Alexander losad et al., 'Governing in the Age of Al: Reimagining the UK Department for Work and Pensions', Tony Blair Institute for Global Change, 2024, https://institute.global/insights/politics-and-governance/reimagining-uk-department-for-work-and-pensions.

⁵ Khoo Wei Yang, *What Household Connectivity Gaps Mean for a Digital Future* (Khazanah Research Institute, 2024), https://krinstitute.org/Views-@-What_Household_Connectivity_Gaps_Mean_for_a_Digital_Future.aspx.

1.2 Boosting High-Growth, High Value (HGHV) Industries

Any transformation pursued by the government can only succeed if it is matched by similar shifts in the market and industry. This is why our focus now turns to the industrial landscape, assessing how the 13th Malaysia Plan's (13MP) emphasis on High-Growth, High Value (HGHV) industries align with the broader aspiration of moving Malaysia towards a higher economic ceiling. Under the 12MP, notable progress was made in areas such as renewable energy, digitalisation, semiconductors, and halal exports, with several sectors surpassing pre-pandemic numbers and attracting record levels of investment. Given the wide range of industries highlighted in the 13MP, we will therefore concentrate on a select number of strategic sectors that are likely to shape Malaysia's future economic direction.

1.2.1 Electrical and Electronics (E&E) Industry: Moving Up the Value Chain

The E&E industry has long been a cornerstone of Malaysia's economy. Today, it contributes around 40% of Malaysia's total gross exports and supports over 600,000 jobs. Within this, semiconductors account for roughly two-thirds of output, while the remainder comprises components for computers, phones, and other electronics. While Malaysia has traditionally excelled in back-end processes like assembly and testing, the government's National Semiconductor Strategy (NSS), launched in 2024, aims to transition the country from a supporting role to a hub for more complex, higher-value activities. Achieving this ambition depends on three critical factors: investment, research and development (R&D), and skilled labour.

1.2.1.1 Investment: A Focus on Quality over Mere Quantity

The NSS has a clear target to attract at least RM500 billion in semiconductor investment by 2030, and development in Penang and Kulim show that Malaysia continues to attract strong interest from multinationals. This is unsurprising given our 50-year track record in the industry. However, at current stage of development, quality matters more than quantity. Simply developing more assembly and test facilities will not move Malaysia up the value chain. Instead, Malaysia needs investments that bring in technology, intellectual property, and meaningful spillovers to local firms. A great example of this is the recent partnership with ARM, which opens doors for local companies to get involved in chip design and innovation. Without these qualitative shifts, Malaysia risks having impressive investment numbers on paper while the real value-added remains limited.

⁷ BNM, *Malaysia's Position in the Global E&e Value Chain and Prospects* (Bank Negara Malaysia, 2025).



1.2.1.2 Research and Development: A Call for Industry-Led Innovation

A persistent challenge for Malaysia is its low R&D spending. Between 2016 and 2020, the Gross Expenditure on R&D (GERD) fell below 1% of GDP, far short of the 2% target set by the National Policy on Science, Technology and Innovation.⁸ The private sector's contribution is particularly concerning, accounting for only 34% of GERD, a stark contrast to the roughly 70% seen in advanced economies like the US, China, and Japan.⁹ This signals a fundamental weakness where innovation is overly dependent on public initiatives rather than being driven by industry. For the E&E industry to build long-term competitiveness, companies must begin to see R&D as an essential investment in future growth, not just a cost.

1.2.1.3 Skilled Labour: Addressing the Mismatch

A common belief is that the E&E industry's growth is hampered by a shortage of skilled labour. However, recent analysis challenges this narrative, suggesting that Malaysia actually produces more graduates, including from TVET pathways, than the industry claims it needs (KRI). This raises important questions about whether the data on labour shortages is accurate or if there's a mismatch between what graduates are trained for and what the industry requires. The latter seems more likely, pointing to a weak link between educational institutions and employers. To address this, labour market data needs to be more transparent, and curriculum development must involve closer collaboration with industry. Without such measures, Malaysia risks producing large numbers of graduates who remain underemployed or disconnected from the E&E workforce. These issues will be explored in greater detail in later sections on education.

1.2.1.4 Navigating a Complex Global Environment

Beyond domestic factors, Malaysia's semiconductor industry operates in an increasingly complex global environment shaped by US-China tensions, supply chain disruptions, and growing protectionism. These shifts create both opportunities and risks. While multinational firms are looking to diversify their production bases, Malaysia must move quickly up the value chain to capitalise on these trends. Navigating this landscape will require careful positioning, maintaining Malaysia's reputation as a neutral, reliable hub while ensuring that local firms can integrate into higher-value segments of the global supply chain. One area where Malaysia has made good progress is through trade liberalisation. To date, we have signed and implemented 16 free trade agreements (FTAs). These FTAs not only help

 $^{^{10}}$ BNM, Malaysia's Position in the Global E&e Value Chain and Prospects .



⁸ Farlina Said and Angeline Tan, 'Malaysia's Semiconductor Ecosystem amid Geopolitical Flux', *Institute of Strategic & International Studies (ISIS)*, 2024, https://www.isis.org.my/2024/06/20/malaysias-semiconductor-ecosystem-amid-geopolitical-flux/.

⁹ Said and Tan, 'Malaysia's Semiconductor Ecosystem amid Geopolitical Flux'.

expand exports but also provide investor protections, helping the E&E industry stay competitive despite global uncertainties.

1.2.2 Data Centre: The Next Growth Engine?

With Malaysia's aspiration to become a leading digital economy, one sector that has recently attracted significant attention and investment is the rapid expansion of data centres. Within the 13MP, the strategy to strengthen digital economic development aligns closely with this trend, positioning data centres as a key enabler of our digital ambitions. As of June 2024, Malaysia has established over 70 data centres across the country, with Selangor and Johor emerging as the main hubs. ¹¹ These facilities serve as the backbone of the digital ecosystem, providing the computing power, storage capacity, and connectivity essential for technologies such as AI, cloud computing, and the Internet of Things (IoT). In particular, they support the development of platforms like digital twins, hyper-personalised services, and the national data bank envisioned under the 13MP. In this sense, data centres are not merely infrastructure, but the foundation for Malaysia's ambition to become a regional hub for digital technology and AI.

The growth of the data centre industry also brings tangible economic opportunities. Global technology giants such as Microsoft, Amazon Web Services, and Google have already announced major investments in Malaysia's cloud and data infrastructure. These projects are expected to generate high-value employment opportunities, not only in technical roles such as data engineering, cybersecurity, and network management, but also indirect spillover to construction, facility management, and renewable energy solutions. Recent estimates suggest that the sector could support as many as 30,000 jobs by 2030, highlighting its potential to serve as a powerful new growth engine for the digital economy.¹²

However, as with the E&E industry, Malaysia must ensure that its data centre strategy moves beyond low- or mid-value activities. If we limit our role to simply hosting facilities for global firms, we risk being limited to activities that are highly energy-intensive but generate little knowledge transfer. Instead, policies should aim to attract higher-value functions such as AI research and development, advanced data analytics, regional command centres, and innovation in cloud services. This is crucial to ensure that Malaysia captures not just the infrastructure side of digitalisation, but also the higher value intellectual property and technological leadership that come with it.

¹² Asia-Pacific Data Centre Association (APDCA), 'Asia-Pacific Data Centre Association Launches Landmark Report on Malaysia's Data Centre Sector', 2025, https://www.apdca.org/malaysia-data-centre-economic-impact.



¹¹ Dr Tan Lee Ooi, 'Building Malaysia's Digital Future: Balancing Growth, Sustainability, and Public Perception in the Data Centre Industry', Penang Institute, 2024, https://penanginstitute.org/publications/issues/building-malaysias-digital-future-balancing-growth-sustainability-and-public-perception-in-the-data-centre-industry/.

At the same time, the rapid growth of data centres presents crucial trade-offs in terms of energy and environmental sustainability.¹³ Data centres are highly resource-intensive, demanding uninterrupted electricity and large-scale cooling systems. If left unchecked, this could undermine Malaysia's climate target and increase the pressure on the domestic energy supply. Transitioning to renewable-powered, energy-efficient 'green data centres' is hence essential. Striking the right balance between economic competitiveness and environmental sustainability will ultimately determine if data centres can become Malaysia's next growth engine.

1.3 Strengthening Labour Market Competitiveness

The 13MP recognises that digital governance and industry upgrading cannot succeed without a labour force equipped to meet evolving demands. Hence, several key labour market reforms have been emphasised to reshape Malaysia's labour market.

As higher-skilled workforce is essential for Malaysia's aspirations toward higher-level industrial development. To this end, initiatives such as the Academy in Industry (ADI) were introduced to bridge mismatches between labour supply and industry demand. ADI provides demand-driven training aligned with sectoral requirements, enabling workers to obtain recognised qualifications while addressing the needs of HGHV industries. In parallel, reskilling and upskilling programmes under the Human Resource Development Corporation (HRDC) have trained close to four million workers over the past five years and remain a critical aspect of workforce development moving forward.

In this regard, the 13MP is moving in the right direction, as the skills mismatch has long been identified as a structural weakness in the labour market. As Malaysia climbs the industrial value chain, this mismatch is likely to widen in the short term, making close monitoring, targeted training, and strong collaboration between government, industry, and educational institutions all the more important. Since skills upgrading cannot be achieved overnight, policymakers must prepare for persistent frictions in the near term, while maintaining focus on long-term structural reforms and ensuring continuous alignment between talent development and industrial transformation.

