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PRIME MINISTER'S FOREWORD



TRANSFORMATION PROVES TRIUMPHANT

My fellow Malaysians,

The year 2016 was one marked by sweeping geo-political change and continued global economic uncertainty. I am pleased to say, however, that Malaysia remained blessed with stability and continued on a positive growth trajectory.

This is as the National Transformation Programme (NTP) completed its sixth year of implementation, proving decisively that the crucial decisions we have taken since 2010 place us firmly on the path to become a high-income status nation by 2020.

I am pleased to report that by improving public service delivery through the Government Transformation Programme (GTP), and catalysing private sector investment through the Economic Transformation Programme (ETP), the Government continues to deliver on our promises made at the launch of the NTP in 2010.

Chief among these promises was the development of a truly world-class transport system. In addition to capacity expansion and infrastructure upgrades to our existing public transport network, in December 2016 we saw my dream of an efficient, reliable and safe public transportation system for the rakyat come closer to reality with the launch of the Mass Rapid Transit (MRT) project in the Klang Valley.

This, the largest infrastructure project ever undertaken by the Government, sets the benchmark for all of our future plans, taking into account the rakyat's connectivity needs and quality of life. Phase one of the Sungai Buloh-Kajang Line was also delivered ahead of schedule and under budget, bearing further testimony to the Government's success in implementing the NTP.

But the tangible outcomes of the transformation do not consist only of large scale projects. Another vital component of the NTP is the effort to secure sustainable and inclusive growth through fundamental reforms in areas such as Government finances and economic development.

As a result, since 2010, we have recorded healthy GDP growth year after year, regularly achieving rates that were more than double global growth. I am also pleased to note that efforts to diversify the Government's sources of revenue have successfully reduced the share coming from the oil and gas sector from 41.3% in 2009 to 14.7% in 2016.

This has been led by the diversification of our economy through the ETP's 12 National Key Economic Areas, as shown in the "Year in Review 2016" and NTP chapters within this publication. A point to note is that beyond lifting our economy out of the global turmoil in 2009, the wisdom and prudence of the Government's efforts were demonstrated during the decline in oil prices and other external economic developments beyond our control. They shielded our economy against significant slowdown, and in 2016 we continued to achieve stable GDP growth of 4.2%.

The NTP has also been instrumental in propelling us out of the middle income trap, in which we found ourselves in 2009. As at the end of 2016, our GNI per capita had increased to US\$10,010, against our high-income target which was estimated to be US\$12,272 for last year based on PEMANDU's estimate following the World Bank's GNI per capita calculation using the Atlas method, using currently available public information.

This is a commendable achievement, as it means that between 2010 and 2016 Malaysia narrowed the gap towards the high income target from 33% to 18%. In addition, the national transformation has also helped to create over 2.26 million jobs in the past 6 years.

At the same time, the Government has had to introduce difficult but necessary measures such as the Goods and Services Tax (GST) and subsidy rationalisation. These may not have been popular. However, they have been vital. With RM38.5 billion in GST collected in 2016, the new tax has made up for the shortfall in Government revenue of RM30 billion due to the drop of nearly 50% in the price of oil. This has allowed us to support our expenditure amid limited resources and continue to implement our measures and programmes whose sole purpose is the benefit of the rakyat.

Subsidy rationalisation has also reduced the burden on the Government's finances and helped to eliminate leakages. In 2016, the Government's fiscal deficit continued to decline steadily to 3.1%, which leads us to maintaining our target of achieving a balanced budget by 2020. This has enabled us to introduce a more efficient and targeted subsidy system to benefit those who are truly in need. Bantuan Rakyat 1Malaysia (BR1M), for instance, provided relief to 7.28 million households in 2016. Since 2012 it has ensured that no one is left behind amid the country's transformation.

In working towards an inclusive economy, the NTP has touched the lives of millions of people, especially those in rural areas. We have already completed 6,041.7 km of new rural roads, against the 750 km of rural roads built in the first year of the NTP in 2010, and we continue to undertake rural electrification and water supply programmes, as well as building and restoring houses for the rural poor. All these have benefited a total of 6.2 million rural folk.

Other highlights of the NTP include the establishment of the Pengerang Integrated Petroleum Complex (PIPC) in Johor, a world-class hub for downstream oil and gas activities that is drawing sizeable private investment and is driving our oil and gas capabilities higher up the value chain. Furthermore, the Human Capital Development Strategic Reform Initiative has paved the way for the formation of a skilled workforce that will support our high income aspirations and raise our global competitiveness.

Malaysia has emerged as a model for other countries pursuing transformation, providing affirmation that our plan is one that works and offers valuable lessons that others can draw from.

It is right that we should note these achievements, but our work is far from being done. The Government will not rest until we have attained our high income goals and improved sustainability and expanded inclusiveness in our economy. At this point, I would like to express my gratitude to the civil service for their dedication in driving our country towards our aspirations. I am confident that over the past six years the civil service has built the capacity and adopted the processes required to continue the NTP on its journey towards the goals we have set for 2020.

It is for this reason that we felt the time had come for the civil service to take over the mantle of the NTP from PEMANDU, which up to this point had been overseeing and performance-managing the transformation implemented by the civil service. As announced by my office in January 2017, some of this transformation work has been fully transferred to the civil service helmed by the Chief Secretary to the Government, Tan Sri Dato' Dr Ali Hamsa. The remainder of the work will be transferred in stages up until 2019.

I would like to take this opportunity to extend my appreciation to PEMANDU for their relentless efforts in overseeing the NTP since the start. My gratitude is also extended to the rakyat for their continued support for our initiatives.

The road to transformation has not always been easy. However, I remain certain that by 2020, in just three years' time, we will stand shoulder-to-shoulder to witness the triumph of our great nation in becoming a high-income country in which prosperity and opportunity are able to be shared by all.



YAB DATO' SRI MOHD NAJIB TUN ABD RAZAK
PRIME MINISTER OF MALAYSIA

A NOTE FROM THE DEPUTY PRIME MINISTER

EMBODYING THE
GOVERNMENT OF
THE PEOPLE

As the chair of the Government Transformation Programme, I am pleased to report that its initiatives continued to enhance public service delivery and address the rakyat's most pressing concerns in 2016. Six years into its implementation, we have also witnessed greater institutionalisation of the transformation throughout the Ministries involved.

At this juncture, I call on all my peers within the civil service to remain committed to achieving our high-income aspirations and continue taking up the mantle in implementing the National Transformation Programme. This is especially as the NTP reached a new juncture in 2016, with the transition of PEMANDU's work to the civil service as the programme nears its completion in 2020.

The achievements of the NTP speak volumes of the work the civil service has put in to build an impactful public service delivery system and ensure the well-being of all Malaysians. Chief among these results has been the

reduction in Index Crime by almost half between 2010 and 2016.

Registering an average decline of 9% annually since 2010, our efforts to reduce crime have made the public feel safer, with the Perception of Crime Indicator recording a marked reduction in the rakyat's fear of becoming a victim of crime in 2016. It also reflects our success in adopting a more targeted approach to fighting crime by focusing on the crime and safety issues that concern the public the most.

I am also pleased to note that our 1Malaysia initiatives such as BR1M remain a targeted and effective measure in aiding those in need, gaining widespread recognition for the benefits it delivers. During the year, 7.28 million households benefited from the RM5.36 billion in BR1M funds disbursed by the Government to provide relief to those battling the inevitability of rising living costs. We have also introduced a number of measures centred

on entrepreneurship, such as the 1AZAM programme, to improve outcomes for the poor and hard-core poor in a sustainable way. These initiatives underscore the Government's commitment to charting a future for Malaysians that is both inclusive and sustainable.

Key to paving the way for this bright future is ensuring a high-quality education system for our students, starting from the early childhood level. I am heartened to note that the national preschool enrolment rate rose to 85.56% in 2016, from 67% in 2009, with national preschools achieving almost universal enrolment for the 5+ age group, at 92.1%. Older schoolchildren are performing better; with the school banding system showing improvements in the performance of schools. This is further reflected in improvements in Malaysia's Trends International Mathematics and Science (TIMSS) scores for 2015. Reported in 2016, our students showed better scores in Mathematics and Science in the assessment.

To build on the enhancements of our national education system, the High Performing Schools programme has identified 132 schools to act as a model for other schools by further improving their quality, while the Dual-Language Programme and the Highly Immersive Programme continue to equip our students with the English language skills needed for them to be globally competitive talents.

As part of the Government's efforts to eradicate corruption, the National Consultative Committee on Political Funding (NCCPF) continued to engage with Malaysia's political parties on both sides towards introducing legislation for financing, managing and reporting political campaigns. To ensure the Government leads by example in rejecting graft, in 2016 74.4% of corruption cases had been disposed of within a year of registration in court. This was achieved through the establishment of 14 special corruption courts in each State and Federal Territory.

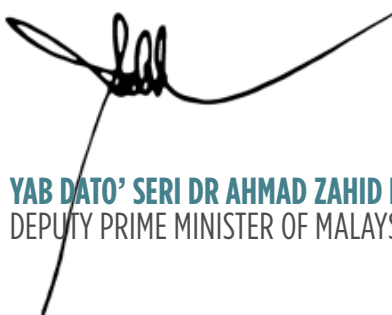
Meanwhile, developments in urban public transportation represented some of the Government's significant achievements in 2016. The launch of Phase 1 of MRT Line 1 in December 2016 marked the height of the sector's success during the year, capping off enhancements to Greater Kuala Lumpur/Klang Valley's rail backbone with the LRT Line Extension Project.

These activities, together with the continuing bus and taxi service transformation to ensure first- and last-mile connectivity for commuters, as well as the initiation of efforts to offer an integrated payment system for transport services, bode well for the Government's efforts to create a world-class system of urban public transport. Truly, these efforts represent tangible markers in Malaysia's journey of transformation into a high-income nation.

At the heart of the NTP lies our initiatives to improve the quality of life of rural communities. From 2010 to 2016, this has seen the Improving Rural Development NKRA deliver 6,041.7 km of new rural roads and 2,378.5 km in road maintenance, provide 350,094 houses with access to clean water and 153,821 houses to electricity services and build and restore 94,605 houses for the rural poor. These initiatives have benefited a total of 6.2 million Malaysians, ensuring all Malaysians benefit from the efforts of the NTP and are provided with access to the opportunities created in a high-income economy.

Indeed, this focus on ensuring no one is neglected and creating long-term impacts is the anchor of our national transformation. This has resulted in the near-eradication of poverty since the introduction of the NTP, the creation of over two million jobs and lasting change in the way the Government provides public services. All the while, this has been achieved by taking the public's interests to heart.

As we enter the final phase of the NTP, it is my hope that all Ministries and agencies involved will remain resolute in shaping a brighter future for our beloved nation that we can share for generations to come, and continue embodying the spirit of a Government that is for the people.



YAB DATO' SERI DR AHMAD ZAHID HAMIDI
DEPUTY PRIME MINISTER OF MALAYSIA

THE YEAR IN REVIEW

DELIVERING THROUGH DISCIPLINE OF ACTION

DATO' SRI IDRIS JALA
CHIEF EXECUTIVE OFFICER
PEMANDU

When we first started the National Transformation Programme (NTP) in 2010, Malaysia faced a multitude of challenges from socioeconomic disparity, a precarious fiscal position, and stagnating economic growth. Six years on, our objective remains steadfast – to become a high income nation by 2020 in a manner that is inclusive and sustainable. Year on year, the Government has diligently worked towards setting 'Olympic targets' and delivering on 'impossible' KPIs we set for ourselves.

In 2009, Malaysia was said to be “stuck in the middle-income trap” because in the preceding years, the gap between our country's GNI per capita and the World Bank's high-income threshold had not narrowed. Now, six years into the implementation of the NTP, we are clear that Malaysia has escaped the middle-income trap, with our GNI per capita at US\$10,010.¹

¹ PEMANDU's estimate based on World Bank's GNI per capita calculation using the Atlas Method using currently available public information

TAKING THE ROAD LESS TRAVELLED TOWARDS HIGH-INCOME, SUSTAINABILITY AND INCLUSIVENESS

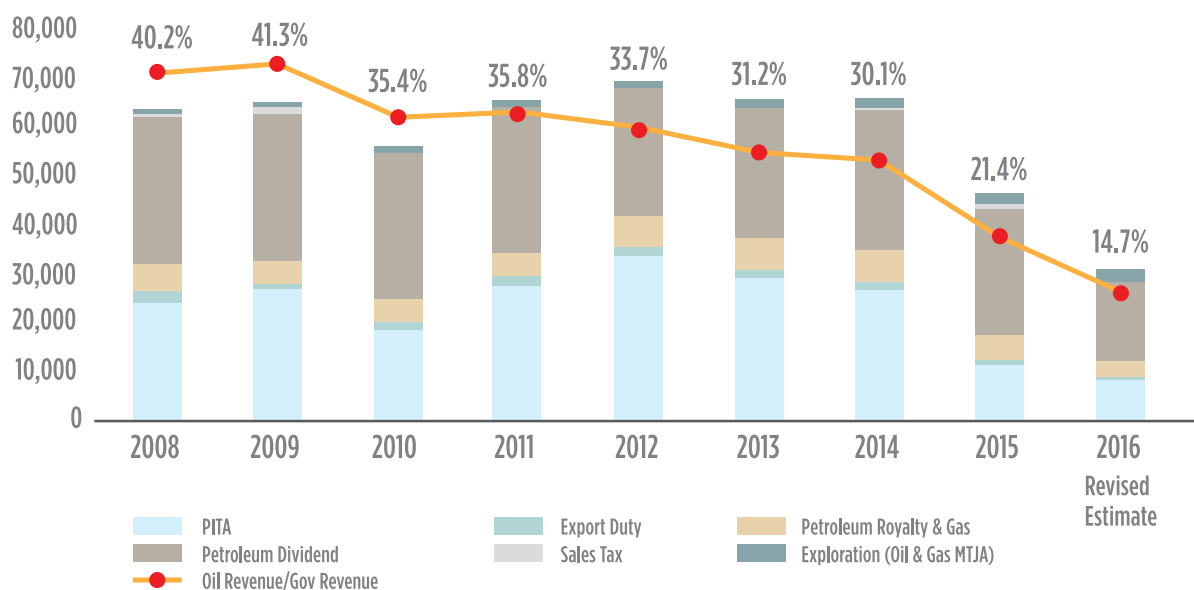
The Government was clear when we began the NTP that we would not adopt the path that many countries took – pursuing unbridled growth at the expense of the Government's fiscal position. We have had to make tough decisions such as the gradual removal of long-standing blanket subsidies and introduction of the Good and Services Tax (GST), all aimed at reducing borrowings and deficit levels to secure the Government's fiscal position.

At the same time, the NTP has rejuvenated economic activity, enabling the private sector to drive growth through business-friendly policies. The economic reforms instituted through the NTP have redistributed Malaysia's sources of growth – we have reduced our historic reliance on oil & gas from 41.3% of the Government's revenue in 2009 to an estimated 14.7% in 2016.

In addition to propelling our GNI per capita towards the high-income threshold, the main measure of the national transformation has been geared towards achieving a robust fiscal position and mildly expansionary, private sector-driven development to achieve sustainable growth. The NTP also focuses on enhancing inclusiveness within the economy through socioeconomic outcomes which touch the lives of all Malaysians positively.

GOVERNMENT LESS DEPENDENT ON OIL REVENUE

(RM mil.)



Source: Ministry of Finance

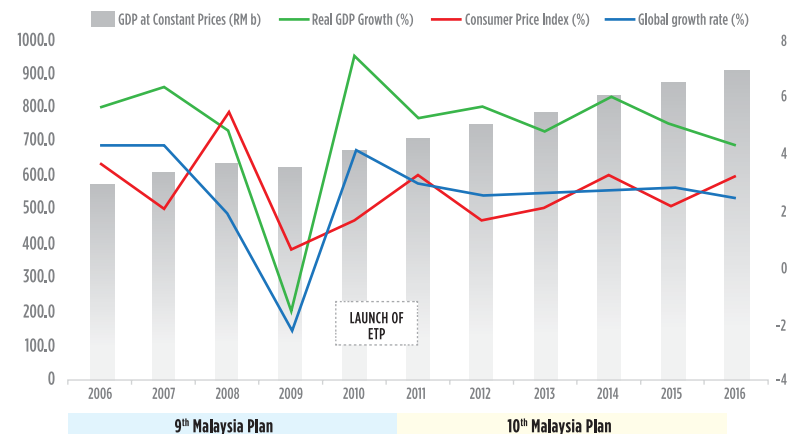
THE YEAR IN REVIEW

All this required new courses of action in the Government's processes and the courage to institute unpopular but necessary measures to inculcate prudence in Government spending, as well as increasing revenue to mobilise socioeconomic development and improvements for the rakyat.