¹⁴ BNM, *The Case for Labour Market Reforms in Malaysia: Challenges and Opportunities* (Bank Negara Malaysia, 2024), https://www.bnm.gov.my/documents/20124/12141961/emr2023_en_box3.pdf; Hawati Abdul Hamid et al., 'Shifting Tides: Charting Career Progression of Malaysia's Skilled Talents', Khazanah Research Institute, 2024, https://www.krinstitute.org/Publications-@-Shifting_Tides-;_Charting_Career_Progression_of_Malaysia%E2%80%99s_Skilled_Talents.aspx.



¹³ Khoo Wei Yang, 'Energy and Ecological Impacts of Data Centres', Khazanah Research Institute, 2025, https://www.krinstitute.org/Views-@-Energy_and_Ecological_Impacts_of_Data_Centres_.aspx; Sara Loo, 'Data Centres, Energy Demand and Sustainability: Can Malaysia Strike the Right Balance?', *ISEAS – Yusof Ishak Institute*, no. 43 (2025), https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2025-43-data-centres-energy-demand-and-sustainability-can-malaysia-strike-the-right-balance-by-sara-loo/.

Next, wage levels in Malaysia have long been a critical concern, cutting across different sectors, occupations, and regions. In 2025, the median monthly salary is estimated at around RM3,000, while the reasonable living expenditure for an individual owning a car exceeds RM2,400 in most states. ¹⁵ This suggests that many workers are earning just enough to cover their basic living costs. More worryingly, wage growth has consistently lagged behind productivity growth, with the wage share of national income standing at only 32.4 per cent in 2022, well below countries like South Korea and Japan, where the figure is closer to 50 per cent. ¹⁶ Encouragingly, the 13MP acknowledges these gaps and places wage acceleration as a key policy priority.

The notable initiative in this regard is the Progressive Wage Policy. Unlike the minimum wage, which merely sets a wage floor, the policy introduces a structured wage progression pathway tied to skills, productivity, and career development. With a pilot launched in 2024, the policy is designed to benefit both workers and employers where workers are incentivised to upskill through TVET, ADI, and HRDC programmes, while firms receive government support to raise wages alongside productivity improvements. If implemented effectively, the policy could strengthen inclusivity by lifting incomes, particularly for low- and middle-wage workers, while simultaneously encouraging firms to invest in technology and workforce development.

However, several limitations could undermine its effectiveness if not addressed early. Among the concerns raised are administrative complexity, as different sectors and regions may require tailored wage ladders; weak monitoring and enforcement mechanisms, which risk incompliance by firms; and the potential burden on SMEs, which often operate on thin margins and may struggle to meet wage commitments.¹⁷ These challenges need to be resolved during the pilot phase, otherwise, scaling up the policy risks generating more distortions than benefits.

Ultimately, the success of the policy will depend on striking the right balance between raising wages, maintaining firm competitiveness, and ensuring that workers genuinely progress through skills and productivity improvements. In this sense, labour market reforms under the 13MP are not just about

¹⁷ Calvin Cheng and Kevin Zhang, 'Malaysia's Progressive Wage Policy', *Institute of Strategic & International Studies (ISIS)*, 2024, https://www.isis.org.my/wp-content/uploads/2024/04/Malaysias-Progressive-Wage-Policy.pdf; Hwok Aun Lee, '2024/48 "Malaysia's Progressive Wage Policy: Looming Questions for the Pilot Project" by Lee Hwok Aun - ISEAS-Yusof Ishak Institute', *ISEAS – Yusof Ishak Institute*, no. 48 (2024), https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2024-48-malaysias-progressive-wage-policy-looming-questions-for-the-pilot-project-by-lee-hwok-aun/.



¹⁵ KWSP and Universiti Malaya, *BELANJAWAN KU: Expenditure Guide for Malaysian Individuals and Families, Klang Valley & Selected Cities 2024/2025* (KWSP, 2024), https://www.kwsp.gov.my/documents/d/guest/20241115_booklet_belanjawanku_en_005_olcompressed.

¹⁶ Malaysia, *Kertas Putih: Cadangan Dasar Gaji Progresif*, Kertas Perintah 69 Tahun 2023 (Diterbitkan di Dewan Rakyat / Negara menurut Perintah.. 2023).

improving livelihoods but are also the critical foundation that enables governance reforms to be effective and industrial upgrading to succeed.

2.0 Fostering Inclusive Development and Social Mobility

2.1 Public Transportation

To foster inclusive development across all segments of society, improving connectivity for both goods and people must be central to the discussion. In the 13MP, the goal for public transportation has focused largely on boosting ridership and expanding the concept of Transit-Oriented Development (TOD).

Public transportation ridership

In terms of ridership, the figures cited in the 13MP have been encouraging, with passenger numbers growing by 18% and bus frequency rising by 35% from 2021 to 2024. However, because 2021 was heavily impacted by Covid-19 movement restrictions, it is more accurate to examine data from 2022 onwards to capture the post-pandemic trends.

Table 1: Malaysia's Public Transportation Ridership

Types of Transportation	2022	2023	2024
LRT Ampang	44,151,332	50,590,579	64,022,915
LRT Kelana Jaya	55,015,765	73,763,592	84,733,297
MRT Kajang	45,348,209	66,501,508	84,520,994
MRT Putrajaya	4,147,577	29,555,851	48,126,110
Monorail	10,668,069	18,107,573	20,032,392
KTM Komuter	-	3,233,314	12,182,679
KTM Komuter Utara	3,057,483	4,358,963	5,529,110
KTM ETS	3,338,531	4,114,978	4,145,120
KTM Intercity	1,187,698	1,472,950	1,493,774
Rapid Bus KL	46,748,777	64,581,963	75,068,550
Rapid Bus Penang	11,464,196	14,296,579	16,270,231
Rapid Bus Kuantan	806,671	825,190	975,677

Yearly data obtained from Public Transportation¹⁸

¹⁸ Government of Malaysia., 'Data.Gov.My', Data.Gov.My: Malaysia's Official Open Data Portal., 2025, https://data.gov.my/.



As seen from Table 1, the data clearly shows a significant increase in ridership from 2022 to 2024, suggesting that more Malaysians are making the shift toward public transportation. With the LRT Shah

Alam line expected to open later this year, demand is likely to grow even further. Therefore, is our current infrastructure is adequate to meet these rising expectations.

First and last mile connectivity

One of the most pressing challenges in urban areas is first and last-mile connectivity. The 12MP has also recognised this as a key barrier to ridership and called for greater attention and resources. Poor walkability has always been and remains a major deterrent. One example can be seen in Taman Sri Rampai, where residents are living just 400 metres from the LRT station in direct distance, yet face a 2.5 km walk due to poor urban walkability design¹⁹. Study also shows that even in central Kuala Lumpur, the walkability index remains only at moderate levels, leaving much room for improvement in pedestrian infrastructure.²⁰

Equally critical of first and last mile issue would be the availability, coverage and frequency of bus services. As explained in the 13MP, the number of electric buses has grown by 250 units and diesel buses by 310 units from 2024 to 2025. Nonetheless, the increase still far short of international standards. For instance, cities like London, Hong Kong and Singapore maintain roughly one bus per 1,000 passengers. In comparison, we only average one bus for every 5,000 passengers.²¹ This shortfall highlights the urgent need to expand our buses fleet if we aspire to match the efficiency of global public transport leaders.

A newer solution that has been emerging recently is the Demand-Responsive Transit (DRT), operated by both private and public providers. DRT works particularly well in lower-density areas where fixed-route buses would be underutilised. However, DRT should be regarded as a supplementary measure, but not a replacement for conventional buses and strong pedestrian infrastructure. DRT vehicles have smaller capacities, making them inefficient during peak hours, and often require smartphone booking, which can exclude elderly passengers or those without easy access to technology.

²¹ Kamarul Azhar and Adam Aziz, 'Prasarana Moves on from 2022 Snafus with Improvements in Services and Facilities', The Edge Malaysia, 2024, https://theedgemalaysia.com/node/736322.



¹⁹ Steuart Chin Jia Yun et al., *Pedestrian Walkability Index for Light Rail Transit (LRT) Stations in Klang Valley, Malaysia*, 2020, 737–48, https://doi.org/10.1007/978-3-030-32816-0_52.

²⁰ Nurfadhilah Ruslan et al., 'SPATIAL WALKABILITY INDEX (SWI) OF PEDESTRIAN ACCESS TO RAIL TRANSIT STATION IN KUALA LUMPUR CITY CENTER', *PLANNING MALAYSIA* 21 (September 2023), https://doi.org/10.21837/pm.v21i29.1368.

Transit Oriented Development (TOD)

TOD is also a significant strategy in the 13MP, with high-density, mixed-use developments encouraged near transit lines. The logic is straightforward: proximity to stations reduces first and last-mile problems. However, without safeguards, TOD can contribute to gentrification. For instance, research indicates that a condominium near an MRT station can be 9.5% more expensive compared to similar properties farther away.²² This is unsurprising, as demand for well-connected properties drives prices upward. But if TOD benefits are concentrated only among higher-income groups, we risk reinforcing inequality rather than alleviating it.

Stage Bus Service Transformation (SBST)

While much of the public transport conversation focuses on the Klang Valley, it is essential not to overlook other regions. The 13MP did not place much emphasis on this, but we would like to briefly bring it into the discussion given its importance. The SBST programme, which supports bus services in second-tier cities such as Johor Bahru, Melaka, Seremban, and Ipoh, plays a vital role in ensuring nationwide connectivity. In many of these areas, rail infrastructure might not be feasible, making bus services especially crucial. Continued and increased funding for SBST will be critical to achieving inclusive growth across states.