The end result is sustainable and resilient economic growth. This decision by the Government proved to be unusually prescient, as despite global headwinds caused by uncertainty in major markets such as the US, UK and the Eurozone as well as a depression in global oil prices, Malaysia continued to

Malaysia's GDP growth rate exceeds CPI and global growth rate

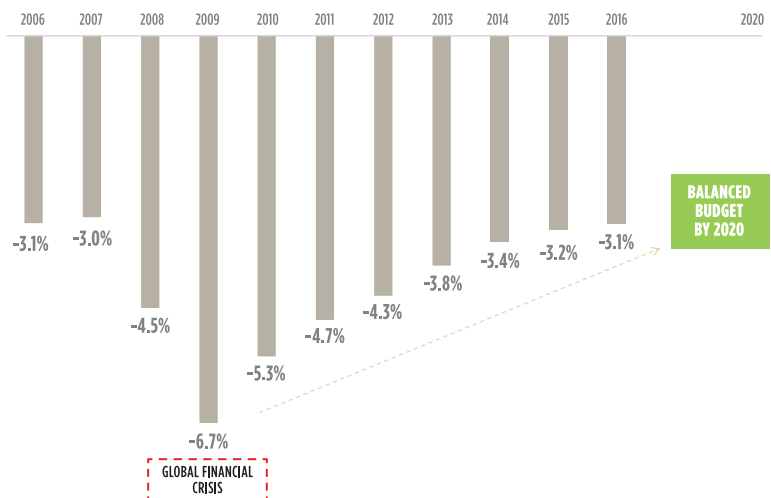
(RM bil.)



Source: Department of Statistics Malaysia, using Constant 2005 Prices, IMF

We have reduced the fiscal deficit from 6.7% in 2009 to 3.1% in 2016. At this rate, the Government remains well on track of achieving its target of fiscal balance by 2020.

Maintain its target towards Fiscal Balance



Source: Economic Planning Unit

achieve stable GDP growth of 4.2% in 2016, sustaining a trajectory of over 4% since the start of the NTP in 2010 and on occasion, outpacing the global growth rate.

We were clear that we wanted to ensure growth did not come at the expense of the Government's fiscal position. We have reduced the

fiscal deficit from 6.7% in 2009 to 3.1% in 2016. Here, the Government maintains its target of achieving its target of fiscal balance by 2020.

We are also carefully managing the Government's debt-to-GDP ratio. In 2016, our debt to-to-GDP was 52.7%, within its self-imposed debt ceiling of 55% of GDP. Malaysia

is one of the very few countries that has this self-imposed debt ceiling.

This fiscal prudence has been supported by vibrant economic activity led by the private sector which has doubled its compounded annual growth rate (CAGR) of investment since 2010. Between 2011 and 2016, the CAGR of private

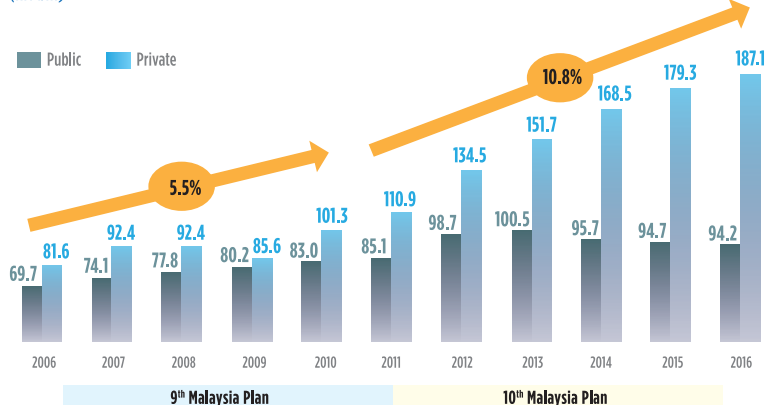
investment was 10.8%, against just 5.5% in the period from 2006 to 2010.

Additionally, from around an equal share of total realised investments between the public and private sectors prior to the NTP, since 2010 the private sector has gradually outpaced public sector investment. In 2016, the private sector showed its clear dominance in realised investment, accounting for a lion's share of 71% against public sector investment of 29%.

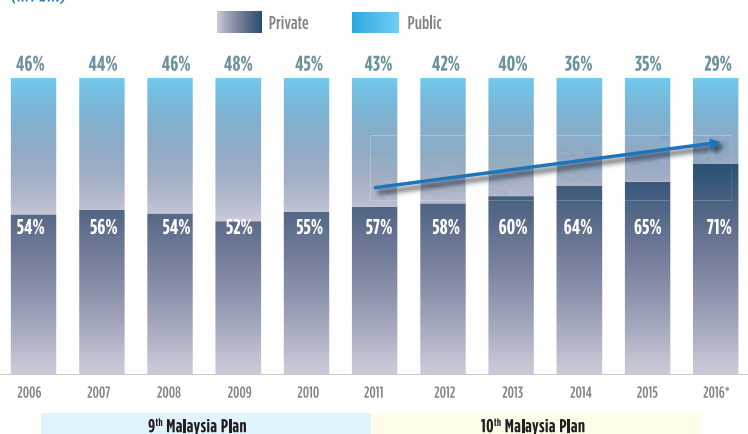
This vibrant landscape for private investment has been enabled by the NTP's focus on 12 National Key Economic Areas (NKEAs) designed to position the private sector as the engine of economic growth. The NKEAs have accounted for the largest share of GDP, representing RM865.3 billion, or 70%, of the country's GDP of RM1.23 trillion in 2016.

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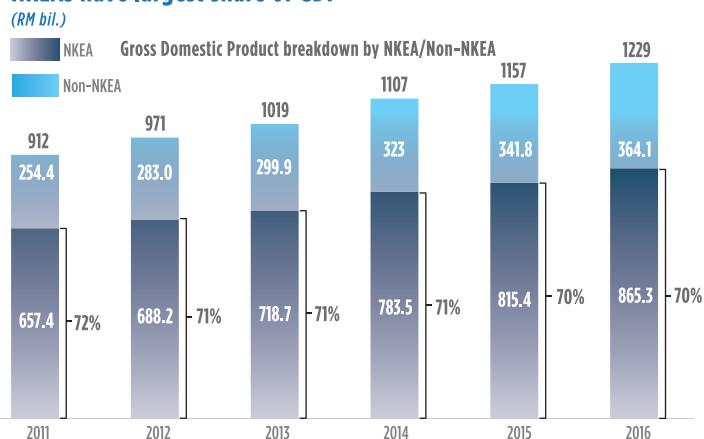
Realised investments accelerated post-ETP, driven by the private sector (RM bil.)



Realised investments increasingly driven by the private sector (RM bil.)



NKEAs have largest share of GDP



THE YEAR IN REVIEW

The GNI contributions by NKEA also account for the majority share of the structure of our GNI, as well as showing diversification in our GNI structure.

An immediate impact of this private sector-led growth has been the creation of a wealth of employment opportunities for Malaysians. Since 2010, the economy has recorded 2.26 million new jobs².

GNI VALUE (RM BILLION)	
NKEA SECTOR	2016
Agriculture	68.1
Palm Oil/Rubber	64.9
Oil, Gas & Energy	179.7
Electrical & Electronics	57.0
Wholesale & Retail	181.9
Education	9.7
Healthcare	10.9
Communication Content & Infrastructure	58.1
Tourism	73.3
Financial Services	64.8
Business Services	58.6
TOTAL NKEA	827.2
Other Industries	367.5
TOTAL GNI	1,194.6

TRANSFORMATION FOR ALL

Inclusiveness and a balanced socioeconomic impact are cornerstones of the NTP. Being a developed nation means nothing if we are not inclusive in our development. We want all Malaysians to have an equal footing when it comes to opportunities, be it

in business, education, employment or quality of life.

With this in mind, the plight of Malaysia's Bottom 40% of household income earners (B40) continues to be a key concern of the NTP, in tandem with the Government's growth policies. This follows the

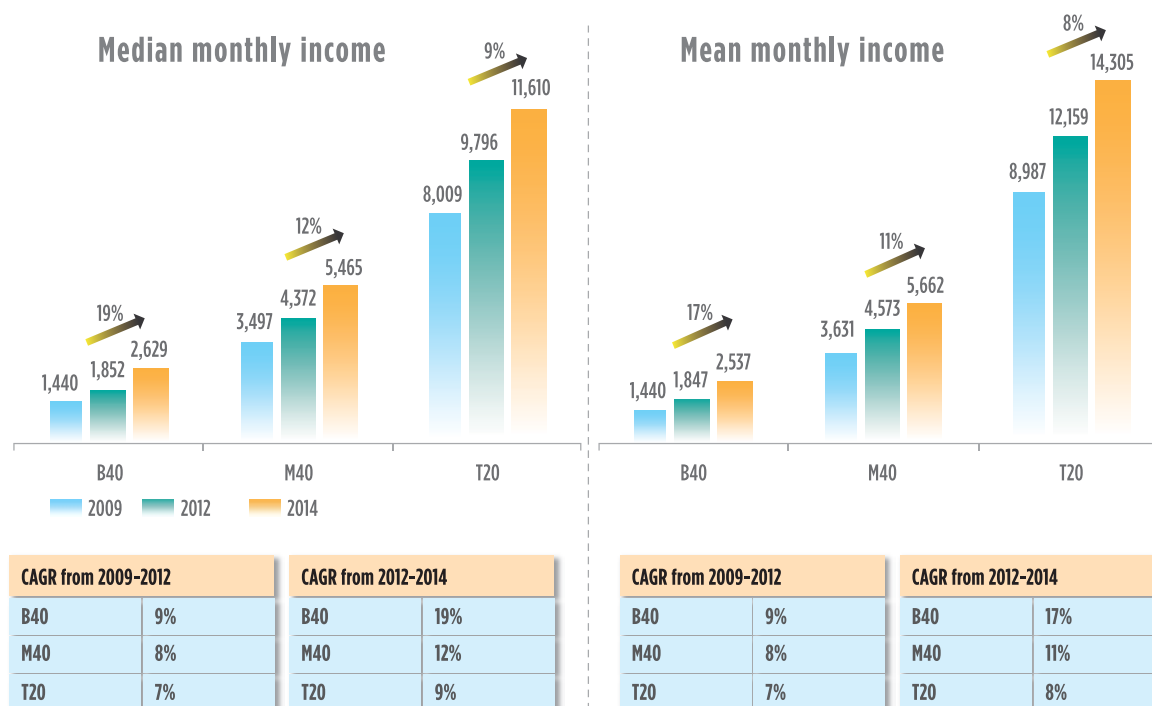
promise set out at the start of the NTP, to grow the monthly income of the B40 group. Today, B40 mean and median household income growth is outpacing total household income growth at a CAGR of 12% and 12.8%, respectively³.

²Jobs created calculation is based on PEMANDU's definition and methodology. The data for the calculation is sourced from DOSM

³DOSM Household Income and Basic Amenities Survey Report 2014. This report is released every two years.

The report for 2016 is expected to be released in the second half of 2017.

Since 2009, among all income stratas, the B40 have experienced the greatest increase in CAGR growth



Source: Department of Statistics Malaysia Household Income and Basic Amenities Surveys

We have put a lot of effort into ensuring rural communities are not left out of the nation's development. To date the NTP has also achieved the following:

1. Completed 6,041.7 km of rural roads;
2. Provided 153,821 rural houses with reliable electricity;
3. Provided 350,094 rural houses with access to clean water; and
4. Built and restored 94,605 houses for the rural poor.

All in all, these measures have impacted the lives of 6.2 million Malaysians.

These efforts have been enabled, in part, by the Government's review of its expenses undertaken through the NTP. Through the gradual removal of blanket subsidies as outlined earlier, the Government was able to redeploy its funds to target those most in need.

The funds were channelled to low-income households and individuals through the Bantuan Rakyat 1Malaysia (BR1M). In addition to this, the Program 1AZAM, which provides assistance in four essential areas -- job placements (Azam Kerja), creating small business enterprises (Azam Niaga), creating

small service providers (Azam Khidmat) and creating opportunities in agriculture (Azam Tani), have contributed significantly in raising the low income households' chance of a better life.

These initiatives and achievements serve as a testament to the far-reaching impact of the NTP and are aligned to the programme's approach of ensuring no one is left behind amid the country's transformation into a high-income nation.

THE YEAR IN REVIEW

ADDRESSING THE RAKYAT'S KEY TOUCH POINTS AND DRIVING PRIVATE SECTOR PARTICIPATION IN THE ECONOMY

The NTP was first developed with a view to address the rakyat's most pressing concerns. This has been undertaken through the seven National Key Results Areas (NKRAs) implemented by the Government's delivery system and were identified as the key factors to be enhanced in tandem with Malaysia's transformation into a high-income nation. These NKRAs also represent areas of civil service reform to ensure the rakyat's needs and expectations are met in terms of their main touchpoints.

Completing the NTP's initiatives are the 12 NKEAs as well as the six Strategic Reform Initiatives (SRIs) which account for the Government's efforts to build the focus and competitiveness needed for Malaysia's economy to achieve high-income status. This is being achieved by prioritising the economic sectors which contribute the most to GNI and GDP growth while putting in place the enablers required to ensure a business-friendly environment and global competitiveness among local businesses.

As detailed in the subsequent pages of this Annual Report, in 2016 the NTP continued to deliver on its promises as first set out in its roadmaps in 2010. The following is a summary of the programme's activities and highlights for the year.



ADDRESSING THE RISING COST OF LIVING

While Malaysia's inflation rate remained low at 2.1% in 2016, the cost of living will naturally be impacted by the general increase in prices over time. A moderate level of inflation, as has been enjoyed by Malaysia since 2010, is in fact a sign of a healthy and growing economy. However, the cost of living is susceptible to the impact of external factors such as commodity prices and currency fluctuations. This adverse impact on prices may, in turn, affect some groups, such as low-income earners, more than others.

In view of this, the NTP has put in place measures to provide immediate relief to those struggling the most with the rising cost of living, with emphasis on the B40 group. Bantuan Rakyat 1Malaysia (BR1M) is the flagship initiative under this NKRA. Since 2012, a total of RM19.33 billion has been disbursed to low-income individuals and households on a needs basis. In 2016, RM5.36 billion was disbursed to 7.28 million households.



RAISING LIVING STANDARDS OF LOW-INCOME HOUSEHOLDS



Poverty eradication is key to a country's development into an inclusive and harmonious nation. Focusing on the different factors which cause poverty to ensure the nation's hard-core and urban poor are permanently uplifted out of poverty, the initiatives of this NKRA emphasise economic empowerment for those in need. This has contributed to the decline in the country's poverty level to 0.6% in 2014 from 1.7% in 2012.

Initiatives are led by the 1AZAM (Akhiri Zaman Miskin) programme which covers seven focus areas: AZAM Tani, AZAM Niaga, AZAM

Kerja, AZAM Khidmat, AZAM Bandar and the autonomously-operated 1AZAM Sabah and 1AZAM Sarawak. Participating individuals are provided the assistance most suitable to their circumstances and capabilities to upskill themselves. They are then either given access to gainful employment opportunities or a chance to prove their entrepreneurial skills. High-performing participants are also provided the opportunity to join the Beyond 1AZAM programme, which provides advanced training, coaching and mentoring. The primary goal for this programme

is to provide all successful 1AZAM participants the ability to increase their incomes from their existing projects by 50% for at least three months and lead them towards establishing their own small- and medium-sized enterprises (SMEs).

In 2016, 7,016 new individuals participated in 1AZAM. 7,758 new and existing participants increased their income above RM300 (more than 90% of their previous individual income). Meanwhile, 1,719 participants in Beyond 1AZAM increased their income by at least 50%.

REDUCING CRIME



While even the world's safest cities and countries cannot boast freedom from crime, the Government remains determined to reduce the country's crime rate to ensure the rakyat's safety and peace of mind.

Since 2010, this NKRA has reported an average annual decline of 9% in Index Crime, bringing the total reduction to 47%. In 2016, the Index Crime rate fell by 2.8%. In tandem with this, the Perception of Crime Indicator (PCI) registered a decline in the people of Kuala Lumpur's fear of becoming a victim of crime to 61% in 2016 from 80% at the indicator's introduction in 2015. The PCI measures the public's

perception towards their most worrying factors about crime and safety.

At the core of this NKRA's activities is the transformation of the police force through the Modern Policing initiative, the rehabilitation of drug offenders and reducing recidivism. During the year, crime-fighting efforts also turned towards border security as Malaysia's growing socioeconomic prominence has made the country more vulnerable to cross-border crime.



THE YEAR IN REVIEW



FIGHTING CORRUPTION

Integrity, transparency and accountability represent critical values of a high-income nation. To this end, this NKRA tackles the eradication of corruption among the public and private sectors. Although political will and governance play a strong role in fighting corruption by ensuring the existence and enforcement of the appropriate corruption legislation, the public must also recognise their part in enabling corrupt practices.

On the public sector front, this NKRA has focused on transforming political financing and the management, regulation and reporting of political campaigns. Following its establishment in August 2015, in 2016 the National Consultative Committee on Political

Funding (NCCPF) held focused discussions with Malaysian political parties across the political divide to gather feedback on its proposal on political funding. This engagement will continue with a target to finalise the proposal for Cabinet approval and draft the bill of the proposed Act on political financing to be brought to Parliament for debate.

Another highlight of efforts to fight corruption in Government has been the disposal of 74.4% of corruption cases within a year of its registration in court, led by the Malaysian Anti-Corruption Commission (MACC). This was further enabled with the establishment of 14 special corruption courts for each State and Federal Territory.

In an effort to build on the MACC's efforts, this NKRA has also placed emphasis on inserting a corporate liability provision in the MACC Act in line with its initiatives to combat corruption in the corporate sector. Although this has yet to be achieved, it represents a game-changing opportunity for MACC to persecute companies which commit graft. It also builds on the Corporate Identity Pledge (CIP) and Corporate Integrity Systems Malaysia framework to steer companies towards putting corruption prevention measures into practice. As of 2016, 800 companies have signed the CIP since the launch of this initiative under the Fighting Corruption NKRA.



IMPROVING URBAN PUBLIC TRANSPORT

A safe, efficient, affordable and reliable urban public transport system is the hallmark of a high-income nation. Prior to the NTP, urban public transport initiatives and services have been fragmented and did not fully address the transport needs of Malaysia's urbanites. This changed with the introduction of the NTP, which spearheaded the introduction of subsequent land public transport development plans to adopt a holistic approach to urban public transport with a focus on building a comprehensive transport network with first- and last-mile connectivity.

Developments under this NKRA represent among the brightest achievements of the NTP, with the year 2016 ushering a new era of urban public transportation in Malaysia. Following the completion of the LRT Line Extension Project, which expanded and upgraded the LRT network for the first time since its construction in 1998, urban commuters further benefited from the opening of the first phase of the Klang Valley MRT Line 1. These activities were additionally supplemented by ongoing initiatives to transform taxi and bus services for a complete suite of urban public

transport services. Additionally, measures are underway to enhance urban public transport payment systems to increase user convenience and affordability.



IMPROVING RURAL DEVELOPMENT



This NKRA brings development to rural areas by providing basic infrastructure to remote areas and offering economic empowerment programmes to rural populations.

For 2016 alone, 755.42 km of new roads were built and 3,000 houses were provided with access to clean water. Meanwhile, 3,233 new houses were built and 8,900 houses repaired, and 9,921 houses were connected to electricity.

In terms of providing income generating opportunities, the NKRA undertakes the 21st Century Village programme, spearheaded by the Desa Lestari initiative which develops the rural economy sector through co-operative platforms and commercial projects. During the year, the Desa Lestari project achieved 100% of its targeted 20 villages. Another initiative under the 21st Century Village programme is

the Rural Business Challenge (RBC), which encourages entrepreneurship among rural youth. Overall, entrepreneurs from the RBC have recorded a 109.35% increase in sales, with 43.47% of entrepreneurs registering more than 100% growth in sales. RBC projects have also helped to generate more than 352 new jobs and create 82 new entrepreneurs.

EDUCATION



The NTP's initiatives on education are undertaken through public (NKRA) and private sector (NKEA) efforts, signalling the Government's holistic approach to improving educational outcomes for all Malaysians from early childhood through to the tertiary level. The education sector has also been identified as an engine of economic growth due to its potential to generate private investment and exports of education services.

Among the Education NKRA's achievements include improving the performance of students against international benchmarks, such as the Trends International Mathematics and Science (TIMSS) study. Since 2011, Malaysia has

registered a 45-point improvement in the study's Science score to 471 and a 25-point increase in the Mathematics score to 465 points.

The Education NKEA, meanwhile, has helped to establish Malaysia as an international education hub, with 172,886 international students, from the international school level to the tertiary level, recorded in 2016. Subsequently, UNESCO ranked Malaysia the ninth-preferred destination for tertiary education among international students in its latest International Students Mobility Survey. This marks an improvement from the country's 12th-place ranking in 2014. The country's EduCity@Iskandar initiative, a fully integrated education centre made

up of institutes of higher education, student accommodation and recreational and sports facilities also continued to gain traction with the opening of Multimedia University's (MMU) Johor Campus and University of Reading's first overseas, full-fledged campus.



THE YEAR IN REVIEW



OIL, GAS AND ENERGY

While the Government has taken steps to reduce its reliance on oil revenue, private sector efforts to harness the high-value potential of the Oil, Gas and Energy industry remain a key driver of the country's economy. This has been spearheaded by significant downstream projects such as Pengerang Integrated Petroleum Complex (PIPC), which houses the

Pengerang Integrated Complex (PIC) and Pengerang Deepwater Terminal (PDT).

PIPC is the single largest downstream/infrastructure investment project in Malaysia, with an expected total investment of RM128 billion from its anchor investors PETRONAS (for PIC) and DIALOG (for PDT). The PIC continued to progress on scheduled in 2016, reaching 50%

completion at the end of the year, while DIALOG has completed 1.3 million cubic metres of oil storage capacity under the first phase of PDT. DIALOG is also on track for phase two of the oil/petroleum terminal.



HEALTHCARE

The healthcare sector accounts for another important driver of the Malaysian economy, supported by the new growth areas catalysed by the Healthcare NKEA. Initiatives are further anchored on the Government's efforts to enhance the delivery of care through capability and capacity building, policy improvements and active promotion of healthcare services in collaboration with relevant Ministries and agencies.

In 2016, the NKEA's efforts were focused on the clinical research, pharmaceuticals, medical devices and healthcare travel sectors. Clinical research is driven by Clinical Research Malaysia (CRM), which positions Malaysia as a preferred global destination for industry-

sponsored research (ISR) and enables and facilitates clinical trials. During the year, CRM reached a crucial juncture with the introduction of Phase 1 clinical trials in Malaysia, marking the country's move higher up the clinical trial value chain.

The pharmaceuticals industry recorded exports of RM737.31 million in 2016 while also providing a platform for local companies to enter new markets. During the year, a new Entry Point Project was established through a strategic partnership between Winthrop (M) Sdn Bhd, a subsidiary of Sanofi Aventis Group (Sanofi), and Xepa-Soul Pattinson (M) Sdn Bhd (Xepa) for Xepa to locally manufacture and export a range of Sanofi's products.

Under the medical devices

sector, RM9.69 billion in exports were recorded for 2016. A further significant development for the sector includes the establishment of two Good Laboratory Practice (GLP) labs, which will help local medical device-makers cut costs in testing the safety of their products. This is geared towards a holistic ecosystem to support the sector.

In terms of promoting Malaysia as a top healthcare travel destination, the Malaysia Healthcare Travel Council (MHTC) facilitated a number of public-private partnerships as well as Government-to-Government agreements. This has contributed to a significant increase in healthcare travel revenue.

ELECTRICAL AND ELECTRONICS (E&E)



This NKEA builds on Malaysia's expertise and competitive advantage developed over the country's long history as a manufacturing hub. Under the NTP, however, activities are focused on higher higher-value-added businesses in tandem with Malaysia's transformation into a high-income economy. While electronic components manufacturing remains active, the sector has also increasingly moved towards high-value operations such as industrial design, test & measurement and electrical appliances.

The Malaysia Investment Development Authority (MIDA) approved 107 E&E projects amounting to RM9.2 billion in investments, surpassing the year's target of RM6 billion. Of these, 17 projects represented new investments worth RM1.5 billion, while 90 accounted for expansion/diversification projects with an investment value of RM7.7 billion. The majority of investments were made up of expansion and diversification activities in the manufacturing of LED products,

household appliances, and solar wafers and cells.

As a result, Malaysia's E&E exports rose by 3.5% to RM287.72 billion in 2016, accounting for almost half of the country's total exports last year. Furthermore, the sector has catalysed the creation of 108,920 employment opportunities as at the end of 2016, with 157,000 more jobs expected to be created by 2020.

BUSINESS SERVICES



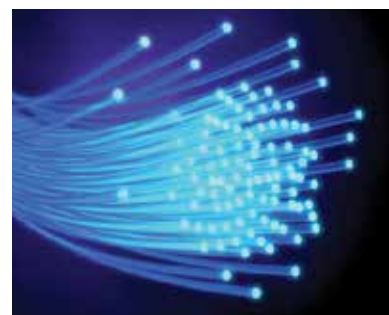
The Business Services NKEA is focused on developed new areas of growth in which Malaysia can carve a globally competitive niche. To date, this has allowed the country to nurture its expertise in the outsourcing industry, data centres, aerospace manufacturing, green technology and ship repair and shipbuilding.

The NKEA contributed RM56.5 billion in GNI in 2016, up 9% from the previous year despite a slower business climate and shifting global trends. It also continued to drive job creation in high-value services and knowledge intensive industries. For example, 3,734 jobs were created in the Shared Services and Outsourcing (SSO) industry this year. Malaysia has also consistently

been ranked the third most attractive SSO location in the world by AT Kearney's Global Services Location Index since 2004.

Other highlights recorded by the NKEA in 2016 include a number of foreign investments and the establishment of agreements with foreign companies: Malaysia Airlines and US company Aircraft Propeller Service entered into a joint venture to build Asia's first ATR aircraft turboprop MRO facility, Japan's Asahi Aero Malaysia Sdn Bhd opened an RM18 million aircraft parts surface treatment facility, its first in Southeast Asia; and Swiss company RUAG Aviation opened its new 24,000-square-foot component repair centre, the first of its kind in Asia. Meanwhile, the

data centre sector, which is driven by business's demand for storage and use of digital information, saw VADS Bhd start building a new 100,000-square-foot data centre in Nusajaya, Johor, which will be linked to a similar facility to be built in Cyberjaya, Selangor through a 100Gbps high-speed fiber optic link.



THE YEAR IN REVIEW



GREATER KUALA LUMPUR & KLANG VALLEY

The Greater Kuala Lumpur and Klang Valley (Greater KL/KV) is unique among the NKEAs in that it is focused on a geographical location, centred on Malaysia's capital city and its surrounding suburbs.

During the year, this NKEA witnessed tangible outcomes of six years of hard work initiated at the start of the NTP. In addition to the commencement of the MRT Line 1, it also recorded the signing

of a bilateral agreement between the Malaysia and Singapore Governments to commence the High-Speed Rail (HSR) link between our two nations. To position Malaysia as a hub for commercial activity and talent, InvestKL secured the entry of 13 new multinational corporations (MNCs), bringing the total number of MNCs setting up their regional operations here to 64 since the start of the NTP; while TalentCorp

facilitated the approval of more than 4,000 skilled Malaysians to return to work here from abroad. The River of Life project, which has seen several attempts at initiation since even before the NTP, also demonstrated encouraging progress with the river cleaning portion starting to show results in improving the water quality of the iconic Klang and Gombak rivers and its tributaries.



FINANCIAL SERVICES

The Financial Services NKEA is a strong example of the private sector taking the lead in economic activities, facilitated by the Government and other regulators.

During the year, the financial system remained resilient due to the well-capitalised banking system and in spite of external factors such as soft conditions in the oil and commodities markets. The capital-markets also continued to be robust, recording a value of RM2.8 trillion.

Financial Services highlights during the year include progress in the single insurance and takaful business conversion exercise and growing adoption of new digital technologies in financial services with the introduction of peer-to-peer financing.



WHOLESALE AND RETAIL



The Wholesale and Retail NKEA aims to capitalise on Malaysia's strong private consumption by facilitating investments in the sector and assisting small retailers increase their competitiveness. In addition to brick-and-mortar shopping, the NKEA also promotes the growth of e-commerce.

In line with this, seven new hypermarkets and 12 new superstores opened their doors

during the year, while Lulu Group, a major retailer from the Middle East, also commenced its operations here during the year. In terms of supporting small retailers, the TUKAR and ATOM programmes continued to transform local retailers and automotive workshops. The TUKAR programme signed up 151 new participants in 2016, while 100 new ATOM participants were recorded.



COMMUNICATIONS CONTENT AND INFRASTRUCTURE



Efforts under this NKEA are aimed not only to drive Malaysia's communications and creative content activities higher up the value chain, it also seeks to leverage digital platforms to create additional income for Malaysians, especially the B40 group.

During the year, activities were focused on the development of digital applications and content while expanding communications connectivity. To this end, the Bay of Bengal submarine cable to enhance broadband connectivity was completed in 2016 while creative content recorded export growth of 182% to RM1.22 billion. Furthermore, high-speed broadband ports were also increased to 281,262, with new towns and cities including Kangkar Pulai, Johor; Kemasek, Terengganu; Bukit Palah, Melaka; Kota Belud, Sabah; and Lundu, Sarawak



benefiting from this initiative. Broadband coverage also improved with the addition of 127,546 ports providing high speed broadband in sub-urban areas (SUBB).

THE YEAR IN REVIEW



TOURISM

The tourism industry continues to build on Malaysia's prominence as an internationally-renowned tourist destination by focusing on new opportunities for growth. The country continued to gain recognition and was named Asia's Leading Destination at the World Travel Awards 2016 and the No. 1 Muslim-friendly Destination by MasterCard-Crescent Rating 2016. The industry recorded 26.7 million tourist arrivals in 2016, from 25.7 million in 2015, and registered RM13 billion in tourism receipts.

The NKEA undertook the Tourism Lab 2.0 in 2016, identifying culture, arts, heritage and crafts as well as birding, diving and homestays as new areas to be developed. At the same time, the ecotourism cluster and cruise industry continued to provide strong avenues for growth. Furthermore, Malaysia has emerged as one of the region's top business destinations, hosting highly accredited Meetings, Incentives, Conferences and Exhibition (MICE) events.

A further highlight for the industry in 2016 includes the introduction of Visa-free entry and eVisa facilities in March 2016, aimed mainly at facilitating travel from China. This resulted in a 26.7% increase in Chinese tourist arrivals for the year.



PALM OIL AND RUBBER

As the world's second-largest exporter of crude palm oil, with 5.6 million hectares of planted area out of the 7.9 million hectares of agricultural land available, palm oil continues to be Malaysia's leading commodity. Through the NTP, the palm oil industry has been geared towards unlocking higher-value potential while creating opportunities for smallholders. In terms of the rubber industry, this NKEA has focused on raising demand as well as the quality of supply.

As a result, the country produced 15.85 million tonnes of crude palm oil for the domestic and foreign markets in 2016, valued at RM52.2 billion. The Government also fully implemented the Malaysian Sustainable Palm Oil (MSPO) certification in line with global standards for quality and environmental compliance, with



122,521 hectares of palm oil land and seven palm oil mills certified in 2016.

Meanwhile, the rubber industry recorded strong growth in the price of Standard Malaysian Rubber grade 20 to RM8.71 at the end of 2016 from only RM4.81 in 2015. Although rubber production and exports of natural rubber have been on the decline, the country remains

the world's fifth-largest producer of natural rubber. Malaysia is now renowned globally for its high-quality and competitively priced rubber products. This contributed to a marginal year-on-year growth of 0.9% in its exports of rubber products in 2016, surpassing RM18 billion.

AGRICULTURE



The Agriculture NKEA focuses on driving local companies up the value chain through the adoption of better standards, technology transfer and facilitation of higher-value activities, utilising the anchor company model to expand export presence while leading smaller players towards achieving larger market share. Collectively, this enables companies to demand better pricing thus increasing their income.

The sector recorded a breakthrough in 2016 with the signing of the protocol allowing

raw and unclean bird's nests from Malaysia to China. Signed during the YAB Prime Minister's visit to China, the protocol is expected to drive the price of Malaysia's bird's nests exports up to between RM3,000 and RM5,000 per kg from RM1,000 per kg previously. This will benefit 10,000 bird's nest farmers. Another achievement includes the higher average annual income earned by farmers involved in the NKEA's mini estate paddy farming initiative; to RM42,000 in 2016 from RM33,500 in 2012.