Key Policy Directions

With major infrastructure projects like the LRT Shah Alam line, East Coast Rail Link (ECRL), and Pan Borneo Highway already underway, policy focus should shift to smaller but high-impact improvements in walkability, bus networks, and equitable TOD implementation.

Malaysia's growing ridership is a positive trend, but without enough buses, safe pedestrian access, and affordable transit-linked housing, we risk slowing or even reversing this momentum. Ensuring strong public transport is not just about mobility, it is about guaranteeing that everyone, including lower-income groups, can access economic opportunities and enjoy a better quality of life. Investing in these areas now will help ensure our public transport system remains inclusive and sustainable for decades to come.

²² Mohd Faris Dziauddin, Estimating the Impact of Mass Rapid Transit (MRT) on Residential Property Prices in Greater Kuala Lumpur, Malaysia, 1, no. 1 (2022).



Hence, several policy suggestions that require more immediate focus include:

1. Increase the number of buses significantly, both within and beyond the Klang Valley.

2. Mandate walkability audits (within 1 km radius) of all stations to improve pedestrian access

and safety. Aim to encourage everyone within walking distance to utilise the rail services.

3. Ensure TOD projects are inclusive for B40 and M40 populations, not just the ultra-rich.

4. Expand DRT as a supplementary tool to bridge the accessibility gap, but not as a substitute for

conventional buses and pedestrian infrastructure.

2.2 Housing

Another crucial aspect of inclusive development is ensuring that every citizen has access to a

comfortable and secure home. In the 13MP, the housing agenda focuses primarily on scaling up the

supply of affordable homes, increasing home ownership rate and strengthening the regulatory and

management framework of the housing sector.

The housing market is undeniably complex, and it is not possible to address every element discussed in

the 13MP. Hence, this report will emphasise on only several key issues to advance inclusive and

sustainable housing in Malaysia.

Demand-Side: Affordability and Financing

The most crucial factor in the housing market is, without question, the affordability of homes. In recent

years, the Median Multiple affordability indicator, calculated by dividing the median house price by the

median annual household income, has consistently classified Malaysia's housing market as "seriously

unaffordable". Our scores have mostly remained above 4.0, well beyond the affordability benchmark

of 3.0.23 In other words, the median home mostly costs more than four times the median household's

annual income.

Compounding this issue, Malaysia's household debt has also increased drastically over the past two

decades, with the household debt-to-GDP ratio nearing 85%. More than half of this debt is tied to

²³ Theebalakshmi Kunasekaran, 'Affordable Housing or Affordable Debt?', Khazanah Research Institute, 2024, https://www.krinstitute.org/Views-@-Affordable_Housing_or_Affordable_Debt%5E.aspx.



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residential property.²⁴ Together, these figures point to a housing market under pressure, with prices remaining high and household debt on the rise, raising concerns about its long-term sustainability.

Given these circumstances, expanding the Rent-to-Own (RTO) scheme may not be the most effective solution. While RTO offers an alternative pathway to home ownership by allowing buyers to rent first and defer their mortgage application, it does not eliminate the need for financing. Instead, it merely postpones the process, with buyers still required to secure a traditional mortgage at the end of the rental period.

In addition, this structure introduces additional uncertainty for buyers. There is no guarantee they will qualify for a loan in the future, and monthly rents under RTO are usually higher because part of the payment is treated as purchase credit. While locking in the property price today may benefit some, it could disadvantage others if market prices fall. Ultimately, buyers trade immediate mortgage obligations for greater financial uncertainty, without addressing the root causes of housing unaffordability or high household debt.

In short, while RTO provide buyers with extra option, and extra choices is never inherently bad, the main policy priority should remain on addressing the fundamental issues, which is the affordability of housing, rather than relying too much on alternative financing schemes.

Supply-Side: Construction, Productivity and Regulation

On the supply side, the current "sell-then-build" (STB) model places majority of the risk on homebuyers. Under this system, buyers begin servicing loans while projects are still under construction, which will leave them exposed if a project is delayed, stalled, or abandoned. Unfortunately, we have seen numerous such cases over the years, with data showing that as of 31 October 2024, there are 113 abandoned housing projects, 212 delayed and 382 sick projects <u>nationwide</u>. While it is commendable that the government has set up a Task Force on Sick and Abandoned Private Housing Projects (TFST), many of these problems could have been prevented in the first place.

²⁵ Theebalakshmi Kunasekaran, *Abandoned Housing: An Unfinished Dream* (Khazanah Research Institute, 2024), https://www.krinstitute.org/Views-@-Abandoned_Housing-;_An_Unfinished_Dream.aspx.



²⁴ Kunasekaran, 'Affordable Housing or Affordable Debt?'

Therefore, it is encouraging that 13MP has emphasise on a shift towards the "build-then-sell" (BTS) approach, which has the potential to significantly reduce such risk. The plan has also highlighted the importance on adopting modern construction technologies like Industrialised Building Systems (IBS) and Building Information Modelling (BIM), which are critical tools to improve efficiency and cost-effectiveness, especially as the sector transitions to BTS. Complementing this technological focus, the 13MP stresses the need to amend the Housing Development (Control and Licensing) Act 1966 [Act 118], creating a stronger regulatory framework to support this shift. In summary, the 13MP lays out a clear pathway towards BTS, aiming to tackle the root causes of abandoned projects, reduce risks borne by homebuyers, and potentially brings down the house prices.

Critics argue that BTS would limit the market to only financially strong developers.²⁶ However, the counter argument could be valid as well: if developers are not financially robust, the risk is effectively transferred to homebuyers, as is often the case under the current system. By requiring developers to deliver completed units before selling, BTS not only protects buyers but also indirectly ensures that developers are scrutinised more closely. This, in turn, could also encourage better urban planning and help avoid unchecked concentrations of construction in specific areas.

However, it is important to remember that BTS, alongside IBS and BIM is not a new concept. These ideas have been proposed repeatedly over the years. For instance, BTS was discussed in Parliament in 2012 with plans for mandatory implementation in 2015, only for the decision to be reversed in 2014.²⁷ The reverse is not entirely surprising given that transitioning from STB to BTS represents a significant structural change in the housing sector, which will have considerable impact on housing supply.

Hence, successfully implementing this shift will require strong political will, clear policy direction, and broad engagement with all stakeholders. Only then can this crucial reform address the fundamental challenges facing Malaysia's housing sector.

²⁷ Bernama, 'Build-Then-Sell Concept Best Way to "treat" Sick, Abandoned Housing Project Issue | New Straits Times', Business Times, 2024, https://www.nst.com.my/property/2024/03/1022004/build-then-sell-concept-best-way-treat-sick-abandoned-housing-project-issue.



²⁶ Maryam Kamal, '13MP: New Build-Then-Sell Plan Means Only Financially Strong Property Developers Will Survive — Analyst', The Edge Malaysia, 2025, https://theedgemalaysia.com/node/764944.

Social Dimension: Housing as a Public Good

Beyond the private market mechanisms, it is also crucial that the housing market caters to the lower income groups who are still unable to afford homeownership. The rental market remains an important component of the housing sector, with 20.3% of households nationally renting in 2022, and even higher proportion in urban districts.²⁸ This indicates the significant reliance on rental housing, particularly in cities. In this context, the proposal of introducing the Residential Tenancy Act is a welcome measure to protect tenants' right, regulate rent levels, and encourage potential long-term rental as a viable alternative to homeownership.

Equally important are social housing projects, such as the likes of Program Perumahan Rakyat (PPR), which has been rebranded to Program Residensi Rakyat (PRR), are crucial in providing housing shelter for the lower-income households. One persistent challenge in Malaysia has been the lack of a strong maintenance culture, making the emphasis in 13MP on exploring the appointment of qualified third-party agencies for systematic management and maintenance particularly encouraging. The 13MP also recognises the critical role of state governments in implementing public housing projects tailored to local needs, including using bulk procurement mechanisms to improve efficiency and align prices with local income levels. Taken together, the social dimension of housing is incorporated in the 13MP. Yet, as with any policy, strong plans alone are not enough. Effective implementation will depend on coordinated efforts among all stakeholders, clear accountability mechanisms, and sustained political commitment.

Key Policy Directions

In short, housing policy has to be holistic as social housing and the private market are interconnected and problems in one will spill over into the other.²⁹ The general direction outlined in the 13MP is encouraging, but alternative financing schemes such as RTO and the promotion of the "build-then-sell" approach must be executed with care for the broader housing sector reforms to achieve their intended impact.

²⁹ Sr Dr Suraya Ismail, 'Perumahan Sosial Dalam Agenda Perumahan: Keperluan Untuk Definisi Dan Takrifan Tepat', Khazanah Research Institute, 2023, https://www.krinstitute.org/Views-@-Perumahan_Sosial_dalam_Agenda_Perumahan-;_Keperluan_untuk_definisi_dan_takrifan_tepat.aspx.



²⁸ Muhammad Nazhan Kamaruzuki and Ammar Hanania Hazli Izma, 'Towards A Secure and Fully Functioning Housing Rental Sector', Khazanah Research Institute, 2025, https://www.krinstitute.org/Views-@-Towards_A_Secure_and_Fully_Functioning_Housing_Rental_Sector.aspx.

2.3 Education

The education sector was allocated RM67 billion in the 13MP to raise the floor through more inclusive, values-based education and to nurture future-ready talent that strengthens national competitiveness towards a value-creation economy. Given that these represent the two central objectives, our discussion will primarily focus on future talent development, with emphasis on inclusive access for all.

Future Talent Development

One major reform proposed in the 13MP is to make preschool education compulsory at age 5, while primary school will begin at age 6, with the aim of enhancing educational outcomes. In addition to this, secondary school education has also been made compulsory. To facilitate this shift, the Education Act 1996 will be amended accordingly.

This reform builds on the Malaysia Education Blueprint (2013–2025), which targeted universal preschool enrolment by 2020. Yet, that ambition has not been fully realised. By making preschool compulsory, the government is providing the stronger policy push needed to close the gap and move towards a more inclusive and equitable education system. The urgency is supported by evidence, as according to UNICEF ³⁰ children who attend preschool contribute more productively to the labour force as adults and enjoy higher lifetime earnings.

However, World Bank³¹ reported that 24% of children starting primary school in Malaysia lack school-readiness skills, which undermines their ability to cope with reading, writing, and mathematics. Crucially, these struggles disproportionately affect children from lower-income households, reinforcing existing inequalities in access to preschool. Because learning is cumulative, early disadvantages can snowball into significant disparities over time.

https://www.worldbank.org/en/country/malaysia/publication/bending-bamboo-shoots-strengthening-foundational-skills.



³⁰ UNICEF, 'A World Ready to Learn | UNICEF', 2019, https://www.unicef.org/reports/a-world-ready-to-learn-2019.

³¹ World Bank, Bending Bamboo Shoots: Strengthening Foundational Skills, no. 189306 (World Bank, 2024),

While making preschool mandatory is an important step, it is not sufficient on its own. The World Bank ³² preschool survey and stakeholder interviews highlight several persistent challenges such as:

- Limited preschool seat availability in certain areas,
- Low parental awareness of the long-term benefits of preschool, and
- Affordability concerns over fees and related costs.

These barriers also extend into secondary education, where students in rural and remote areas often face significant access and affordability constraints. For instance, UNICEF ³³ reports that in Sabah, students struggle with long travel distances, poor school infrastructure, and high opportunity costs. Without addressing these systematic gaps on access and affordability, compulsory schooling risks being exist only on paper, without ensuring actual access for all. Therefore, the push towards universal preschool and compulsory secondary education must go hand-in-hand with expanded school infrastructure, targeted financial support, and awareness campaigns. If implemented holistically, this reform could mark a turning point for Malaysia's education system, laying the foundation for future-ready talent, breaking cycles of inequality, and supporting the 13MP's broader vision of inclusive development.

Transforming TVET for the Future Workforce

The 13MP positions Technical and Vocational Education and Training (TVET) at the centre of higher education reform, recognising its role in addressing skills mismatches and preparing graduates for an evolving labour market. One of the key steps is expanding TVET certification up to Levels 6–8 under the Malaysian Qualifications Framework. This move puts TVET on the comparable level as university pathways, giving students more opportunities to further their studies for career progression.

Graduate employability data shows that TVET graduates are competitive, with employability rates consistently outperforming non-TVET graduates since 2012.³⁴ This is a strong sign that TVET provides practical and industry-aligned channel of education rather than a "second choice" pathway. However, the negative perception associated with TVET remains a challenge, and the direction under the 13MP on improving the image of TVET, alongside raising its qualification level, is a step in the right direction.

³⁴ Hawati Abdul Hamid and Tan Mei Yi, *Unlocking the Earning Potential of TVET Graduates* (Khazanah Research Institute, 2023), https://www.krinstitute.org/Working_Paper-@-Unlocking_the_Earning_Potential_of_TVET_Graduates.aspx.



³² World Bank, *Shaping First Steps: A Comprehensive Review of Preschool Education in Malaysia*, The Malaysia Development Experience Series (World Bank, 2023), https://www.worldbank.org/en/country/malaysia/publication/shapingfirststeps.

³³ UNICEF, Out of School Children | UNICEF Malaysia (2019), https://www.unicef.org/malaysia/reports/out-school-children.

The plan to strengthen collaboration between universities, industries, and training providers is also crucial. Planned partnerships with high-growth areas like the Johor-Singapore Special Economic Zone (JS-SEZ), Kulim Hi-Tech Park (KHTP), and Kerian Integrated Green Industrial Park (KIGIP) can ensure that training is closely linked to real job opportunities. A major challenge will be securing long-term industry buy-in as without this, the skills mismatches are likely to continue despite reforms.

Taken together, the proposed measures, including higher qualification pathways and stronger industry partnerships could position TVET as a genuine mainstream option for long-term upward mobility. If implemented effectively, TVET has the potential to supply the economy with a highly skilled workforce that better matches job market demand widening access to higher qualifications beyond the traditional university track, and hence, reducing inequality in education opportunities.

Teachers and Education Quality

Beyond improving physical access to education and reforming TVET, the effectiveness of any reform ultimately depends on teachers. It is therefore encouraging that the 13MP emphasises continuous improvement to ensure all educators remain competent and up to date.

Throughout the years, teacher shortages have been a persistent challenge, but it is encouraging that the government has introduced mechanisms to recruit more educators and fill staffing gaps.³⁵ At the same time, high workloads, including non-teaching duties,³⁶ remain a concern as they can affect teaching quality. Addressing these workload issues should be treated as an immediate priority to ensure that education reforms are implemented effectively.

Regarding teacher quality, the 13MP highlights continuous professional development to maintain up-to-date subject knowledge, digital literacy, and pedagogical skills. Primary school teachers will also be trained to teach all core subjects for standard one. While this flexibility can enhance teacher competency and career development, careful implementation is needed to avoid overburdening educators and compromising both their well-being and teaching quality.

³⁵ Jaayne Jeevita, "No More Teacher Shortage" | The Star', The Star, 2025, https://www.thestar.com.my/news/nation/2025/07/04/no-more-teacher-shortage.

³⁶ Bernama, 'NUTP Calls for Special Committee to Address Teacher Workload | New Straits Times', New Strait Times, 2025, https://www.nst.com.my/news/nation/2025/07/1241186/nutp-calls-special-committee-address-teacher-workload.



The 13MP also proposes a review of promotion methods to make teaching a more attractive and competitive profession, helping to draw in top talent. Cross-placement opportunities can further enhance teacher competency by providing exposure to diverse experiences and roles, while creating more flexible career pathways. Once again, while this flexibility could be beneficial for career progression, it is important to ensure that teachers are not overburdened. Together, these measures aim to professionalise teaching and ensure educators are well-equipped to deliver quality education nationwide.

Key Policy Directions

The educational reforms under the 13MP address several structural challenges. Compulsory preschool from age 5, primary and secondary education, TVET reforms, and teacher development are critical steps toward raising the floor and nurturing future-ready talent. These evidence-backed initiatives aim to improve inclusiveness, employability, and better align education with labour market needs.

However, these are long-term reforms, and tangible outcomes will take time to materialise. Sustained implementation, adequate funding, careful workload management, and ongoing monitoring are crucial. Only by ensuring these conditions can the 13MP realise its vision of a high-quality, inclusive education system that produces competent graduates capable of contributing to Malaysia's socio-economic development.

2.4 Health

Healthcare is arguably the most crucial sector in fostering inclusive development, as it ensures that all citizens, regardless of economic status, have access to essential services that enable a healthy life. Recognising this, the 13MP places strong emphasis on healthcare, having 4 primary healthcare targets by 2030. In this analysis, we focus on three key dimensions: healthcare financing, healthcare delivery, and the broader outcomes for population health and well-being.



Figure 1: Key Health Performance Indicators and Targets

Rakan KKM as a Supplementary Financing Mechanism

Healthcare financing has long been one of the most pressing challenges faced by health systems globally. In Malaysia, the issue is particularly evident, as shown in Table 2, where public health expenditure as a percentage of GDP has remained relatively low, hovering only slightly above 2% in most years, with the highest being 2.9% in 2021 during the pandemic.

Table 2: Public health expenditure of GDP percentage from 2019 to 2023

Year	Public health expenditure as a percentage of GDP
2019	2.3%
2020	2.6%
2021	2.9%
2022	2.3%
2023	2.4%

Data obtained from: MNHA Health Expenditure 2011-2023³⁷

³⁷ Ministry of Health Malaysia, 'NATIONAL HEALTH EXPENDITURE 2011-2023', Mesyuarat Pemandu MNHA Bil, 2024, https://www.moh.gov.my/moh/resources/Penerbitan/Penerbitan Utama/MNHA/MNHA_HEALTH_EXPENDITURE_2011-2023_(MNHA_Steering_Meeting_2024).pdf.



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Given Malaysia's constrained fiscal capacity, the Ministry of Health (MOH) has recently proposed Rakan KKM, an alternative financing channel also highlighted in the 13MP. In summary, Rakan KKM functions as a private arm within public hospitals, where patients have the option to pay additional fees for faster access to elective treatments, bypassing the standard waiting queue. This scheme builds on the earlier Full Paying Patient (FPP) scheme introduced in 2007, but with a crucial improvement: while FPP only remunerated specialists, ³⁸ Rakan KKM is structured as a private company, thereby allowing all staff involved in service delivery to be compensated.

Importantly, the scheme applies only to elective care and not emergency services, with the aim of generating supplementary revenue for public healthcare rather than competing with subsidised public services. For example, a patient who wants a cataract surgery may choose to pay through Rakan KKM to receive it earlier, but someone with a heart attack or a serious accident would still be treated immediately in the emergency department, with no option to pay to jump the queue.