COMPETITION, STANDARDS AND LIBERALISATION



Aimed at enabling an environment that is conducive for business in Malaysia to raise the country's global competitiveness, this SRI continued to record milestones including the issuance of two decisions against companies found guilty of anti-competitive practices, following the Malaysia Competition Commission's (MyCC) fifth year of enforcing the Competition Act 2010. On the Standards front, standards adoption gained further traction with a 10% growth to 1,070 in the number of companies being certified on various standards. In terms of Liberalisation,

following the liberalisation of 45 services sub-sectors, the Malaysia Services Development Council (MSDC), which oversees the liberalisation process, continues to improve the regulatory environment by reducing or eliminating laws while the Malaysian Productivity Corporation (MPC) has also reviewed and recommended the removal of various regulations for the education, healthcare, professional services, construction industries and ICT sectors.



THE YEAR IN REVIEW



HUMAN CAPITAL DEVELOPMENT

The Human Capital Development SRI focuses on upskilling and reskilling the country's talent pool to meet the human capital needs of a high-income nation, while enabling workers to secure higher-income jobs through capability-building programmes as well as the appropriate legislation.

Among efforts include the establishment of a partnership between the Department of Skills Development, the German-Malaysian Institute (GMI) and Malaysian German Chamber of Commerce and Industry for the introduction of the Dual Vocational

Training Programme (DVT). The programme is set to be expanded with further funding from the Ministry of Human Resources, while the Penang State Government also sponsored RM2 million to expand the programme in the state.

Other highlights include the continued momentum of the National Human Resources Centre (NHRC) in supporting the human resource management capabilities of SMEs, in addition to capability-building programmes which saw the participation of 33,735 employees in 2016. This earned the employees certifications and diplomas in Human Resources.

One major breakthrough of this SRI was its initiation of the Minimum Wage Order 2012, which institutionalised minimum wages for the domestic labour market to raise living standards of Malaysian workers, especially the lower-income groups. Under this Order, the minimum wage for workers in Peninsular Malaysia as well as Sabah, Sarawak and Labuan was initially set at RM900 and RM800, respectively. In July 2016, the minimum wage was raised to RM1,000 for Peninsular Malaysia and RM920 for Sabah, Sarawak and Labuan.



PUBLIC FINANCE REFORM

The Public Finance Reform Strategic Reform Initiative implements public finance-related policies recommended by the National Economic Advisory Council (NEAC) in the New Economic Model (NEM). It aims to strengthen Malaysia's fiscal position that had been weakened following the 1998 Asian Financial Crisis.

Since its commencement, the SRI has assisted the Government to gradually reduce its fiscal deficit from 6.4% in 2009 to 3.1% in 2016. As a result, the Government continues to maintain its target of achieving a balanced budget by 2020.

A number of initiatives have been implemented to achieve this, including strengthening tax administration and compliance by the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD). This has allowed IRBM to collect RM2 billion and RMCD over RM150 million more than their usual collection target.

This SRI also led the development and implementation of the Goods and Services Tax to replace the Sales Tax and Service Tax. In addition to improving the Government's finances, the GST introduced a safety net for the public for essential

goods and services which are GST-exempt, such as healthcare and education. Furthermore, certain goods and services such as basic household items are subject to 0% GST.

NARROWING DISPARITY



This SRI was established to improve outcomes for Bumiputera in the areas of corporate equity, employment, entrepreneurship, human capital and ownership of non-financial assets. Its initiatives are undertaken through the Bumiputera Economic Transformation Roadmap overseen by Unit Peneraju Agenda Bumiputera (TERAJU). Since 2011, TERAJU has introduced 27 main programmes aimed at driving wealth creation among Bumiputera individuals, entrepreneurs, SMEs, corporates and Government-Linked Companies.

From 2011 to 2016, the Roadmap created RM108 billion in employment opportunities, funding and investment. Programmes such as Dana Mudahcara (Facilitation Fund) provided grants for the infrastructure and equipment costs of projects. As at the end of 2016, RM1.57 billion in funding was approved, generating RM13.18 billion in investments for 469 projects. This catalytic activity also created 43,371 employment opportunities. In the area of human capital, Yayasan Peneraju Pendidikan Bumiputera

provides scholarships at the school, tertiary and professional certification levels, with 6,239 scholars in 53 programmes identified as recipients during the year.



PUBLIC SERVICE DELIVERY TRANSFORMATION (PSDT)



Aimed at improving the processes and service quality of public services, a series of pilot projects were undertaken to test the ability and capacity to achieve quick positive outcomes. The projects are then scaled up towards driving new nationwide standards for public service delivery.

Projects in 2016 included the Ministry of Health's (MOH) LEAN Healthcare initiative and the Ministry of Federal Territories' (Kementerian Wilayah Persekutuan - KWP) Projek Perumahan Rakyat/Perumahan Awam (PPR/PA) Lift Transformation and Road Maintenance Transformation.

LEAN Healthcare is aimed at improving the quality of care provided by public hospitals by using existing resources to enhance the patient experience and add value to the public health service. To date, the process has been implemented in 36 MOH hospitals nationwide and has since proven its worth in enhancing the delivery of healthcare services in Government hospitals. In 2016, 80 LEAN projects were implemented in these hospitals, recording an average improvement of between 20% and 50% in patient waiting times. Meanwhile, KWP's PPR/Lift Transformation programme has expanded to five PPRs/PAs,

while the Road Maintenance Transformation programme saw improvements to 136 km of 43 main and protocol roads around the KL Central Business District in 2016.

THE YEAR IN REVIEW

THE LAST MILE OF TRANSFORMATION

As announced by the YAB Prime Minister's Office in January 2017, we reached another milestone in 2016, marked by the transition of performance management and KPI monitoring of the NTP to the civil service.

Where PEMANDU has previously introduced the process of transformation, monitored and supported the civil service in implementing the NTP, it was determined in 2016 that some NKRA's, NKEA's and SRI's were to be fully transferred to the civil service – allowing independent implementation of transformation initiatives by the civil servants.

In tandem with this transition, the NTP will be tasked to the Chief Secretary to the Government, YBhg. Tan Sri Dr. Ali Hamsa in 2017. Since his appointment in 2012 as the country's top civil servant, YBhg. Tan Sri deserves our utmost gratitude for his support and commitment to the NTP. PEMANDU will continue to support the Government in performance management and delivery of the NTP for the next two years to ensure a smooth and successful transition.

I would also like to take this opportunity to thank YAB Prime Minister and the Government for giving PEMANDU an opportunity

to play a part in the national transformation agenda. The journey has not been without its challenges, sometimes compounded by the career cynics, who lack the belief that we would ever achieve anything. I am, given the results and outcomes we have illustrated thus far, glad to say that Malaysia is on the right path along our transformation journey. I am confident that the civil service will continue to build on their good work undertaken since 2010. I encourage them to continue raising the bar in setting the standard for best transformational practices.

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IMPROVING URBAN PUBLIC TRANSPORT

ONE STEP CLOSER TO OUR DESTINATION



**DATO' SRI
LIOW TIONG LAI**

Minister of Transport

The year 2016 ushered in a new era of urban public transportation in Malaysia with the opening of Phase 1 of the Klang Valley Mass Rapid Transit (MRT) Line 1, spanning Sungai Buloh to Semantan. The completion of the MRT represents a promise delivered by the Government, paving the way towards a world-class public transport system. Commuting in and around our cities is now better than ever, with a range of reliable, affordable, safe and eco-friendly options available to the public.

The Government's efforts to enhance our urban public transport network are not only aimed at enabling the efficient movement of people and goods, but also building environmental sustainability. We also hope to improve commuters' quality of life by providing travelling option for the public, allowing the rakyat to spend less time caught in traffic and save travel costs. With activities in 2016 focused on expanding our rail services, such as with the launch of the MRT and the LRT Extension Project, in addition to measures to improve bus services and the taxi industry transformation which is currently underway, we are confident of attaining our target of 40% modal share for public transportation in Greater Kuala Lumpur/Klang Valley (Greater KL/KV) by 2030.

In doing so, there remains a need to enhance the overall connectivity of our urban public transport network, especially in terms of the first- and last-mile, to encourage demand for public transport. This will complement the capacity improvements the Government has put in place over the past few years to provide the rakyat with a variety of options for commuting in and around urban areas.

We have already seen a positive impact from the improvements in urban public transport so far and I hope that the rakyat will continue to join us on this exciting journey towards building a public transport network that we can all be proud of.



The MRT Sungai Buloh-Kajang Line.

OVERVIEW

The Improving Urban Public Transport National Key Results Area (UPT NKRA) has seen significant investments since 2010 in order to enhance the adoption of public transport in the Greater Kuala Lumpur/Klang Valley (Greater KL/KV) area. In 2016, RM106.5 million was spent to improve the connectivity and accessibility of the public transportation network within Greater KL/KV, enhance the network's capacity and increase overall customer satisfaction. These efforts have now materialised and can be seen in the encouraging 2016 KPI achievement of 84%, surpassing progress made in previous years. The public transport modal share in Greater KL/KV has also improved from 10% in 2009 to 20% as of 2015.

The population of the Greater KL/KV region is expected to reach 10 million by 2020, and with it, increase traffic congestion which not only causes inconvenience and frustration, but also results in economic losses due to lost productivity, wasted fuel and environmental pollution. Switching to the use of public transport for the majority of daily commutes by urbanites is expected to ease this congestion and mitigate its effects. Public transport commuters also gain peace of mind by avoiding the inconveniences of searching for parking and other stresses related to driving private vehicles. The increased connectivity between Greater KL/KV's many suburban centres and the Central Business District (CBD) further allows people

to capitalise on career opportunities in the city.

In 2016, the public transport network in Greater KL/KV received a significant capacity increase, with the completion of several high-impact projects. Aside from enhancing the rail network, seen as the backbone of Greater KL/KV public transport, the UPT NKRA has also improved bus and taxi services, which provide vital first-and-last-mile connectivity to the rail system, as well as other intermediary infrastructure and 'soft' measures aimed at increasing the attractiveness of public transport. All efforts to improve urban public transport have significantly increased public transport modal share in Greater KL/KV.

IMPROVING URBAN PUBLIC TRANSPORT

MRT AT THE FOREFRONT OF URBAN PUBLIC TRANSPORT TRANSFORMATION



The YAB Prime Minister and the Chief Secretary to the Government, Tan Sri Dr. Ali Hamsa, at the launch of MRT Phase 1.

Imagine this: by the year 2020, there will be an estimated 10 million people living in the Klang Valley, all of whom will travel around the Greater Kuala Lumpur area by car. With such growth, both in population and in the number of cars, the roads will not be able to accommodate all these vehicles that will be making their way in and out of the city. Traffic conditions will only get worse and perhaps even be gridlocked for long periods.

MRT Corp has estimated that some 529,000 users will use the MRT Sungai Buloh-Serdang-Putrajaya line once it comes online in 2022, following the full launch of the Sungai Buloh-Kajang line in third quarter 2017.

"Mass Rapid Transit Corporation Sdn Bhd (MRT Corp) envisions that the Mass Rapid Transit (MRT) will be a solution to traffic congestion by reducing the number of people having to rely on private cars for commuting," says MRT Corp CEO Dato' Sri Shahril Mokhtar.

MRT Corp has estimated that some 529,000 users will use the MRT Sungai Buloh-Serdang-Putrajaya line once it comes online in 2022, following the full launch of the Sungai Buloh-Kajang line in third quarter 2017.

Besides being a solution for transportation needs, Dato' Sri Shahril says that the MRT project will create employment opportunities for an estimated 130,000 people. This in turn

will generate a Gross National Income (GNI) of between RM3 billion and RM4 billion per annum from construction and operations alone from 2011 till 2020.

Furthermore, aside from improving connectivity and spurring economic growth, the MRT is anticipated to result in a host of other benefits such as higher productivity gains and a better quality of life.

"For example, with travel time reduced, as people are no longer stuck in traffic jams, productivity is expected to increase to 280 million hours annually. This will translate to RM20 billion per annum in time savings," he says.

"The MRT will certainly be at the forefront of changing the landscape of land public transport in Malaysia. With high levels of reliability, safety and integration, hopefully the MRT will be able to shift the rakyat's mind-set towards utilising it."

"I believe there were two critical success factors in the implementation of the MRT project. Firstly, the structure of the MRT project, with the MRT Executive Committee chaired by the Chief Secretary to the Government, which has enabled efficient decision-making and problem solving, especially in those areas involving various parties and Government agencies," Dato' Sri Shahril says.

He continues that the committee comprises of heads of agencies and authorities. Any issues arising can be



resolved at the highest level through this forum, thus ensuring construction of the MRT runs according to schedule. In addition, its Project Delivery Partner has provided strong project management expertise that has resulted in timely delivery by contractors. Moreover, the rapport between MRT Corp and the Land Public Transport Commission (Suruhanjaya Pengangkutan Awam Darat - SPAD) has been paramount in running the project smoothly.

"The Urban Rail Development Plan (URDP) is important in ensuring that an integrated rail network system with good connectivity is developed. The MRT project is a critical component of the Klang Valley Urban Rail Network. What's more, SPAD was also the authority to give the final approval to both the SBK and SSP Line Railway Schemes. Thus, we had to work closely to obtain the final approval as efficiently as possible," explains Dato' Sri Shahril.

It should also be noted that SPAD chairs the MRT Technical Committee, which meets to solve all project-related issues and guarantees a seamless process in executing the project.

A project of such size and magnitude as the MRT however, has seen its share of challenges. These included building through very developed urban areas, making construction a challenge as there was limited space to work with. This also made safety a big concern as the construction took place in an area where people come and go, 24 hours a day, seven days a week. MRT Corp addressed this by implementing high safety standards at the construction site together with various other measures such as Traffic Management Plans and awareness programmes with the public.

"MRT Corp places a lot of importance on Safety, Health and Environment (SHE). Currently, the construction industry in Malaysia has a very low understanding on SHE. MRT Corp together with its Project Delivery



The YAB Prime Minister riding the MRT SBK Line.

Partner initiated collaboration with CIDB (Construction Industry Development Board) Malaysia and NIOSH (National Institute of Occupational Safety and Health) Malaysia to further improve education in safety for the MRT project."

"This collaboration set a benchmark for Malaysia's safety standards in the construction industry, inadvertently becoming a reference point for other players in the construction industry to improve their safety standards," explains Dato' Sri Shahril.

Learning from the experience of constructing the SBK line, MRT Corp has introduced five major initiatives to boost SHE standards for the construction of the KVMRT. They are Construction Design Management, Specifications and Contractual Obligations, SHE Performance Scheme, Safety Passport Scheme, and Master Trainer Programme. The initiatives are not only aimed at reducing the number of incidents at the MRT project worksites but also at developing a culture of ownership on SHE aspects by the Work Package Contractors.

Moving forward, Dato' Sri Shahril would like to see the MRT project as the project that sets the benchmark in terms of project management, delivery of the



project and also in terms of integrity and good governance. For the size and value of the project that is based on utilising public funds, it is important to ensure that there is a high level of transparency.

"Ultimately, the proof of any pudding is in the eating. For the MRT project, the proof of MRT Corp's success is of course in its timely delivery, within the stipulated budget, and in the working of the railway system," he says.

IMPROVING URBAN PUBLIC TRANSPORT



Launch Ceremony of LRT Line Extension Project in June 2016.

The LRT line extension recorded an average daily ridership of 440,000 since its inception, the line extension is a testament to UPT planning which meets the needs of the rakyat.



RapidKL four-car train set for LRT line.

These efforts have clearly paid off, as also demonstrated by the results of the Land Public Transport Commission's (Suruhanjaya Pengangkutan Awam Darat - SPAD) 2016 Customer Satisfaction Survey conducted by Ipsos. The survey showed that overall customer satisfaction with public transport has increase to 84% in 2016 from 74% in 2015, mainly due to the LRT Extension Project. Notably, the improvement in customer satisfaction was also contributed by more convenient taxi services due to mobile applications. The survey also showed a positive outlook

for public transport use, recording an improvement to 78% in 2016 from 67% in 2015 in respondents' likelihood of using public transport in the future.