The introduction of Rakan KKM demonstrates commendable innovation by the MOH in seeking new funding sources amidst budgetary limitations. Nevertheless, several key concerns require clarification before implementation:

First, public hospitals already face chronic challenges of overcrowding and long waiting times. Since Rakan KKM relies on existing facilities, staff, and equipment,³⁹ how will resources be fairly allocated between paying and non-paying patients? Although the scheme promises clear separation and will not interrupt the current services, public perception may be that paying patients are given preferential treatment at the expense of ordinary patients. Experiences from the FPP scheme suggest that limitations in equipment, drugs, and workforce capacity were major constraints.⁴⁰

⁴⁰ Muhammad Nur Amir Bin Abdul Rassip et al., 'Resource Management for Full Paying Patient Service in Malaysia: Issues and Challenges', *International Journal of Healthcare Technology and Management* 20, no. 1 (2023), https://www.inderscience.com/info/inarticle.php?artid=130298.



³⁸ Ilyana Syafiqa Mukhriz Mudaris, 'Systematic and Comprehensive Governance: Thinking About the Full Paying Patient Programme', Khazanah Research Institute, 2024, https://www.krinstitute.org/Views-@-Systematic_and_Comprehensive_Governance-;_Thinking_About_the_Full_Paying_Patient_Programme.aspx.

³⁹ Alifah Zainuddin and Boo Su-Lyn, 'Rakan KKM's Business Model: Low Costs, High Profits - CodeBlue', Codeblue: Health Is a Human Right, 2025, https://codeblue.galencentre.org/2025/07/rakan-kkms-business-model-low-costs-high-profits/.

Next, another concern lies in whether MOH has the authority to directly channel revenues generated into public healthcare. For example, tax revenue from vape liquids, initially proposed to support healthcare, was ultimately absorbed into the Federal Consolidated Fund. As Rakan KKM is structured as a private company, a transparent framework must be established to ensure revenues are systematically reinvested into strengthening public healthcare delivery.

Third, there is also a risk that Rakan KKM may unintentionally increase household financial burdens.⁴² Families, particularly those motivated by altruism, may feel compelled to pay extra for a faster treatment even when it stretches their budgets. In such cases, this could weaken the idea of cross-subsidisation, where higher-income groups indirectly help fund the system for everyone, and may end up widening inequality.

Finally, the potential revenue generated may not be sufficient to meaningfully supplement public healthcare funding. As a comparison, the FPP scheme generated only RM22 million⁴³ in 2018, while annual public healthcare spending runs into billions of ringgits. Despite all the potential downsides mentioned earlier, the risk remains that Rakan KKM might not generate significant revenue, and its overall fiscal contribution could remain marginal.

Therefore, while MOH deserves recognition for proactively exploring alternative financing models, the design and execution of Rakan KKM require careful scrutiny. Issues surrounding resource allocation, reinvestment mechanisms, household financial impact, and fiscal sustainability must be addressed transparently. The points raised here are broad considerations, and more specific concerns are likely to emerge once further details of the scheme are made public. Most importantly, as the public healthcare system serves as the nation's ultimate safety net, any reforms must be developed inclusively, engaging stakeholders, healthcare professionals, and the public. Additional financing is undeniably necessary, but it should not come at the cost of eroding the equity and accessibility that underpin Malaysia's public healthcare system.

⁴³ Mudaris, 'Systematic and Comprehensive Governance: Thinking About the Full Paying Patient Programme'.



⁴¹ Codeblue, 'RM141 Million In Vape Liquid Tax Revenue Collected Since 2021, Not Earmarked For Health - CodeBlue', Codeblue: Health Is a Human Right, 2024, https://codeblue.galencentre.org/2024/07/rm141-million-in-vape-liquid-tax-revenue-collected-since-2021-not-earmarked-for-health/.

⁴² Codeblue, 'Rakan KKM May Drive Up Household Costs While Generating Limited Revenue: Economist - CodeBlue', Codeblue: Health Is a Human Right, 2025, https://codeblue.galencentre.org/2025/07/rakan-kkm-may-drive-up-household-costs-while-generating-limited-revenue-economist/.

Strengthening Health Delivery in Preparation for an Aged Society

Besides the pressing issue of healthcare financing, another major challenge highlighted in the 13MP is Malaysia's demographic shift into an ageing nation. According to the Department of Statistics Malaysia, those aged 60 and above already account for 11.6% of the population, and this is projected to reach 17.3% by 2040.⁴⁴ Not to mention, Non-communicable disease in also on the rise where the National Health and Morbidity Survey (NHMS) 2023 reveals that 15.6 % of adults battle diabetes, while 29.2 % grapple with hypertension, and a shocking 33.3% have high cholesterol. The convergence of a growing number of NCDs and a rapidly aging society presents a "double-edged sword" for Malaysia's healthcare system. This transition underscores the urgency of ensuring that our healthcare delivery system has sufficient capacity and resilience.

The establishment of a high-level policy coordination committee to oversee health workforce requirements is a welcome move and should be implemented swiftly. Resources in public hospitals are already stretched, and the demands of an ageing population will only increase this pressure. Equally important is the proposed framework for national professional development to strengthen human resource management. This is vital not only for building a resilient healthcare system but also for retaining our doctors, nurses, and other health professionals, many of whom face increasingly attractive opportunities overseas.

Alongside this, the 13MP's plan to accelerate digitalisation in health information management represents a crucial step forward. A national health information-sharing platform that allows seamless access across institutions and states, in both the public and private sectors, would strengthen service delivery, reduce duplication of tests and procedures, and enable better tracking of patients' health outcomes. With an integrated system, healthcare providers could deliver timely and coordinated care, ultimately improving efficiency and patient well-being.

On the consumer side, efforts to digitise healthcare often face challenges, particularly with an ageing population and limited public familiarity with digital tools. In this context, maximising the use of the MySejahtera app⁴⁵ offers a practical solution. Since nearly every Malaysian is already registered, it

⁴⁵ 'MySejahtera', accessed 4 September 2025, https://mysejahtera.moh.gov.my/en/.



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⁴⁴ Arfa Yunus, 'Elderly Population to Hit 17% by 2040, Says Stats Dept | The Star, The Star, 2024, https://www.thestar.com.my/news/nation/2024/09/06/elderly-population-to-hit-17-by-2040-says-stats-dept.

provides a ready-made platform to consolidate functions which currently already include appointment bookings, vaccination records, health monitoring, and access to reliable health information.

However, the success of any initiative, whether Rakan KKM, digital health platforms, or enhanced MySejahtera features, ultimately depends on strong public communication and awareness. Although MySejahtera already offers several user-friendly features, there is no certainty that the public, particularly the older population, is fully utilising them. Without clear understanding and widespread uptake, even the most well-designed reforms risk falling short of the intended impact. In short, strengthening health delivery in anticipation of an ageing society requires urgent, coordinated action on workforce development, digital integration, and public engagement. Only then can our healthcare system remain equitable, accessible, and future-ready.

Key Policy Directions

On the whole, the 13MP has identified critical challenges in our healthcare system, highlighting the need for sustainable financing, addressing the pressures of an ageing society, and accelerating digitalisation to improve service delivery. The Ministry of Health 2023 White Paper, may have provided a detailed roadmap, outlining strategic directions and action plans for the next 5 to 10 years Though, a more pre-emptive strategy is urgently needed. This means shifting the emphasis toward primary care and preventative health initiatives and prioritising public health awareness to address these issues at their root, rather than waiting for them to become chronic conditions. Nonetheless, reforms must not disrupt healthcare provision, and all changes should be communicated clearly and transparently. Above all, ensuring equitable access to healthcare is vital so that no one is pushed down the social ladder.

2.5 Targeted Assistance and Inclusivity

The 13th Malaysia Plan (RMK13) continues to place strong emphasis on strengthening welfare systems and social safety nets to ensure that vulnerable groups are not left behind in the nation's development trajectory. Building on earlier reforms, current welfare initiatives aim to move beyond short-term relief, focusing instead on resilience, empowerment, and more precise targeting of support. This includes the expansion of targeted cash aid and Rahmah schemes, which are intended to ensure equitable reach among low-income and vulnerable households as well as targeted subsidies.⁴⁶

 $^{^{\}rm 46}$ Dreyling et al., 'Navigating the AI Maze'.



Nonetheless, the execution of targeted subsidies poses challenges, as poor implementation risks creating administrative inefficiencies or inadvertently excluding eligible groups. Moreover, Malaysia's welfare landscape shows clear overlaps across JKM (Jabatan Kebajikan Masyarakat), SARA, MyKasih, and other bantuan schemes. While each programme has its own rationale and delivery mechanism, fragmentation in the welfare ecosystem increases the likelihood of duplication of benefits ("double-dipping") by some households, while others most in need may be left out.⁴⁷ Therefore, a need for a unified social protection registry and delivery system to improve coordination, transparency, and equitable coverage. RMK13, while promoting inclusivity and targeted assistance, highlights the urgency of moving towards a more integrated welfare framework that reduces inefficiency and ensures that social support is both comprehensive and sustainable.

3.0 A New Era of Sustainable Development

While sustainability has been a recurring theme in past Malaysia Plans, the 13th Malaysia Plan marks a fundamental shift by strategically fusing the nation's economic progress with its environmental well-being. This plan goes beyond conventional development models to establish a framework where sustainability is not a secondary objective but a core component of national policy. A key question underpinning this plan is whether the proposed policies are robust enough to truly prioritise environmental well-being without compromising the nation's economic momentum.

This transformative vision is built upon the nation's "Aspirasi 2040" with the aspiration for a "Healthy and Resilient Earth" (Bumi yang Sihat dan Berdaya Tahan) serving as its culmination. This commitment to protect the environment for future generations is inextricably linked with a critical emphasis on "Good Governance" (Tatakekola Baik). By prioritizing transparency, agility, and effectiveness, this pillar ensures the nation's wealth is distributed fairly and equitably. This approach highlights that robust governance is not merely a supplementary policy, but a foundational mechanism for achieving both environmental stewardship and socioeconomic equity, thereby cementing a comprehensive and integrated path toward sustainable national progress.

⁴⁷ World Bank, MALAYSIA ECONOMIC MONITOR: Raising the Tide, Lifting All Boats (World Bank, 2023).



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Figure 2: Malaysia's Aspirations 2040 encompassing four core pillars



3.1 Malaysia's Path to Net-Zero Emissions

Malaysia's commitment to achieving net-zero emissions is a central and ambitious goal of the 13th Malaysia Plan, strategically positioned to align the nation's economic development with global climate action. This section examines the country's national net-zero target and analyses the critical role of the Land Use, Land-Use Change, and Forestry (LULUCF) sector, a unique asset that presents both significant opportunities and complex challenges for carbon management.

The National Net-Zero Target and GHG Emissions

As a front-runner in regional climate action, Malaysia has committed to a net-zero target as early as 2050^{48,49} a pledge first voiced in the 12th Malaysia Plan and powerfully reaffirmed in the recently unveiled the 13th Malaysia Plan. This ambitious commitment is supported by a tangible national target: a 45% reduction in Greenhouse Gas (GHG) emission intensity to GDP by 2030, relative to 2005 levels. The 13th Malaysia Plan reports a 37.1% decrease in emission intensity by 2021, a figure that, as the trajectory suggests, positions Malaysia on a promising course to achieve its 2030 objective.

However, the pathway to net-zero presents a formidable challenge, particularly for a nation like Malaysia, deeply entwined with fossil fuels for both its economic engine and energy supply. As a significant fossil fuel producer, the country's provision of subsidies for petrol and electricity directly contributes to the energy sector's dominance as the highest emitter, accounting for a commanding 79% of the nation's total GHG emissions, as clearly illustrated in the bar chart depicting Malaysia's GHG inventory for 2021. Following as the second-largest contributor, the Industrial Processes and Product Use (IPPU) sector, encompassing vital manufacturing of metal, electronics, and chemicals, accounts for 11% of emissions.

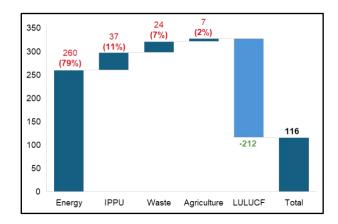


Figure 3: Malaysia's GHG inventory, MtCO2eq (2021) from BTR1

Source: Malaysia. 2024 Biennial Transparency Report (BTR). BTR1.

⁴⁹ National Policy on Climate Change 2.0. National Policy on Climate Change 2.0. https://www.nres.gov.my/ms-my/pustakamedia/Penerbitan/National%20Policy%20on%20Climate%20Change%202.0.pdf



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⁴⁸ New Industrial Master Plan 2030. *Mission 3: Push for Net Zero*. https://www.nimp2030.gov.my/index.php/pages/view/82?mid=472

The LULUCF Sector: Potential and Challenges

Despite these considerable hurdles, Malaysia possesses a distinctive asset in its expansive tropical forests. The Land Use, Land-Use Change, and Forestry (LULUCF) sector emerges as a critical pillar for climate action, functioning as a substantial carbon sink, evident in the time series graph showing negative emissions for this sector for a significant period. Historically, as the graph from 1990 to 2021 reveals, Malaysia operated as a net carbon sink for the majority of years preceding 2004, primarily due to the robust carbon sequestration capacity of its forest ecosystems. This historical context forms a cornerstone of Malaysia's environmental agenda, particularly amplified by the 13th Malaysia Plan's pronounced focus on a green economy and proactive environmental stewardship. Yet, a mere acknowledgement of this sector's potential risks understating the intricate challenges inherent in its effective management and sustained preservation.

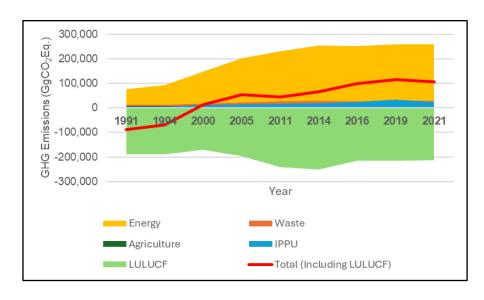


Figure 4: GHG Emission Time Series from 1990 to 2021

Source: Malaysia. 2024 Biennial Transparency Report (BTR). BTR1.

A primary concern stems from the inherent difficulties and significant complexity involved in accurately assessing the climate impact of the LULUCF sector. The detailed and specific methods for counting carbon emissions and removals involve numerous dynamic variables, rendering precise data tracking an ongoing challenge. This fundamental lack of certainty inevitably complicates efforts to smoothly and reliably integrate LULUCF data into a solid and verifiable national climate policy.

Moreover, this ecological imperative exists in direct tension with Malaysia's prevailing economic realities. The timber industry remains a significant contributor to the government revenue, and the persistent pressure to exploit these valuable resources frequently clashes with the overarching long-term objective of safeguarding forests as vital carbon sinks.

Furthermore, the effective on-the-ground implementation of LULUCF preservation strategies is demonstrably hampered by a discernible gap between established policy and actual practice, often compounded by a lack of widespread public awareness regarding the long-term ecological ramifications. The challenges is evident in issues like illegal land-use changes and developmental conflicts, underscoring a persistent need for more rigorous enforcement and enhanced public understanding.

To truly harness the potential of the LULUCF sector as a catalyst for meaningful climate action, Malaysia must confront these core challenges head-on. Policymakers should adopt a targeted approach that transcends broad forest cover metrics. A crucial recommendation involves prioritizing high-carbon ecosystems, notably peatlands and mangroves. These invaluable "blue carbon" ecosystems possess an extraordinary capacity to store immense quantities of carbon, and their degradation triggers substantial emissions. Policymakers must commit to investing in the development of dedicated methodologies and specific emission factors tailored to these unique systems, aligning with the latest guidance from the Intergovernmental Panel on Climate Change (IPCC). Critically, sustained post-planting monitoring and diligent maintenance are indispensable for the long-term success of these ecological restoration initiatives, ensuring that newly established vegetation is not lost to environmental factors or human interference before reaching maturity.

In parallel, the integration of comprehensive carbon accounting for agricultural landscapes is paramount. By actively promoting the adoption of agroforestry systems within palm oil plantations, policymakers can cultivate a synergistic framework where carefully integrated tree cover coexists with crucial agricultural output. This strategic transition enables the country to sustain its vital economic productivity while concurrently bolstering its carbon sequestration capacity and advancing overarching environmental objectives, directly addressing the inherent tension between development and preservation.

Concurrently, policymakers must decisively strengthen the governance framework surrounding the timber industry. While acknowledging its continued growth and economic significance, the strategic focus must pivot towards a gradual yet resolute transition to demonstrably sustainable practices. This necessitates the mandatory adoption of robust sustainability standards, the rigorous enforcement of stricter regulations coupled with significant penalties for illegal logging activities, and the establishment of an end-to-end comprehensive traceability system for all timber products, from their origin to the final market.

Moving forward, the nation's immediate critical imperative is to aggressively pursue the decarbonization of the high GHG-emitting sectors, a crucial step to ensure the attainment of its ambitious 2030 and 2050 climate milestones.

3.2 National Energy Transition Strategies and Policies

The 13th Malaysia Plan positions the energy transition as a central pillar of the nation's economic and environmental strategy, building directly on the National Energy Transition Roadmap (NETR). The government's policies are designed to systematically restructure the energy mix, promote renewable energy, and drive the decarbonization of high-emitting sectors to achieve a green, low-carbon energy framework.

The Role of NETR and Strategic Targets

Under the NETR, Malaysia is actively pursuing an accelerated energy transition to achieve a green, low-carbon energy framework. This fundamental shift away from traditional, fossil-fuel-based systems seeks to balance the "energy trilemma" of security, sustainability, and affordability. The 13th Malaysia Plan specifically integrates and strengthens these goals, making the energy transition a central pillar of its development strategy.

As of 2023, the country's primary energy supply remains heavily reliant on fossil fuels, with coal, natural gas, and crude oil collectively accounting for 94%, while renewable energy (RE) sources made up the remaining 6%⁵⁰. The 13th Malaysia Plan aligns with NETR's clear and ambitious goals to transform this mix. By 2030, the target is to increase the share of RE to 37.8% of the nation's installed electricity capacity, while simultaneously decreasing coal's share to 23.25%. Looking further ahead, the ambition is to have 50% of the country's electricity generation from RE by 2040, with the ultimate goal of achieving a 70% share by 2050, while completely phasing out coal-fired power plants.

Key Policies and Initiatives

The 13th Malaysia Plan outlines specific policies and initiatives to operationalize these targets. The government is continuing its strong push for solar energy through initiatives like the competitive bidding for Large Scale Solar (LSS) projects and the Net Energy Metering (NEM) program. The plan also emphasises the need for a multifaceted approach, as reflected in the Long-Term Low Carbon Development Strategy (LT-LEDS)⁵¹. A notable policy move under this strategy is the recent electricity tariff adjustment, which introduced the Automatic Fuel Adjustment (AFA) mechanism to replace the previous Imbalance Cost Pass-Through (ICPT) system. This change is a strategic move to increase transparency by adjusting tariffs monthly based on fuel costs, and, more critically, to encourage higher-usage consumers to consider cleaner energy alternatives⁵². This policy begins to reflect the true cost of fossil fuels and provides a market-based incentive for decarbonization, directly supporting the 13th Malaysia Plan goals.