In order to ensure that the UPT NKRA meets – and even exceeds – the expectations of the rakyat, extensive benchmarking of world-class public transportation infrastructure from across the globe has been conducted, with the adoption of these practices tailored to local conditions. For example, the recent Taxi Industry Transformation Programme (TITP), which aspires to overhaul the industry's systemic

issues, is an example of this rigorous approach. Malaysia's taxi industry was benchmarked against those from the UK, Singapore, Australia, Dubai and Indonesia in terms of its business models, driver assessments, accreditation and training, as well as market entry costs. Ridesharing/e-hailing service regulation in various other markets was also scrutinised. This ensures that Malaysia adopts a progressive approach to taxi and ridesharing services which will be beneficial for the rakyat.

Improving the Rail Backbone of the Public Transportation Network

Several infrastructure projects involving the rail network that serves Greater KL/KV were completed and launched in 2016, with several more either in the planning or implementation stages.

The completed LRT Line Extension Project (LEP) was launched as scheduled in July 2016, connecting Kelana Jaya and Sri Petaling to Putra Heights. 23 new stations and 35km of new rail tracks have been

added between the Sri Petaling and Kelana Jaya stations, extending the Kelana Jaya Line to 46.4km and the Ampang Line to 44.7km. Recording an average daily ridership of 440,000 since its inception, the line extension is a testament to UPT planning which meets the needs of the rakyat. The LEP also extends commuters' accessibility to other urban rail networks, including Keretapi Tanah Melayu (KTM) Komuter stations and Bus Rapid Transit (BRT) Sunway services.

Meanwhile, the first phase of the Klang Valley MRT Line 1 from Sungai Buloh to Semantan began operations on 16 December 2016. Despite several challenges along the way, this mega-project registered savings of RM2 billion from the initial target cost of RM23 billion, and the entire 51km Sungai Buloh to Kajang line is on track to be completed as scheduled by July 2017.

Improvements to the rail network extend beyond just infrastructure upgrades. KTM also charted several service delivery successes, with its KTM Komuter services during the AM peak period (7am-9am) registering an on-time arrival rate (defined as within a margin of 10 minutes of the scheduled arrival time) of 97% following the deployment of new six-car sets in Greater KL/KV to cater to a growing number of commuters. The enhancement initiated five years ago took a holistic approach and addressed supply issues for KTM Komuter to increase the capacity and reduce wait times for passengers, especially during peak hours. Headway for KTM Komuter trains during peak hours has since improved from 45 minutes to 15 minutes, making rail travel a more convenient option.

While the rail network makes up the backbone of the urban public transport, the bus network and taxi services are also high priorities under the UPT NKRA.



MRT feeder bus.

IMPROVING URBAN PUBLIC TRANSPORT



An MRT train set on the Sungai Buloh-Kajang Line.

Further to this, on 19 October 2016 KTM launched its Automated Fare Collection (AFC) system. A new contractor was appointed to oversee the project, with the Delivery Management Offices of the Ministry of Transport and the Land Public Transport Commission (SPAD), as well as the KTMB Steering Committee closely monitoring it to ensure effective implementation.

The AFC uses tokens and stored-value cards (also known as KomuterLink) that can be purchased at ticket vending machines and customer service counters throughout all 53 KTM Komuter Stations. This new system is able to capture travel statistics and data that will provide KTMB with insights into ridership

trends and patterns. Subsequently, KTMB will be able to provide better comfort, convenience and safety in terms of infrastructure and facilities at its stations. It will also assist KTM in creating loyalty programmes and benefits for frequent commuters.

The AFC is also expected to help minimise loss of revenue by cutting down on fare dodging. It is also expected to make public transport more appealing to car users by making the KTM Komuter service more convenient. In anticipation of the upcoming Integrated Common Payment System (ICPS), which will be the standard ticketing system among all rail operators in the Klang Valley, the AFC system, in its current form, will be conveniently integrated into

the wider ICPS service once the latter is ready for launch.

Expanding First-And Last-Mile Connectivity

While the rail network makes up the backbone of the urban public transport, the bus network and taxi services are also high priorities under the UPT NKRA, providing many commuters access from their residential areas to rail corridors as well as within the residential areas.

2016 marked the first full year of operations for the Bus Rapid Transit (BRT) Sunway line, serving 500,000 people in Bandar Sunway



their eligibility for fare discounts as well as facilitated the application and issuance of BRT cards.

Following the implementation of the Bus Network Revamp in 2015, the utilisation of Prasarana's stage buses outperformed the higher KPI target set for 2016 – coming in at around 80% consistently throughout the year. This was due to the increased demand for buses stemming from the LRT extension and the rollout of MRT Line 1, as well as the addition of a new KPI to address the stage bus driver shortages in Greater KL/KV. The Bus Network Revamp aimed to improve the first- and last-mile connectivity of bus services between rail and other public transport hubs, and for direct services within Greater KL/KV where rail services do not reach. Efforts continued to increase bus area coverage (especially in previously underserved routes) and frequency, as well as enhance bus operator performance and network efficiency.

Bus Stop Info Panels have been installed at high-traffic areas within the Greater KL/Klang Valley. These panels help the rakyat plan their journeys more effectively, as route numbers, each bus stop served and bus schedule information will be displayed on the panels. A total number of 3,000 info panels were targeted for installation, but due to operational issues faced during installation, the actual number of info panels installed as of 31 December 2016 amounted to 1,290. Both SPAD and Ministry of Transport (MOT) have closely monitored the project to ensure the installation will continue to be completed in 2017.

To further improve first- and last-mile connectivity, the Taxi Industry Transformation Programme (TITP) was introduced to improve the taxi industry in a comprehensive manner, encompassing not only the existing fleet of registered taxis, but also the as-yet-unregulated ridesharing / e-hailing services, including Uber and Grab.

and Subang Jaya and connecting them to KTM Komuter and LRT. This 5.4km stretch passing through seven stations recorded up to 6,000 commuters daily – 50% more than the previous year. A major contributing factor to the ridership growth was the commencement of the LRT extension in July 2016, which boosted the connectivity and take-up rate on public transport.

The BRT Sunway team has also been relentless in their marketing efforts, which focused on students, senior citizens and the disabled. Besides the introduction of a 50% fare discount to students, the project team, in collaboration with nearby higher learning, have also informed new student intakes of



RapidKL Stage buses.

IMPROVING URBAN PUBLIC TRANSPORT

The launch of the TITP followed after a lab conducted by SPAD and PEMANDU in late 2015, which produced several recommendations endorsed by the Economic Council in April 2016 and received the Cabinet's approval-in-principle in July 2016.

The recommendations included 11 initiatives under four key areas, namely:

- the regulation of e-hailing (ride-sharing) applications;
- the improvement of taxi drivers' income and welfare;
- the improvement of taxi drivers' service quality and conduct; and
- the harmonisation of taxi fares for greater industry competitiveness.

A number of taxi drivers and operator associations were engaged and syndicated throughout the lab. More than 30 meetings and syndications were carried out to test new ideas and initiatives that would improve the taxi industry as a whole. While taxi associations were receptive

to the initiatives to improve their livelihood and welfare, the reception to the legalisation of private hire e-hailing services was, however, polarised. The lab nonetheless proposed for the legalisation of e-hailing, while also proposing that the barriers to entry for taxis be reduced, ensuring standard clauses are present in all taxi contracts and the liberalisation of vehicle options for taxis.

Meanwhile, the Centralised Taxi Service System (CTSS) will be introduced as new technology to improve the quality of taxi services. CTSS is a technological infrastructure which consists of a core system and a mobile app interface for the driver which enables the performance monitoring of taxi service delivery. Most importantly, the system will assist SPAD to carry out its enforcement and monitoring duties with regard to the taxi service performance and management. The data collected from the CTSS will also ease analysis and planning of taxi services, improving the industry as a whole.

The Taxi Industry Transformation Programme (TITP) was introduced to improve the taxi industry in a comprehensive manner.



Teksi 1Malaysia (TEKSIM)

Making Public Transport an Attractive Option

Infrastructure upgrades and extensions, performance enhancements, and quality of service improvements have all been part and parcel of making urban public transport a smart and viable choice for city commutes. Initiatives under the UPT NKRA are also aimed at making urban public transport an attractive, convenient choice through a variety of 'push' and 'pull' factors.

In terms of 'pull' initiatives, more Park 'n Ride facilities have been built at strategic locations throughout the Greater KL/KV rail network, with a total target of 7,000 parking bays. 2016 saw 1,547 new parking bays in Park 'n Ride facilities at Taman Paramount, Taman Jaya, Taman Bahagia, UKM and Nilai.

Similarly, Parkway Dropzones are being built at high ridership rail stations for better integration of existing infrastructure, such as bus stops with covered walkways, to encourage car-sharing and act as a transit facility for bus/taxi passengers to board rail services. The first Parkway Dropzone was completed at Kampung Dato Harun on 13 September 2016.

The NKRA has also spearheaded a solution to provide real-time travel information for urban public transport users to plan their commute. SPAD has developed a Journey Planner app which is targeted to be launched in 2017. The app is designed to help commuters find land public transport services to and from a destination within Greater Kuala Lumpur/Klang Valley. Commuters will be provided with an integrated platform that includes multimode and multi-



Park 'n Ride at Salak Tinggi.



Parkway Dropzone at Kampung Dato Harun.

operator service information via a search engine. The application will also display the best options for an individual's trip, based on real-time information, once the user has keyed in their start and end destinations. The project team is currently working on addressing fixes and new builds to ensure the app will be beneficial to the public once it goes live.

IMPROVING URBAN PUBLIC TRANSPORT



Passengers boarding a Rapid KL bus.

The urban public transport capacity reached 61,978 passengers per hour per direction (pphpd) last year, and this is expected to grow to 127,578 pphpd by 2020, an additional capacity of 61%. This capacity boost will help alleviate the choking traffic condition in KL CBD – but only if ‘push’ initiatives are effectively put into place. In response to this, a KL Travel Demand Management Workshop was organised in May 2016 by Dewan Bandaraya Kuala Lumpur (DBKL) in partnership with various related agencies including SPAD to plan the implementation of ‘push’ initiatives.

This is to support the overall aim of reducing private transport modal share in the KL CBD (especially around the Middle Ring Road 1) during the AM peak period to 60% by 2020. With all the ‘pull’ initiatives in place and ongoing, it is crucial to be supplemented by significant ‘push’ initiatives to ensure strong adoption of land public transport in KL CBD and subsequently help improve traffic congestion.

The workshop came up with nine initiatives that could be implemented by DBKL and SPAD within the short-term (three years). The report

was submitted to DBKL, and the outcomes presented to the Mayor. The workshop’s outcomes have also been presented to the CEO of SPAD and received the commission’s full support. Following this, further detailed discussions will need to take place between DBKL, SPAD and other related agencies.

Managing travel demand, while important for the long-term sustainability of a growing city like Kuala Lumpur, will not be easy. For instance, in July 2016, DBKL announced a 150% increase in DBKL parking charges for on-street parking



within the CBD, which resulted in some controversy. Despite the public pushback, it is a step in the right direction, especially since the last rate increase was in 1984. In future, as the public transport capacity in Greater KL continues to grow and the level of convenience for public transport continues to improve, more efforts must be directed at driving demand for urban public transport.

The urban public transport capacity reached 61,978 passengers per hour per direction (pphpd) last year, and this is expected to grow to 127,578 pphpd by 2020.

Source: Operator Analysis by SPAD

IMPROVING URBAN PUBLIC TRANSPORT



Taxis in Kuala Lumpur.

MOVING FORWARD ►

Having focused on monitoring urban public transport AM peak ridership as a KPI, the UPT NKRA will shift towards monitoring daily ridership for a better reflection of the full impact its efforts are creating.

In terms of rail connectivity, the full Klang Valley MRT Line 1 will be completed by July 2017, followed by Line 2 in 2022. MRT Line 3 (Circle Line) has undergone a feasibility study, the results of which are being assessed. To further provide better connectivity and manage consumer demand, remedial measures will be considered and taken to address issues relating to delayed projects such as the KL Monorail Fleet Expansion Project (KLMFEP), which

is crucial to alleviate bottlenecks at some Monorail stations. The three-year delay in the KL Monorail expansion project has warranted close monitoring by both PEMANDU and the Ministry of Transport (MOT), escalating to the YAB Prime Minister for immediate intervention. A Third Supplementary Agreement was signed on 3 March 2017 to address contract issues and facilitate the delivery of the remaining six trains for the project scheduled in 2017.

All parties have been working hard to ensure the completion of the project, with ongoing monitoring of implementation, rigorous problem-solving exercises and coordination meetings held every two weeks.

The KL Monorail Expansion Project will add greater capacity to the current service, which serves a daily ridership of 63,778 and registers an average load factor of around 89% during the AM peak period, with demand expected to rise further due to population growth and the completion of other rail projects.

Following the success of BRT Sunway, SPAD and other relevant agencies are working towards preparing the tender for construction of the next BRT corridor (KL-Klang) in 2017. The BRT KL-Klang corridor will run from Pasar Seni to Klang town, passing through three major thoroughfares; namely, the Federal Highway, Jalan Tun Sambanthan and Jalan Syed Putra. It will span a total distance of 34km along 25 stations. Unlike BRT Sunway, which features purpose-built road infrastructure for the buses, BRT KL-Klang will instead have exclusive lanes for the busway, at terminals and the intermediate

stations. These exclusive lanes will run on existing road infrastructure, although the roadway will be widened to accommodate the BRT lane. The KL-Klang BRT will serve an important and congested traffic corridor and hence contribute towards relieving traffic congestion on the Federal Highway and improving public transport connectivity in this very dense and vibrant section of Greater KL/KV.

Meanwhile, the Integrated Transport Terminal (ITT) Gombak project is being closely monitored, with constant engagements with the concessionaire, project owner and KPI owner, to ensure significant construction progress in 2017. When completed, ITT Gombak will serve as the hub for all inter-city buses operating the KL-East Coast routes, removing approximately 750 express buses from the Eastern and Northern sectors currently being served by hubs in the city centre, thus helping to relieve traffic

congestion in Kuala Lumpur.

The TITP is now being implemented, with the next major milestone comprising the regulation of e-hailing services. This can be anticipated in 2017, when SPAD will table an amendment to the Land Public Transport Act to allow for the regulation of e-hailing services. SPAD, as the lead implementer of the UPT NKRA, will continue to oversee the TITP in 2017 and ensure the number of new taxis and ride-hailing vehicles on the road are optimal.

Beyond the outcomes already discussed during the KL Travel Demand Management Workshop, DBKL and SPAD will also be brainstorming a comprehensive Travel Demand Management plan to resolve the traffic problems in Greater KL/KV and encourage the further take-up of urban public transport.



Kuala Lumpur Monorail.

RAISING LIVING STANDARDS OF LOW-INCOME HOUSEHOLDS



**LIGHTING THE
WAY FOR A
BRIGHTER
FUTURE**



**DATO' SRI ROHANI
ABDUL KARIM**

Minister of Women, Family and
Community Development

The Raising Living Standards of Low-Income Households National Key Results Area (LIH NKRA) has created a deeply transformative and uplifting impact on the nation's hard-core and urban poor. With an emphasis on providing economic empowerment to the needy rather than merely providing handouts, the NKRA focuses on the different factors which cause poverty to ensure long-term, sustainable results.

This approach has become especially vital as the Government strives for prudence in its financial management and the optimisation of resource allocation towards activities that will influence lasting change. Nonetheless, I am pleased to report that we remain on track to meet our KPI targets for the 1AZAM programme, which has become an important element of this NKRA in catalysing meaningful change for our hard-core and urban poor.

Since 2010, the Government has spent over RM1.9 billion on the LIH NKRA in order to uplift the rakyat from poverty and hard-core poverty. From a poverty level of 3.8% in 2009, the NKRA has seen a drop to 0.6% in 2014. During the year, over 90% of the people who participated in the 1AZAM programme increased their income by at least RM300.

In light of the challenging global economic conditions, there is a need for a strong safety net for the less fortunate segments of our society, not just for the rural bottom 40% of income earners (B40), but in the urban areas as well. The LIH NKRA has accordingly also put in place, initiatives that empower these segments of our population to pursue work, training and job opportunities outside of formal employment, in order for them to earn additional income.

Various agencies, especially those implementing the programmes on the ground, have gone through many challenges together with low-income groups determined to improve their lives. I am thankful for their dedication and commitment, and I want to assure everyone that the Government will continue to do its best to transform the plight of our low-income households.

OVERVIEW

The LIH NKRA is a multi-agency effort led by the Ministry of Women, Family and Community Development (MoWFCD). Other partner agencies include the Ministry of Agriculture and Agro-based Industry (MOA), Ministry of Urban Wellbeing, Housing and Local Government (MUWHLG), Sabah State Government, Sarawak State Government and Implementation Coordination Unit (ICU). MoWFCD has taken greater ownership of the LIH NKRA, developing the NKRA Joint Committee as an alternative to bring together all stakeholders to brainstorm, troubleshoot and problem-solve while implementing the NKRA's initiatives. Overall, the LIH NKRA achieved 122% of its KPIs in 2016. Credit has to be given to ICU, being the owner of the eKasih database, for taking the initiative to go down to the ground to verify the status of B40 individuals and households, to ensure the fair distribution of funds to those truly in need.

In 2016, RM66.71 million was allocated to all the agencies involved in delivering the LIH NKRA, focusing on the continuation of the 1AZAM (Akhiri Zaman Miskin) and Beyond 1AZAM programmes and the delivery of economic empowerment projects to vulnerable groups via digital means. Efforts were focused on initiatives which maximised the value of the allocation as well as on seeking private sector assistance for Beyond 1AZAM participants to grow their businesses.

In the Government's efforts to alleviate the impoverished, the poor and hardcore poor now make up only 0.6% of the population in 2014 from 3.8% in 2009. The Government will continue its efforts in assisting the rakyat, especially the B40, to give them a chance of a better life.



1AZAM Niaga participant.

Boosting Earning Potential

The 1AZAM programme has recorded significant rates of participation since its introduction in 2009. Under the seven 1AZAM focus areas (AZAM Tani, AZAM Niaga, AZAM Kerja, AZAM Khidmat, AZAM Bandar and the autonomously-operated 1AZAM Sabah and 1AZAM Sarawak), individuals are provided the assistance most suitable to their circumstances and capabilities to upskill themselves. They are then either given access to gainful employment opportunities or a chance to prove their entrepreneurial skills.

The Beyond 1AZAM programme, which started in September 2014 as a pilot project, provides high-

performing 1AZAM participants who have graduated from the basic 1AZAM programme with advanced training, coaching and mentoring. The primary goal for this programme is to provide all successful 1AZAM participants the ability to increase their incomes from their existing projects by 50%. With proven skills and capabilities, these Beyond 1AZAM participants have the potential to start up their own small and medium-sized enterprises (SMEs).

In 2016, 7,898 new individuals participated in 1AZAM and 10,225 new and existing participants have increased their income above RM300. Meanwhile, 2,329 participants in Beyond 1AZAM successfully increased their income by 50% or more.

RAISING LIVING STANDARDS OF LOW-INCOME HOUSEHOLDS

AZAM TANI DRIVES UP INCOME OF PARTICIPANTS



Residents of Madrasah Tahfiz Raudhatul Baiduri harvesting rock melons that they planted as part of the AZAM Tani project.

The project has allowed the madrasah to earn extra income through six cycles of fruit harvesting since July 2015, generating earnings of RM39,000 to date.

The AZAM Tani programme has recorded significant success in helping its participants improve their livelihood, providing participants with aid to improve and expand their businesses. Among these beneficiaries include Mohd Jaffar bin Juman, from Tanjung Karang, Selangor, who operates a fruit stall. Aid from the programme allowed him to upgrade his stall's canopy and display racks, as well as equipment needed to run his business, such as a sugar cane juice machine and a cash register, among others. As a result, his earnings have improved from just RM1,000 a month previously

to RM10,000 after receiving the assistance.

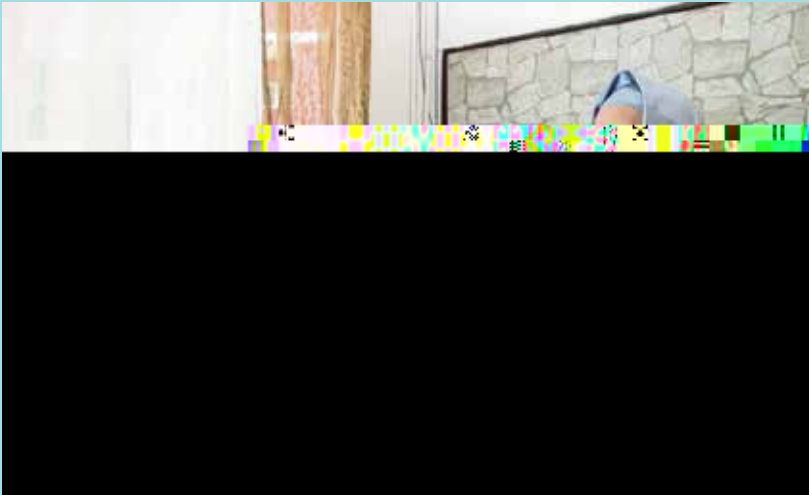
Akrab bin Hassan is another AZAM Tani participant who has seen phenomenal growth in the income from his agro-based/food processing business, through which he produces coconut-based food products. With the assistance from AZAM Tani, Akrab received the processing and packaging machinery as well as cooking equipment to grow his businesses, and now earns RM15,000 monthly from just RM600 previously.

The AZAM Tani programme also conducts community-based

projects, such as in Banting, Selangor, where the Madrasah Tahfiz Anak Yatim/Miskin Raudhatul Baiduri undertook a rock melon project. The madrasah received a fertigation system, as well as seeds, fertilizer, pesticide and other resources needed to grow the fruit, while the Ministry of Agriculture & Agro-Based Industry also provide training to its management and students on the agriculture and fertigation system.

The project has allowed the madrasah to earn extra income through six cycles of fruit harvesting since July 2015, generating earnings of RM39,000 to date.

SUCCESS STORY: MARIAM HUSSIN



Mariam Hussin is amongst one of the people who have been assisted by Amanah Ikhtiar Malaysia (AIM) in starting up her disposable diaper business. Before that, she had gone through a tough life. In order to support her family, Mariam did all sorts of jobs, right up to dealing in scrap metal. "Whatever I could do to make money, I did," she stated.

At that time, her family was so poor she could not afford to buy the disposable diapers that were then on sale for her small children. "My income before 2003 didn't even reach RM1,000."

The expense of disposable diapers was one of the factors that inspired Mariam to enter the industry. "I tried to go overseas to find diapers with more reasonable prices, which could then be resold. So I began my business in 2003; I went to (South) Korea to import their products and then to distribute them in Malaysia and overseas."

Mariam had been given a lot of support by her South Korean supplier when she made the decision to become the exclusive distributor for his brands in Malaysia. "Transport, food and lodging – from the airport to their factories and then to the

hotel, and the next day back to the airport, it had all been taken care of," she explained. To this day, Mariam still maintains a close working relationship with her supplier.

Every month, Mariam gets up to five container loads of disposable diapers from her supplier. "The quality of South Korean products is the highest in Malaysia," she stated. At present, she also exports to Indonesia and the Philippines. The imported disposable diapers are distributed not only through retail outlets, but also through online channels such as Mudah.com. In fact, at one stage she was also selling through the Tesco chain of hypermarkets.

Mariam is very thankful for the assistance that AIM has provided her. "Amanah Ikhtiar Malaysia is a body that has been extremely good to me, and has greatly helped small business owners. AIM has provided me assistance in the form of promotion, training and courses, explaining my products to other AIM friends and also financially through loans. AIM loan repayments are not burdensome, either. AIM also gives AIM friends the opportunity to network with each other."

After having been supported

by AIM, Mariam now lives a better lifestyle. "Praise be to God, after getting into the disposable diaper industry, my monthly revenues are around RM1 million. I have been able to put all my children through university without needing loans, had their weddings in luxurious locations, even given them each a car. I have also been able to purchase an oil palm plantation. And at the end of January (2017), I will be bringing my entire family for the Muslim pilgrimage." She feels very fortunate to have been involved with AIM, and with God's blessing, she's been able to live a good life.

Mariam advises low-income earners who wish to become entrepreneurs to take advantage of the excellent facilities and services offered by AIM. "Sell disposable diapers which are daily necessities just like rice; look at how I am able to sell five full container-loads every month. I am confident that my fellow Sahabat AIM are able to succeed the way I have."

After having been supported by AIM, Mariam now lives a better lifestyle. "Praise be to God, after getting into the disposable diaper industry, my monthly revenues are around RM1 million."

RAISING LIVING STANDARDS OF LOW-INCOME HOUSEHOLDS

Entrepreneurship as a Means of Escaping Poverty

The Government has always been committed in helping the rakyat to increase their incomes and lead a better quality of life. A long-standing initiative by the Government to help individuals in the B40 segment to increase their income and escape poverty is through the efforts of Amanah Ikhtiar Malaysia (AIM).

Amanah Ikhtiar Malaysia is a trust council initiated way back in the

day, on 17 September 1987, with the aim to reduce the level of poverty in Malaysia by providing micro-credit financial aid to support economic activities that have the potential to generate more income for low income households. The services provided by AIM have comprehensively helped many entrepreneurs from the B40 segment to establish and develop their businesses and expand to SMEs through close monitoring and continuous training.

Since its establishment, AIM has developed innovative ways to further enhance the capabilities of entrepreneurs from the B40 segment. One of the ways adopted

by AIM is through partnerships with universities. Since 2012, AIM in collaboration with AKPK has been working together with Taylor's University to organise financial literacy programmes for entrepreneurs to improve their sales, income and savings. The mentor-mentee concept was introduced through this collaboration to allow the business owners to acquire theoretical knowledge in order to enrich their businesses and achieve higher sales to develop from micro businesses to small and medium enterprises.

eKASIH DATABASE ENSURES EFFECTIVE AID DISTRIBUTION



As part of initiatives to ensure effective distribution of funds and assistance to low-income individuals and households, the Implementation Coordination Unit, Prime Minister's Department (ICU JPM) has developed eKasih, a centralised National Poverty Data Bank which keeps information related to poverty such as detailed profiles of the poor and hard core poor, aids/assistance received from various government agencies, economic programmes/projects and other information.

eKasih was established in October 2007 as a new initiative to improve the effectiveness of poverty eradication implementation programmes. "The main objective of eKasih is to avoid any duplication of aid/programmes

given and leakages to the poor and hard core poor by establishing a central data bank which can be accessed and used by all agencies and other related parties involved in poverty eradication programmes at both the Federal and State level. Thus, all agencies are accessed and referred to in the same repository," says Md Azhan Samat, Director of Society Wellbeing Division at ICU.

Previously, data related to poverty was collected and stored by the various databases owned by the different agencies involved in alleviating poverty. Although this data was verified by the respective agencies according to their individual processes and procedures, the data was fragmented. The Department of Statistics Malaysia (DOSM) has since conducted a poverty census, according to international standards, to further verify this data. This has improved the integrity and reliability of the data. The data verified by DOSM is then captured through the Poverty Household Census data entry system before it is uploaded into eKasih. A household's poverty status

is then automatically calculated by the system based on the household's income and Poverty Line Income (PLI).

eKasih keeps detailed profiling of the poor and hard-core poor as a base for national poverty programme planning and aid distribution. Information captured contains programme/project information details and profiles of heads of households (HOHs) and members of households (MOHs), including details of location, residence, education levels, skills and job, property ownership, health condition, sources of household income and aid or assistance received such as Bantuan Rakyat 1Malaysia (BR1M), Kumpulan Wang Amanah Pelajar Miskin (KWAPM) and 1AZAM.

"The development of the eKasih database is revolutionary, particularly in current times when despite the country's rapid development, there are those who are still in need of help. This database ensures the Government can channel that help effectively and efficiently," says Md Azhan.



YB Minister with 'Sahabat AIM'.

MOVING FORWARD ►

The NKRA will increasingly leverage other economic empowerment programmes by the Government as well as work with non-governmental agencies and the private sector to ensure the continued effectiveness of LIH programmes as prevailing economic conditions impact its funding.

The overall 1AZAM process will also be improved, with lessons learnt to be applied to further assist the implementing agencies in 2017. 1AZAM 'graduates' will also be incubated as Beyond 1AZAM participants in an effort to nurture entrepreneurship among participants. Additionally, the relevant agencies working towards delivering impact under this NKRA will formulate a way forward for Beyond 1AZAM participants to firmly fix their place in the M40 or even the top 20% of income earners (T20).

Initiatives will also focus on providing training/support to potential entrepreneurs to grow the SME sector. This will require incorporating training programmes

on the information/documentation required by banks/financers in the services provided by Beyond 1AZAM. The NKRA will also partner with SME Corp and participating banks to facilitate microcredit financing to successful participants and provide additional support such as marketing training for potential and successful 1AZAM participants.

In tandem with growing emphasis on the use of information and communications technology (ICT) to raise the incomes of the B40 and M40 groups, the e-usahawan programme will be expanded as a platform to further grow small businesses. Efforts to gain more registrations for eRezeki will also be increased, as the platform will also be used to track the earnings of participants. Furthermore, promotional activities for the orang-e platform will be intensified to increase its take-up, while the scope of the orang-e platform will be expanded in 2017.

While Malaysia's economic climate remains resilient and the NTP has created new avenues of growth, it remains imperative that no one gets left behind as the country transforms into a high-income nation. In tandem with this aspiration, the Government will continue to innovate its programmes not only to achieve the eradication of poverty, but also to drive low-income households towards a brighter, sustainable future.

REDUCING CRIME

**YAB DATO' SERI
DR AHMAD ZAHID
HAMIDI**

Deputy Prime Minister of
Malaysia and Minister of
Home Affairs

Following six consecutive years of significant reductions in crime, it is reasonable to forecast the reduction in our crime rate to moderate and reach a plateau given the increase in population and development. Bearing in mind that the safest cities and countries in the world are not crime-free, the achievements under this NKRA to date are nevertheless noteworthy. Between the year 2010 to 2016, our Index Crime decreased at an average of 9% annually to record a total reduction of 47%. In 2016, the reduction registered a lower decrease rate of 2.8%. This figure suggests that the number of residents filing crime reports have increased, but does not directly indicate that there is an increase in the number of crime incidents. Rather, it possibly suggests the increase in vigilance of the rakyat in filing crime reports. The analogy of 'the tip of the iceberg' can be applied in this context.

The Perception of Crime Indicator (PCI) introduced in 2015 recorded a reduction in the people of Kuala Lumpur's fear of becoming a victim of crime, signalling that the rakyat does feel safer. From 80% in 2015, this has been dramatically reduced by 19% to 61%, which reflects a marked improvement in our endeavor to address the public's most pressing concerns about crime and safety, as we embark on a more targeted approach to combating crime.

The core of our efforts is the complete transformation of our law enforcement agencies. Under the Modern Policing initiative, the Royal Malaysian Police (PDRM)'s vision is to become a world-class, service-oriented police force by 2020, by using technology to improve efficiency and productivity. By streamlining and simplifying decades-



**ENSURING THE
SAFETY AND
SECURITY OF THE
COUNTRY AND
ITS PEOPLE**

old processes and work practices, we will free up personnel to focus on eliminating existing threats and facing new ones. We are also changing the way we rehabilitate drug offenders and how they can be reintegrated into society by providing an innovative end-to-end drug offender treatment programme which has been piloted in the district of Besut, Terengganu.

This year we also took steps towards strengthening our borders. Our country's socio-economic prosperity and development have increased our 'vulnerability' to criminal elements. Human and drug trafficking, and the threat of terrorists infiltrating our borders, are very serious issues that must be addressed urgently. I believe the newly set up Border Safety Agency and the Border Security Lab held in April 2016 will significantly strengthen our borders and discourage criminal syndicates from operating at our borders.

Lastly, the foundation upon which this NKRA was built is to ensure the safety and security of our people remains paramount in all our efforts to combat crime. I believe this year's results shows the impact of the crime reduction initiatives implemented, and I would like to congratulate PDRM and other NKRA stakeholders such as the Department of Prisons and the National Anti Drug Agency (*Agensi Anti Dadah Kebangsaan*, AADK) on a job well done, but we must continue to be vigilant.

OVERVIEW

The Reducing Crime National Key Results Area (CRI NKRA) has been successful in reducing the Index Crime by 47% from 2010 to 2016, with the number of cases declining to 112,354 in 2016 from the 2009 baseline of 209,817 cases. Overall in 2016, CRI NKRA achieved 118% of its KPIs. In the past seven years, the NKRA had focused its efforts on crime reduction, drug rehabilitation, prisoner upskilling, community policing, and programmes to improve public perception.