The 13th Malaysia Plan also supports the diversification of Malaysia's energy mix. The exploration of nuclear energy, particularly through small modular reactors (SMRs), signals a long-term commitment to a stable, low-carbon baseload power source. This is complemented by the Hydrogen Economy and Technology Roadmap (HETR), which positions the country to leverage its renewable energy potential

⁵² Eco-Business. Malaysia's electricity tariff reforms will help companies measure true cost of fossil fuels: Energy Commission chief. https://www.eco-business.com/news/malaysias-electricity-tariff-reforms-will-help-companies-measure-true-cost-of-fossil-fuels-energy-commission-chief/



⁵⁰ Ministry of Economy, Malaysia. National Energy Transition Roadmap. https://ekonomi.gov.my/sites/default/files/2023-08/National%20Energy%20Transition%20Roadmap.pdf

⁵¹ United Nations Framework Convention on Climate Change (UNFCCC). National Statement Nik Nazmi Nik Ahmad Minister Of Natural Resources, Environment & Climate Change At COP28.

 $[\]underline{https://unfccc.int/sites/default/files/resource/MALAYSIA_cop28cmp18cma5_HLS_ENG.pdf}$

to become a regional leader in hydrogen production and use⁵³. Progress is already underway, with Sarawak spearheading ventures with catalytic green hydrogen projects aimed for completion by 2027 and the deployment of hydrogen-powered public transportation⁵⁴. These interconnected strategies demonstrate a comprehensive and forward-looking approach, where the 13th Malaysia Plan serves as the overarching framework for the nation's energy transition.

3.3 Building an International Carbon Market

The 13th Malaysia Plan also establishes a robust framework for Malaysia's carbon market, positioning it as a key complementary policy to the energy transition. The plan leverages market-based mechanisms to incentivize emissions reductions and mobilize private sector investment, particularly for hard-to-abate sectors. This strategy is centered on developing a comprehensive ecosystem, beginning with the establishment of the Bursa Carbon Exchange (BCX).

The Role of the Bursa Carbon Exchange (BCX)

The BCX, which launched in late 2022, serves as the initial phase of Malaysia's national carbon market. While currently a **voluntary market**, its early progress, as noted in the 13th Malaysia Plan, is crucial for price discovery and building a credible domestic supply of credits. This was clearly demonstrated in July 2024, when the first Malaysian-based carbon credit auction from the Kuamut Rainforest Conservation Project successfully cleared at a benchmark price of RM50 per contract. The participation of key players like Petronas and Maybank signals significant corporate interest and validates the market's potential to attract investment into high-integrity nature-based solutions⁵⁵.

⁵⁵ Bursa Malaysia. Bursa Carbon Exchange (BCX) - Bursa Malaysia. Retrieved August 15, 2025, from https://box.bursamalaysia.com/about.html



⁵³ Skrine. Malaysia Launches Hydrogen Economy & Technology Roadmap. https://www.skrine.com/insights/alerts/october-2023/malaysia-launches-hydrogen-economy-technology-road

⁵⁴ Ministry of Education, Innovation and Talent Development (MEISTY) Sarawak. Green hydrogen projects must be commercially viable to succeed. https://meesty.sarawak.gov.my/web/subpage/news_view/40

Regulatory Pillars and Strategic Linkages

The 13th Malaysia Plan's strategy is built on a series of interconnected regulatory pillars:

- Carbon Tax and ETS Development: The finalization of the National Climate Change Act and the planned implementation of a carbon tax in 2026 provide the essential legal and financial levers for a national Emissions Trading Scheme (ETS). As announced in the 2025 Budget and supported by the 13th Malaysia Plan, this tax will target high-emitting industries like the energy and iron and steel sectors. This strategic linkage allows companies to use a portion of high-quality carbon credits from the BCX to offset their tax liability, effectively creating a hybrid market model and providing a powerful financial incentive for participation.
- Forest Carbon Offset (FCO) Instrument: The government is exploring a Forest Carbon Offset (FCO) instrument to address the dual goals of conservation and market supply. A Technical Working Group has been established to create guidelines for this initiative, which will link forest conservation and restoration efforts to the Malaysia Forest Fund (MFF). The MFF will operationalize the FCO, generating high-integrity nature-based credits from Malaysia's extensive forests. These credits will be a vital domestic supply for companies seeking to meet future compliance obligations on the BCX.
- Carbon Capture, Utilization, and Storage (CCUS) Act: This regulatory framework is further strengthened by the recent enactment of the CCUS Act on July 22, 2025. This new law provides the essential legal framework to regulate the CCUS industry in Peninsular Malaysia and Labuan. The Act's key provisions, including a licensing framework and a Post-Closure Stewardship Fund, ensure the long-term safety and integrity of storage sites. This is a highly proactive step, given Malaysia's natural advantage in having vast geological formations, particularly depleted oil and gas fields, which are ideal for safely and permanently storing CO2. The development of a robust CCUS industry is considered a key strategy for mitigating industrial emissions and achieving the nation's net-zero ambitions.

While Malaysia's new Act is a crucial first step, it is part of a broader, multi-faceted strategy that must keep pace with the rapid technological development of CCUS and address challenges like the energy intensity of the capture process, and complex issues of long-term liability and public acceptance. For example, the Northern Lights project in Norway, a pioneer in cross-border CO2 transport and storage, and Australia's Gorgon facility, one of the world's largest, both highlight persistent challenges in scaling up this technology⁵⁶.

3.4 Green Economy to Fuel Sustainable Growth

The 13th Malaysia Plan explicitly identifies the Green Economy as a primary engine for sustainable development, a central component of its "Enhancing Economic Resilience" pillar. This strategic focus is designed to integrate economic growth with environmental stewardship by fostering both the demand for and supply of green products and services. The plan's multi-faceted approach targets key sectors to drive this transition, from agriculture to finance.

Greening the Agri-Commodity Supply Chain

A key priority under the 13th Malaysia Plan is the greening of Malaysia's vital agri-commodity supply chain to increase its global competitiveness and protect local ecosystems. This will be achieved by enhancing local sustainability standards for major exports like palm oil, rubber, and timber, while also introducing new certifications for other agri-commodities such as kenaf, cocoa, and pepper. Specific examples of these standards include the established Malaysian Sustainable Palm Oil (MSPO) and the Malaysian Timber Certification Scheme (MTCS), complemented by the new Malaysian Sustainable Natural Rubber (MSNR), with enforcement slated to begin in 2025.

To support these initiatives, the plan commits to implementing advanced technology to enhance the traceability of agri-commodity products, thereby strengthening supply chain integrity. Furthermore, a mechanism will be developed to determine the sustainability of imported agri-commodity products, a measure designed to ensure the resilience of Malaysia's downstream industries.

⁵⁶ Global CCS Institute. (n.d.). *Northern Lights Project*. Retrieved August 8, 2025, from https://www.globalccsinstitute.com/project/northern-lights-project/



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Embracing a Circular Economy

The government recognises the crucial role of the Circular Economy as a foundational approach to minimising waste and maximising resource value. This strategy represents a fundamental shift away from a linear "take-make-dispose" model towards a restorative one, where resources are kept in use for as long as possible. The 13th Malaysia Plan 's commitment to increasing the national recycling rate and expanding waste-to-energy (WtE) plants is a direct application of these principles.

This approach generates both economic value and environmental benefits by creating new value chains in recycling, repair, and remanufacturing. By stimulating economic growth and job creation, the circular economy simultaneously reduces reliance on virgin materials, minimises landfill waste, and lowers pollution.

A compelling international example of this success is seen in Denmark, a leader in waste management and industrial symbiosis, where one company's waste becomes a valuable resource for another. A collaborative project in Aalborg, involving 25 companies, successfully demonstrated this model by exchanging residual products like water, energy, and materials, which contributed to a reduction of annual CO2 emissions by 10,000 tonnes⁵⁷.

Scaling Up Green Finance

An integral part of the 13th Malaysia Plan's green economy strategy is to enhance access to green financing, particularly for Micro, Small, and Medium Enterprises (MSMEs). This aligns with Bank Negara Malaysia's Financial Sector Blueprint (FSB) 2022-2026, which focuses on improving project bankability, expanding the pool of financing providers, and introducing new programs. The FSB highlighted the ambitious goal of "Driving wider adoption of green finance and sustainability practices," targeting at least half of new financing to be aligned with climate-supporting activities by 2026⁵⁸. To facilitate this, capacity-building programs will be intensified to help MSMEs design projects that are attractive to a wider range of private financial providers, ensuring an inclusive transition.

⁵⁸ Bank Negara Malaysia (BNM). (2022, January 24). *Financial Sector Blueprint 2022-2026*. Retrieved from https://www.bnm.gov.my/fsb3



⁵⁷ Mortensen, L. (2023). INDUSTRIAL SYMBIOSIS EMERGENCE: In the Aalborg East Port Industrial Area.

These efforts are complemented by a strategic focus on blended financing to accelerate energy transition projects. The newly launched Climate Finance Innovation Lab (CFIL) serves as a collaborative platform to develop, test, and scale new financial products and services⁵⁹. In parallel, the government has introduced the National Energy Transition Facility (NETF), a dedicated catalytic fund with an initial seed fund of RM2 billion⁶⁰. A recent milestone demonstrating this commitment is the approval of RM122.65 million in financing by Malaysia Debt Ventures Bhd (MDV) for six technology-based companies focused on renewable energy and energy efficiency. The path to accessing these funds is guided by four key criteria outlined in the 13th Malaysia Plan: a project's potential for emissions reduction, its ability to generate economic opportunities, its cost-effectiveness, and its commitment to social inclusiveness. These criteria ensure that funding is directed towards initiatives that align with national sustainability goals, creating a structured and transparent framework for businesses to participate in the green transition.