However, due to (but not limited to), the ever-shifting trends in crime, Malaysia's evolving demographics, and socio-economic structure provide a basis for change to the way crime reduction initiatives are formulated. With the national Index Crime rates starting to moderate and the PCI indicating that the rakyat of Kuala Lumpur feel safer now than they have in the previous year, the CRI NKRA will focus on addressing the issues raised in the NKRA's annual surveys to continue ensuring the safety of the rakyat.

One of the ways in which the CRI NKRA is changing the way crime is addressed is through the Modern Policing (MP) initiative within the PDRM, aimed at shifting the police force towards a service-oriented, technology-savvy organisation that is focused on its core duties.

Another change in direction comes from reviewing the way drug-related offenders are treated. The decriminalisation of drug offences marks a policy change towards the innovation and modernisation of how the country views and treats addiction in a holistic manner.

Meanwhile, prison time is viewed not just as incarceration, but an opportunity for inmates to reflect on their life and better themselves through upskilling programmes. Prisoners are provided with the

opportunity to be trained and certified in various technical skills to increase their employability once released. This reduces criminal recidivism and is an important part of crime prevention.

The CRI NKRA is also looking towards enhancing border security as threats and occurrences of terrorism as well as human, drug and weapons trafficking are rising globally. Malaysia's security forces must be proactive in facing these threats, focusing on preventive measures to arrest on international and cross-border crime with an eye not only on keeping Malaysia safe, but also on safeguarding the economy.

This NKRA's 2016 initiatives for reducing crime were benchmarked against several best practices internationally i.e. Modern Policing (Singapore Police Force, London Metropolitan Police, Hong Kong Police Force), Drugs Treatment Initiative (Portugal), Border Security (US-Mexico border framework, US-Canada border framework, UK Border Agency) and Perception of Crime Surveys (UK, US).

In the past seven years, the NKRA had focused its efforts on crime reduction, drug rehabilitation, prisoner upskilling, community policing, and programmes to improve public perception.

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Modern Policing 'Talk to Us' Event.

Transforming the Police Force

Phase One of the 10 Modern Policing (MP) initiatives was completed on 31 October 2016. The implementation of these initiatives was headed by the Royal Malaysian Police Kuala Lumpur Contingent Headquarters and rolled out to 24 police station within the contingent's jurisdiction. Amongst the initiatives

include replacing a 30-year old manual filing process and shifting towards electronic filing by migrating handwritten POL40 (station diary) and POL41 (police report book) forms to the electronic format, enabling auto-filling of identity details when a complainant's National Registration Identity Card (NRIC) is inserted into the Police Reporting System (PRS), providing biometric and NRIC readers at stations. The MP programme also encourages effective patrolling, allowing the police force to put more

feet on the ground to enhance public confidence. With the MP initiatives in place, approximately 10% of the manpower (or 11,500 personnel) in the police force is expected to be deployed for on-the-ground tasks. Other technological improvements will also be brought through the MP initiatives to reduce redundancy and simplify paperwork processes, releasing personnel for patrolling and other core policing duties.

PDRM has also taken a stricter stance on law enforcement for common infractions and as of December 2016 issued 1,676,272 summonses, of which 665,111 have been collected. This has contributed to higher Government revenue with approximately RM81.3 million collected. For 2017, this NKRA will pursue a higher target for summons collection of at least 40% from 30% in 2016.

The success of the MP initiative has been reflected in the results of the PCI, which recorded a reduction in the public's fear of being a victim

PDRM has also taken a stricter stance on law enforcement for common infractions and as of December 2016 issued 1,676,272 summonses, of which 665,111 have been collected.

of crime and an improvement in the feeling of safety among the rakyat. The total number of respondents in the KL survey also increased to 14,393, indicating an increase by 3.4 times from 4,200 in 2015.

In a further effort to understand the public's concerns about crime and safety, the NKRA has completed the development of a Community Engagement Index (CEI). The CEI is aimed at restructuring and streamlining the way PDRM engages with the public and will be measured based on three criteria; the percentage of engagement (foot print); the intensity of engagement (contact hours); and the effectiveness of engagement (thumbs up).

Workshops aimed at reviewing current engagement strategies, introducing improvements and new measurements for effectiveness were completed in September 2016 and are currently in the process to syndicate.

As the NKRA continues to undertake initiatives to keep crime rates low, efforts will increasingly take into account growing urbanisation which is contributing to a rise in street crime, in addition to the uptrend in non-index crimes such as cybercrime and narcotics-related crimes resulting from Malaysia's shifting demographics and worldwide crime trends. From January to December 2016, 17,333 street crimes had been recorded against 16,034 during the same period

in 2015, an increase of 8.1%

The CRI NKRA will also move towards a more comprehensive approach to measure the crime rate, such as by calculating crime per 100,000 population where the crime rate is measured by dividing the number of reported crimes by the total population; the result is multiplied by 100,000. This, together with other NKRA initiatives, will shape how PDRM and other law enforcement agencies address crime moving forward.

AN OUT-OF-THE-BOX APPROACH TO COMBATING DRUG ABUSE



Prof Dr. B. Vicknasingam, Director of the Centre for Drug Research at Universiti Sains Malaysia.

The Besut drug rehabilitation pilot project is an initiative which uses a treatment-based public health approach to reform drug users in a new way to combat the crime more effectively.

"At the turn of the millennium, the main driver of HIV infection in Malaysia was injecting drug use. The Government realised that they needed to address this issue and implement a harm reduction

programme which provided methadone and clean injecting equipment for people who use drugs. Malaysia was successful in rapidly reducing the number of HIV infections in this population. This is an example where when an evidence-based approach is used; the desired results are produced. We should now move forward by not only providing harm reduction services but to get people who use drugs into treatment programmes and not continue to lock them up," says Prof Dr. B. Vicknasingam, Director of the Centre for Drug Research at Universiti Sains Malaysia (USM), which leads the project under the Crime NKRA.

Prof Vicknasingam points out that previous institutional rehabilitation models based on disciplining drug users were largely ineffective, further elaborating that Malaysia is not alone in using institutionalised

rehabilitation programmes with dedicated facilities, as this has also proven to be largely ineffective worldwide.

The Besut pilot project aimed to move drug users who had been detained by the police into the treatment stream very rapidly, rather than having them remain within the criminal justice system. "We got them into community-based outpatient treatment programmes," Prof Vicknasingam explains. "Our treatment is non-punitive. Previously, when treatment providers treat drug users, if they come up with a urine-positive test, the doctors will 'punish' them." In contrast, the Besut trial assured the drug users that as long as they came for the treatment sessions, they would not be penalised even if they continued to test positive. "As long as they came for the sessions, we still have a point of engagement and the opportunity

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to change them,” Prof Vicknasingam adds.

The Besut project used a combination of treatment approaches such as methadone and buprenorphine for heroin users and intensive counselling for those who use amphetamine-type stimulants, or what are locally called ‘pil kuda’ (“horse pills”) due to the belief that those narcotics originate from horse tranquilisers. “We measured two parameters; one was compliance in terms of treatment session attendance, and the second was the urinalysis tests for drugs. Out of the 97 patients we have in Besut, over 80% are attending more than 75% of their treatment sessions, which is very encouraging for us. Indeed, about 55% of them are beginning to show negative urine results. For the first three or four weeks, they were still using drugs outside, but as the weeks went along, they began to abstain.”

The success of the Besut project model has gotten both the Kedah and Terengganu State Governments interested in replicating it across several districts. Prof Vicknasingam explains that the project itself provides successfully-treated patients with skills training. “If you just provide treatment and leave them in the current environment, that’s not going to be helpful either.” Prof Vicknasingam believes that upskilling the drug users can help decrease their demand for drugs by not only occupying their time, but giving them hope and better economic prospects.

From his experience, Prof Vicknasingam believes that the vast majority of drug users in Malaysia are a result of troubled beginnings, and should not be penalised solely for seeking solace in drugs. “If we look at their dwelling, socio-economic status, troubled family background, then we can understand what went

wrong with this person and why he resorted to drug use. We should also understand that drug use is a relapsing disorder where it will take several attempts to finally quit drugs.” He further underscores this point by providing an example of someone trying to stop smoking.

“How many of them managed to quit smoking on the first attempt? Maybe only about 10% – but we expect drug users to quit immediately. It is time that we start thinking out of the box to deal with the drug problem. We have been detaining drug users all these years with not much success in terms of output. As long as we do not provide treatment for people who use drugs they will continue to use them, as drugs are addictive. What we are doing in Besut is to provide treatment for people who have been detained for using drugs and not for drug users who have committed other crimes. They will still have to face the criminal justice system if they commit a non-drug related offence, let’s be clear on that.”

Two patients enrolled in the Besut trial, Adam and Badrul (not their real names) had been involved with drugs for only two to three months, having been pressured into it by their peers. For both, the Besut programme was their first drug rehabilitation programme. Adam had been directed there by the police, and he has since improved and recovered. Now drug-free and happier, he says his health has improved significantly and his appetite has returned. He is spending more time with his family and at work, instead of loitering around with friends – which was what got him involved with drugs in the first place. Meanwhile, Badrul was sent to join the programme by AADK because he no longer wants to be involved with drug abuse. He too, is currently recovering well.

Prof Vicknasingam highlights that the majority of people currently in prison are there for possession of relatively small quantities of drugs used for personal consumption. “Many are repeat offenders, so putting them in prison is not only pointless, it costs Malaysian taxpayers quite a fair bit as well. We should channel these drug users into treatment programmes rather than put them in prison where no treatment is provided. Instead of temporarily putting away the problem, our efforts should be concentrated on decreasing the supply of drugs by taking down the pushers and suppliers.”

ADDRESSING THE RAKYAT'S KEY CONCERNS ON CRIME



Datuk Kamarudin Md Ali, Vice Chairman of Malaysian Crime Prevention Foundation (MCPF).

As far as non-governmental organisations (NGOs) go, the Malaysian Crime Prevention Foundation (MCPF) is a fairly uniquely-placed one. Founded in 1993, the MCPF's Chairman is a serving Cabinet Minister appointed by its patron the YAB Prime Minister, while its Deputy Chairman is the ex officio Inspector-General of Police. As a result, MCPF works closely with law enforcement bodies to increase the awareness of crime prevention amongst the rakyat, and to encourage the various sectors of Malaysian society to play a more active role in reducing crime in line with the CRI NKRA, according to MCPF Vice Chairman Datuk Kamarudin Md. Ali. "We're involved with student programmes all the way through tertiary education, and we also involve ourselves with the rehabilitation of prisoners," he explains.

MCPF was involved in the development of the Perception of Crime Indicator (PCI), which, as MCPF EXCO Member Dato' Wong Pui Lam puts it, is made up of three sub-indicators; one each for the rural, semi-rural, and urban populations. "The most pronounced response will be from the urban population, because the demand is greater," he clarifies. "The factors that influence the PCI numbers differ between each

different population."

Prior to the introduction of the PCI, the perception towards law and order – and its enforcers – was very bad, as Dato' Kamarudin describes it. "At the time, the statistics provided by the police were not necessarily believed by the public," he recounts. "Perception is reality, and one of the reasons the rakyat didn't believe the numbers given was the lack of engagement from the police." In order to further study this matter, MCPF went down to the ground, visiting various police stations throughout the nation, and conducting focus group interviews with representatives across all segments of the public.

The work that the police have put into improving their visibility, and the public's confidence in them, through increased engagement with the rakyat over the past year, has been encouraging. Dato' Kamarudin points out that the PCI has improved from 2015's figure of 80% to 61% in 2016, a reduction in the level of the fear of crime by 19%. "I have been engaging with the residents' associations ever since I was a police officer back in the early 2000s, and recently, when I was talking to the Bangsar residents' associations, their complaints were not about street crime like pickpocketing; they were instead complaining about double parking. That shows their shift of focus away from street crime."

The MCPF, too, has been playing its part in community engagement. "We are like an arm of conscience to tell the public that we are here to help you; we are here to tell the police 'look here, this is the public reaction'. We interface between the two parties," Dato Wong says, explaining MCPF's work in further detail. The

Foundation is now working on training its members on the ground to learn what the problems are in each particular area. "Housewives, school children, pensioners, members of residents' associations, neighbourhood community, and like-minded NGOs; they are good sources of information."

The MCPF helped to develop the PCI, with its four indicators of 'signals', 'my space', 'amplifiers' and 'service', and discover how the people felt about them. "It's up to us, the MCPF members, to explain to the rakyat that Rome was not built in a day," Dato' Wong expounds, highlighting that all segments of society are needed to prevent and reduce incidences of crime.

As Datuk Kamarudin sees it, the Modern Policing and Omnipresence initiatives, also part of the CRI NKRA, played a significant role in the improvements to the PCI figures over 2016. "We told the police that we have to face the public and allow the public to question them directly regarding what they have done, as well as their other concerns," he says, adding that MCPF roundtables held throughout the nation saw the participation of top police officials doing just that.

Dato' Wong agrees, pointing out that a number of police initiatives to 'meet and greet' with the communities at large are progressively inculcating and reinforcing the image of the police as the rakyat's friends and protectors, thus reducing their fear of crime.

"We want the rakyat to visit the police stations not only to make statements and reports, but simply to drop in and have a chat with the police on duty as friends and fellow members of the community."

REDUCING CRIME



Police officers engaging with the public during a Talk to Us session under Modern Policing initiative.

A New Approach to Drug Offender Rehabilitation

Crime reduction does not end with capturing the perpetrators and locking them away. In addressing the root causes of criminal behaviour i.e. substance addiction, the CRI NKRA has taken a holistic and not just a punitive or deterrence approach.

In the case of drug addiction cases, the NKRA has taken some innovative steps towards drug treatment and rehabilitation. Initial steps have been taken to decriminalise addicts, moving away from the arrest, incarceration and 'cold turkey' methodology to one that is health-based, involving the community and providing an end-to-end treatment programme. This approach was piloted in the district of Besut in Terengganu, creating an encouraging impact on the patients and community at

large. Based on the correspondence with volunteers of the drug pilot project, 65% of the volunteers have registered for treatment and 54% of them have remained drug-free. On a national level, as at the end of 2016, 6,144, or 60%, of 10,192 People Under Supervision (Orang Kena Pengawasan/OKPs)-rehabilitated drug addicts who are aiming to remain addiction-free – have stayed clean for a minimum of one year, against 37% in 2015.

Leading Prisoners to a Brighter Future

Prison related initiatives under this NKRA have focused on reducing recidivism by equipping prisoners with skills that will increase their employability upon their release. During the year, the Malaysian Prisons Department worked with heavy vehicle manufacturer Syarikat HINO Motors Sales (M) Sdn. Bhd. (HINO Motors) on the Corporate Smart

Internship programme for automotive skills training and certification of prisoners at the Henry Gurney Prisoners School (SHG) in Telok Mas, Melaka. Through the partnership, the training facility at SHG was upgraded, while HINO Motors also provided one engine for the trainees to work with.

Ten juvenile residents had registered for the programme, which included related courses on workshop safety and audio systems conducted by four trainers. HINO Motors also provided skills upgrading to the trainers prior to the start of the programme.

In addition, under the Prisons Department's certified skill training programme, a total of 2,125 inmates have completed certified skill training under Sijil Kemahiran Malaysia (SKM-SLDN), Sijil Kecekapan Kemahiran (SKK-CIDB) and Program Pemanduan Kenderaan Perdagangan (Metro). A review of expansion of other skillsets (i.e. working in call centres, textile manufacturing and others) will be undertaken next year.

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Various agencies working together strengthening Border Security.

MOVING FORWARD ►

Following this NKRA's success in reducing Index Crime since 2010, initiatives will move towards overall crime reduction. This is as the Government adopts a more holistic approach to crime-fighting which not only takes into account crime statistics, but also on reducing the fear of crime and improving the feeling of safety among the public. In 2017, the NKRA team intends to go to the ground to addressing the specific concerns the rakyat of Kuala Lumpur highlighted in the 2016 Perception of Crime (PCI) survey.

To this end, the CRI NKRA will continue to transform processes and workflows, structures, and the workplace cultures of implementing agencies to create a sustainable improvement in efficiency and effectiveness in law enforcement and crime prevention. The CRI NKRA will also work to replace crime-related law enforcement policies that are outdated, irrelevant, inadequate or otherwise hinder progress and improvements with more appropriate

policies that are inclusive, robust and better able to address current issues.

Border security is also becoming one of the top priorities of the CRI NKRA. During the Border Security Lab held in March 2016, which was attended by over 150 participants from over 20 Government agencies, 16 "big bucket" issues and 82 sub-issues were identified in terms of policies and processes, community outreach and inter-agency cooperation; and agency empowerment and integrity.