However, the success of these blended finance initiatives hinges on the critical factor of human capital. While these funds are crucial, their effective deployment depends on the availability of a skilled workforce. A significant challenge is the need for more high-skilled individuals and the importance of attracting experienced overseas project developers. These individuals and firms are essential for developing a robust pipeline of high-quality, "bankable" projects that can attract the necessary private investment and fully capitalise on the potential of green financing. To truly succeed, these initiatives must be effectively communicated to their intended audience, specifically companies and businesses, through the right channels to build a robust pipeline for business participation and growth.

3.5 A Protected Blue Economy for Sustainable Prosperity

The Blue Economy is a strategic priority under the 13th Malaysia Plan, outlining a distinct framework for the sustainable use of Malaysia's vast ocean resources. It stands as a separate but equally vital pathway for sustainable growth alongside the green economy. While the nation has a long history of engaging with its marine assets, a formal strategic focus on the Blue Economy as a distinct concept began with the 12th Malaysia Plan. This earlier period, however, highlighted a critical gap: development still faced challenges due to a lack of supportive policies, legislation, governance, and investment.

⁶⁰ Malaysia Debt Ventures Berhad (MDV). (n.d.). *National Energy Transition Fund (NETF*). Retrieved from https://www.mdv.com.my/v3/netf/



⁵⁹ Climate Finance Innovation Lab (CFIL). (n.d.). *Home*. Retrieved from https://www.mycfil.com/

The new plan aims to address these foundational gaps by leveraging a formal blueprint to unlock the economic potential of marine and coastal environments while preserving their health.

Lessons from the 12th Malaysia Plan

Under the 12th Malaysia Plan, the groundwork for these concepts was developed within the broader policy theme of "Advancing Green Growth," which focused on protecting the environment, conserving natural resources, and managing coastal and marine areas⁶¹. Despite these efforts, significant environmental challenges persisted and, in some cases, worsened. Several key indicators highlighted this decline:

- Marine and River Pollution: The ocean was under stress from marine litter and debris, and river pollution was identified as a growing problem.
- Declining Ecosystem Health: There was a noted decrease in fish stocks and a reduction in live coral coverage, indicating a decline in the health of marine ecosystems.
- **Physical Degradation:** Approximately 15% of the Malaysian shoreline was threatened by coastal erosion.
- Biodiversity Loss: The document noted a general deterioration of biodiversity and ecosystems, largely attributed to inadequate conservation efforts and a lack of public appreciation for natural resources.

The Malaysia Blue Economy Blueprint and Strategic Initiatives

The transition to the 13th Malaysia Plan is being bridged by the Malaysia Blue Economy Blueprint, which is scheduled for introduction by the end of 2025⁶². This document will outline specific initiatives, set key performance indicators (KPIs), and establish timelines for the strategic development of the sector from 2025 to 2030, moving from foundational work to accelerated implementation.

The 13th Plan aims to unlock the economic potential of marine and coastal environments while preserving their health. This begins with strengthening the overall ecosystem through improved policies, legislation, and a comprehensive ocean policy that provides integrated management for all maritime activities.

⁶² Bernama. (2024, November 17). Blue Economy Framework To Be Finalised By End-2025 - Rafizi. Retrieved from https://www.bernama.com/en/general/news.php?id=2364314



ASB ASEAN Research Center (ARC)

⁶¹ Rancangan Malaysia Ke-12 (2021-2025). Advancing Green Growth. Retrieved from https://rmke12.ekonomi.gov.my/en

The key aspects of this new plan include:

- **Growth of Strategic Industries:** The plan will prioritize the expansion of industries such as integrated fisheries hubs, coastal and maritime tourism, and blue bio-based technologies.
- Establishment of a Blue Economy Hub: A dedicated hub will be developed in Sabah to centralize and accelerate blue economy initiatives.
- **Port and Maritime Infrastructure:** Efforts will be intensified to develop the shipbuilding and ship repair (SBSR) industry and to attract investments for expanding shipping capacity and upgrading bunkering infrastructure at ports in various states.
- **Digital Transformation:** The Ministry of Transport will develop the "Malaysia Maritime Single Window" (MMSW), a unified digital platform to enhance the competitiveness of Malaysia's ports by streamlining trade and shipping services.

The stark reality of declining marine biodiversity, as highlighted by the 12th Malaysia Plan's indicators, proves that past efforts to preserve and conserve the Blue Economy have been insufficient. The upcoming blueprint will play an important role in the future of the country's reliance on these natural resources and will serve as the impetus for a more focused and actionable approach by all stakeholders. The success of this transition will depend on the effective implementation of the new policies and a concerted effort to overcome the challenges identified in the previous plan.

3.6 Building a Resilient Nation Through Planetary Health

The 13th Malaysia Plan introduces Planetary Health Preservation as a foundational priority, a crucial framework that formally links a healthy environment with human well-being and national resilience. This concept moves beyond traditional environmental management by integrating climate and biodiversity efforts to create a holistic strategy. The government's comprehensive approach, as outlined in the plan, focuses on strengthening climate adaptation, enhancing biodiversity conservation, and improving environmental governance to protect the nation's natural assets for future generations.

Strengthening Climate Resilience and Governance

The government's strategy for planetary health includes the development of a National Adaptation Plan (NAP), which is expected to be completed in 2026. This plan is designed to prepare critical sectors like agriculture, forestry, and public health for the inevitable impacts of climate change. Furthermore, the government is committed to enacting specific climate change legislation to provide a clear legal

framework for climate action and accountability, ensuring that policies are not only formulated but also

rigorously enforced.

Enhancing Biodiversity Conservation and Preservation

In alignment with its climate efforts, the 13th Malaysia Plan emphasizes enhancing biodiversity

conservation, a particularly vital effort for Malaysia. As one of the world's 17 "megadiverse" countries,

Malaysia is home to an extraordinary array of life, including iconic species like the Malayan tiger,

orangutans, and elephants. This rich biodiversity is not only a national heritage but also provides

essential ecosystem services, such as clean water, fertile soil, and food security.

The government's plans in this area thus include the commitment to maintain at least 50% of the

country's land under permanent forest cover. This long-standing national pledge, first made at the 1992

Earth Summit in Rio de Janeiro, is crucial for both biodiversity and climate regulation. As of May 2024,

Malaysia has successfully fulfilled this pledge, with its forest cover standing at 54.58% of its total land

area⁶³.

While this achievement is significant, the challenge of protecting wildlife remains ongoing. Recent

newspaper coverage highlights a concerning number of animal road accidents, underscoring that more

needs to be done. According to the Minister of Natural Resources and Environmental Sustainability,

over 2,300 wild animals were killed in road accidents between 2020 and 2024. These tragic incidents

have affected endangered species like Malayan tapirs, elephants, and tigers. The issue is often linked to

habitat fragmentation, which forces animals to cross busy roads in search of food and other resources.

To address this, the government has implemented measures such as installing wildlife crossing signs

and solar-powered amber lights, as well as constructing wildlife crossing viaducts in critical areas.

These strategies, combined with a focus on strengthening the circular economy and improving waste

management, form a holistic approach to ensuring the continuous preservation of the environment and

natural resources. The introduction of the Planetary Health concept in the 13th Malaysia Plan therefore

⁶³ Ministry of Natural Resources and Environmental Sustainability. (Opening Speech YBM NRES - Forest Conservation Certificate Launch Ceremony. Retrieved August 15, 2025, from

https://www.nres.gov.my/ucapan/Koleksi%20Ucapan/Opening%20Speech%20YBM%20NRES%20-%20Forest%20Conservation%20Certificate%20Launch%20Ceremony.pdf



signifies a recognition that environmental stewardship is not a siloed issue but an essential component of a resilient and sustainable national development agenda.

Conclusion

Malaysia has a long history of creating five-year plans to balance economic growth, social fairness, and environmental health. While these past plans helped build our cities and industries, they still have some big problems. We haven't been good at making sure everyone is included, getting different groups to work together, and, most importantly, actually carrying out the plans. These experiences teach us a key lesson for the upcoming 13th Malaysia Plan (13MP). It's not enough to just have a clear vision; we need a strong system to make it happen. This means holding people accountable and involving everyone in the process. We keep seeing the same issues: plans that don't get fully executed, some regions being left behind, and a risk of forgetting our most vulnerable people. So, any new policy must be designed with everyone in mind, right from the start.

The Promises and Pitfalls of Technology

Investing in new technologies like AI and digitalisation offers huge opportunities, but they also come with major risks. We're already seeing a digital divide, where some people have access to technology and others don't, as well as uneven access between different regions and genders. To fix this, we need to improve our skills and systems, reform our job market to be more inclusive, and take a comprehensive approach to making policies work.

The Importance of Basic Services

Lessons from our past Malaysian plans in things like transportation, housing, education, and healthcare show us just how important it is to be inclusive and connect people. These initiatives require a long-term commitment to see real results. At the same time, any changes we make should improve daily life for the "Rakyat" and not disrupt the essential services they rely on. Ultimately, policies only succeed when they are accessible to everyone. Fair and equal development is the foundation of a resilient nation.

Making Sustainability a Priority

Moving forward, sustainability and green development must become a central part of our strategy. With growing climate risks, we can't afford to chase growth that harms the environment. We need to be vigilant and accountable, ensuring that sustainability is built into every part of the 13MP.

The Road Ahead

While the government's intentions are clear, the reality of putting plans into action often falls short. The 13MP is a crucial opportunity to bridge this gap. Whether Malaysia truly becomes a prosperous, fair, and sustainable nation depends on how well we learn from our past mistakes, engage all Malaysians, and ensure that our future economic growth truly leaves no one behind.