Following this, a border security framework was developed with a vision of securing Malaysia's land borders against illegal movements of people and goods. Anchored on this vision, the lab identified 21 initiatives, with six Quick Wins, to address the 16 significant issues. The initiatives are clustered according to six focus areas; Streamlining Border Processes and Policies, Changing Border Community Mindset and Culture, Improving Physical Infrastructure, Manpower and Technology, Strengthening Border Personnel Capabilities,

Fostering Greater Interagency Cooperation, and Inculcating a Culture which Emphasises Integrity and Honour. Amongst the quick wins are establishing a one-stop inspection centre, implementing a reward system for performing personnel and maintaining an accreditation standard as well as setting up an interagency joint patrol between PDRM and the Malaysian Armed Forces. In 2017, we see the implementation of the 6 quick win initiatives at two Immigration, Customs, Quarantine Security Complexes (ICQS) located at Bukit Kayu Hitam in Kedah and Rantau Panjang in Kelantan.

The overall target is to improve and streamline lawful travel and trade at nine immigration, customs and quarantine (ICQ) locations at the Northern Land Borders (Kedah, Perlis, Kelantan, Perak) as well as strengthen and secure the Northern Land Borders from any illegal movements (porous entry and exit) of people and goods by the year 2020.

FIGHTING CORRUPTION

**DATUK PAUL LOW SENG KUAN**

Minister in the Prime Minister's
Department

The year 2016 proved to be an eventful year in fighting corruption, both within the public and the private sectors. In 2015, Malaysia's standing in Transparency International's Corruption Perception Index (CPI) had dropped from 50 to 54; in 2016, our ranking stood at 55th out of 176 countries. Regardless, it is true that global media coverage has not done our nation any favours when it comes to the international community's perception of the level of integrity in Malaysia.

Corruption can be deeply rooted; not only in Government agencies and corporate bodies, but within our own society, given how many of our youth seem to believe that corruption is acceptable. There is no 'silver bullet' that will magically resolve entrenched and systemic issues. However, this NKRA aims to deliver true transformation in the way financing of political parties and campaigns is handled, regulated, and reported. This is likely to be a game-changer, capable of significantly improving the levels of integrity and transparency within the political arena.

To this end, we tasked the National Consultative Committee on Political Funding (NCCPF) on how best to tackle this issue and have taken its recommendations to the Cabinet. It is noteworthy that over the course of 12 months, the Committee consulted and engaged with a wide cross-section of stakeholders, including Malaysian political parties whether in Government or not, international experts and civil societies in order to complete the proposal. The Committee had also received written submissions from various parties on the subject matter during the development period, so as to more accurately represent the nation's viewpoints.

Meanwhile, in combating corporate corruption, the insertion of the Corporate Liability Provision into the MACC Act has the potential to be another massive game-changer, though this has yet to become a reality. Clearly, this is another area with its own set of complications, but is a vital step that needs to be taken.

We are engaged in a long-term process to eradicate corruption in our country, so that future generations can grow up in a Malaysia based on integrity and honesty.

OVERVIEW

The fight against corruption involves both the inculcation of transparency and accountability within the government machinery, as well as the upholding of integrity in corporate bodies and the community, especially amongst the youth.

From a CPI score of 45 in 2009, this NKRA has seen it increase to 50 in 2015. In 2016, Malaysia achieved a score of 49. Overall, the NKRA achieved 79% of its KPIs in 2016.

One main highlight in 2016 is that governance of political financing has taken steps in the right direction. The National Consultative Committee on Political Funding (NCCPF) was formed by the Prime Minister in August 2015 to come up with a constructive regulatory structure to resolve issues surrounding political financing. In December 2016, the Committee conducted various focused discussions with Malaysian political parties from across the political divide (BN component parties, Pakatan Harapan, PAS and IKATAN) to gather feedback on its proposal. The Committee will further engage all key political parties prior to tabling its final proposal to the Cabinet for approval, in order to incorporate additional feedback and concerns. Once approved, the bill of the proposed Act will be drafted and brought to Parliament for debate.

In terms of fighting corruption in the Government, 74.4% of corruption cases have been disposed of within a year of the case being registered in court. The Malaysian Anti-Corruption Commission (MACC) has fully undertaken to see this through efficiently. The establishment of 14 special corruption courts (one in each State and Federal Territory) has allowed the Malaysian judiciary to hear and adjudicate on the cases in a shorter time frame. Additionally, over

96.6% of issues highlighted in Auditor General's Report 2014 Series 1-3 have been successfully dealt with and resolved within a year of being tabled in Parliament. This is a noteworthy achievement and underscores MACC's effectiveness in investigating these cases, as well as the NKRA's commitment to clean governance.

Corporate integrity is also a priority for the NKRA. The insertion of a corporate liability provision into the MACC Act, which will empower the MACC to go after companies committing graft, is currently still a work in progress.

Transforming the Governance of Political Financing

Key to the Fighting Corruption NKRA since its inception in 2009 has been the reform of the governance of political financing. This is an area that constantly receives public attention and is critical if the NKRA is to be taken seriously by the *rakyat*.

In 2012, recommendations were put forward towards the institutionalisation of clearer guidelines and audit processes of political party accounts, increasing transparency in how the parties' funds

are used. Other recommendations included the introduction of legislations to regulate and govern political parties' funds, especially during election campaign seasons.

In September 2016, the NCCPF announced 32 recommendations, which encompasses three main areas:

- The implementation process of the reform
- The need for the new law and its content
- Wider and longer-term issues

The recommendations made by the NCCPF address the basic systemic issues in establishing a fundamental governance structure to regulate political financing that is currently missing.

In October 2016, the Committee's proposal was presented to the Cabinet, which called for greater transparency from political parties through strict political donation reporting and disclosure requirements. The proposal detailed out recommendations in three key areas; namely, the introduction of the Political Donation and Expenditure Act (PDEA), the addressing of wider and longer term issues, and a heightened focus on effective implementation.

The proposed PDEA serves as a suitable platform to create an effective system of political financing, covering the areas of

In December 2016, the National Consultative Committee on Political Funding conducted various focused discussions with Malaysian political parties from across the political divide.

FIGHTING CORRUPTION

political donation administration, political financing expenditure and disclosure, state funding of political activities, and the relationship between politics and business. It will also complement existing laws, including the Malaysian Anti-Corruption Commission Act 2009, Election Commission Act, Election Offences Act, Registrar of Societies Act, and Anti-Money Laundering and Anti-Terrorism Financing Act 2001.

Further, the Committee aimed to criminalise the discrimination or victimisation of political party donors within the public and private sectors, and allow redress for unfairly treated donors. Government contracting processes will also be reformed to minimise the possibility of political favours. These wider, longer-term issues need to be addressed in order to demonstrate a greater commitment to inculcate integrity into the political system.

In order to effectively implement the recommended procedures, the Committee proposes 'grandfathering', or giving amnesty, to previous deeds – i.e. no retrospective

The proposed Political Donation and Expenditure Act serves as a suitable platform to create an effective system of political financing.

effect or 'name & shame', a gradual but rapid timeline, and applying six guiding principles in designing detailed rules, regulations and steps in reforming political financing in Malaysia; namely, the supremacy of the rules of law; enhancement of civic participation; protection of civil rights; transparency; accountability and integrity; and healthy political competition.

Eliminating Opportunities for Graft in the Private Sector

The Corporate Identity Pledge (CIP) and the Corporate Integrity Systems Malaysia (CISM) framework have been taken up by many private companies interested in weeding out corrupt practices within their organisations. While benchmarking exercise and stakeholder engagements have been conducted, incorporating the corporate liability provision (CLP) into the MACC Act is still in progress, with the draft having been completed and awaiting submission to the Attorney General's Chamber (AGC).

Up to 800 companies both large and small have signed the CIP, and some of them have started with implementation measures. However, a significant fraction of CIP signatories has not yet implemented concrete prevention measures against corruption, either treating the CIP as



Consultation on the JKNMPP recommendations with the Barisan Nasional component parties on 5 December 2016.



Corporate Integrity Pledge (CIP) signatories who have undergone a workshop on the 10 Anti-Corruption Initiatives receiving Certificate of Appreciation from the Minister during the CIP Conference on 6th October 2016.

more of an agreement-in-principle, or due to lack of knowledge on how to move from pledge to practice. MACC has conducted a number of workshops for CIP signatories to assist them with implementation. NGOs such as Transparency International have also been working directly with the private sector, organising programmes on improving governance of companies.

In 2016, along with 19 other national delegations across five continents, Malaysia was involved in an initiative by the British Standards Institution (BSI Group) to create and establish ISO 37001, an international Anti-Bribery Management System Standard designed to help organisations implement an anti-bribery management system. ISO 37001 requirements are generic and intended to be applicable to

all organisations and organisational units, regardless of type, size and nature of activity, and whether in the public, private or not-for-profit sectors.

This new standard is also all-encompassing when it comes to addressing the issues of bribery, whether it be in the public, private or not-for-profit sectors, whether it is initiated by the organisation, its personnel or business associates acting on its behalf or for its benefit, and whether it is direct or indirect bribery (e.g. a bribe offered or accepted through or by a third party).

Currently, Standards Malaysia and MACC are working together to adapt ISO 37001 for the nation. This will involve the adoption of anti-corruption policies, appointment of a party to monitor compliance with these policies, training and risk

assessments, implementation of financial and commercial controls, and putting in place reporting and investigation procedures.

Standards Malaysia and MACC are working together to adapt ISO 37001 for the nation.

FIGHTING CORRUPTION

MRCB WALKS THE TALK IN INTEGRITY



Malaysian Resources Corporation Berhad (MRCB), a leading urban property and construction company, had already put anti-corruption processes in place long prior to its signing of the Corporate Integrity Pledge (CIP), including a comprehensive policy called the Prevention of Fraud Manual and a whistleblowing policy. "That has helped guide management and employees maintain very high standards of conduct and integrity in dealing with all our vendors and contractors," Samarasam Krishnan, General Manager of Integrity & Discipline at MRCB, says.

The CIP, which MRCB signed to indicate that it stood for transparency and integrity, did have an impact as MRCB continued to fine-tune its integrity processes. For instance, from an 'all gifts must be declared' policy, Samarasam points out that in 2016, MRCB revised it to a "no gifts policy", either from vendors to MRCB representatives, or from staff and management to other parties. "Except things like flowers for people in hospital," Samarasam clarifies. He believes that small things like these really hammered down the point for the employees, especially as his department investigates all cases

brought to its attention, no matter how minor. His department maintains close contact with the Malaysian Anti-Corruption Commission (MACC), and has dismissed staff for the slightest breach in integrity.

In signing the voluntary CIP, MRCB has committed itself morally and ethically to its principles, and has unilaterally declared that it will not be a party to any acts of corruption. "We're very serious about it; we will work towards creating a business environment that is free from corruption, and we will uphold anti-corruption principles in all our dealings with our business partners and with the Government," Samarasam explains. Not only does MRCB expect its vendors to uphold integrity when dealing with it, but its anti-corruption policies are also binding on the company when dealing with others as a contractor or vendor itself, especially Government officials and others in power.

While, in his opinion, the construction industry is vulnerable to bad practices simply due to its scale of operations, Samarasam has not yet come across any cases of large-scale corruption in his tenure at MRCB. "We put these processes in place as a matter of principle; we're committed

to it and we're following through," he expounds. According to Samarasam, MRCB Group Managing Director Tan Sri Mohamad Salim Fateh Din has set the tone for the rest of the company by showing that he is also subject to the same processes, rules and regulations. "He has instructed me on several occasions that I should immediately let him know if, for whatever reason, anything he's planning to do is against our integrity processes, and he will then not go ahead with it," Samarasam recounts.

The CIP has helped surface MRCB as a company committed to transparent and open dealings, as part of a national initiative to change Malaysian business. "The MD calls me in sometimes to manage our vendors, because sometimes they're not aware of our policies," Samarasam says. He believes that the integrity landscape will see a further shift with the passing of the Corporate Liability Provision.

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Dr Mohd Nizam bin Mohd Ali, Senior Director and Chief Coordinator Centre for Knowledge and Consultancy on Integrity in Institut Integriti Malaysia (IIM), speaking to PDRM during the Global Integrity Leadership Course 2016 organised by IIM along with the Institute of Malaysian and International Studies (IKMAS) of the National University of Malaysia (UKM) and Integrity

MOVING FORWARD ►

The implementation of political financing regulations and guidelines is the top priority for the NKRA in 2017, despite some political opposition to the proposal from NCCPF, which has yet to be debated in Parliament. It is essential for all political parties, to embrace and support the Committee's recommendations, and to advocate for immediate implementation of this initiative. This is a necessity, if we are all serious about strengthening the country's integrity and earn the rakyat's trust in the nation's governance.

Getting private sector buy-in for the insertion of the Corporate Liability Provision into the MACC Act

will be another priority under the NKRA for 2017.

Although challenging, the NKRA's ultimate aim is to rebuild the rakyat's confidence and trust in the nation's political institutions, and to ensure that the youth are involved in the upholding of honesty and integrity in all walks of life from the earliest ages.

For 2017, various seminars will be conducted to create awareness on the ISO 37001 anti-bribery management system which will also help companies prepare for implementation of the proposed corporate liability provision, another initiative currently in the pipeline under this NKRA.

ADDRESSING THE RISING COST OF LIVING



**DATO' SERI DR. AHMAD
ZAHID HAMIDI**

Deputy Prime Minister of Malaysia

In recent years, external factors such as commodity prices and currency fluctuation have affected cost of productivity which has led to increase in cost of living.

While household incomes have been on the rise and have driven strong private consumption, the Government recognises that some quarters may feel the pinch more than others when prices rise, even though Malaysia's inflation has not reached alarming levels since the introduction of the NTP. The Government has provided on a needs basis immediate relief to those who are hit hardest by the rising cost of living, in particular, the bottom 40% of income earners (B40).

Bantuan Rakyat 1Malaysia (BR1M) has been the flagship of our initiatives, and its impact over the years has been significant. Since 2012, a total of RM19.33 billion has been disbursed. In 2016 alone, RM5.36 billion was disbursed to 7.28 million households.

BR1M is supplemented by other COL NKRA programmes, which are now directly under the purview of the Office of the Deputy Prime Minister. Through these programmes, students who come from lower-income families, as well as the urban poor and others from remote and rural areas, have gained access to affordable amenities, basic medical treatments and other public amenities.

The provision of quality and affordable houses to low- and middle-income earners also remains a priority. The MyDeposit programme was launched in April 2016 to assist eligible first-time house buyers. In addition, priority has been given to those earning less than RM2,500 a month to own Project Perumahan Rakyat (PPR) houses or flats.

The Government is fully committed to providing aid to those who need it the most and to ensure all Malaysians enjoy a sustainable standard of living.

OVERVIEW

Since the introduction of the COL NKRA in 2011, the Government has spent over RM23.5 billion on various initiatives designed to help relieve the financial challenges faced by the *rakyat*, especially the B40, through both immediate and short-term means. There are two main approaches that the COL NKRA initiatives have taken: (i) targeted direct monetary assistance through programmes such as BRIM (Bantuan Rakyat 1Malaysia), BB1M (Baucar Buku 1Malaysia) and BKAP1M (Bantuan Khas Awal Persekolahan 1Malaysia); and (ii) increased availability and accessibility to public amenities such as KIM (Klinik 1Malaysia), KRIM (Kedai Rakyat 1Malaysia), KFR1M (Kafe Rakyat 1Malaysia) and KK1M (Kedai Kain Rakyat 1Malaysia).

The Government has spent over RM23.5 billion on various initiatives since 2011 designed to help relieve the financial challenges faced by the *rakyat*, especially the B40, through both immediate and short-term means.

Throughout the year, the Government collaborated closely with the private sector and non-governmental organisations (NGOs) in reaching out to those in need. A high-level panel comprising of six relevant Ministries was also set up in January 2016 as the Government

continues to ensure a focused approach to addressing cost of living issues. The panel also incorporated perspectives from relevant NGOs and consumers' associations in coming up with further measures to help the *rakyat*.



Photo credit: Harian Metro

Customers at Kedai Rakyat 1Malaysia (KRIM) can enjoy staple products such as rice, sugar and cooking oil, at stable prices.

ADDRESSING THE RISING COST OF LIVING

Fast Relief for Those in Need

The BR1M initiative seeks to help Malaysian households earning less than RM4,000 per month by providing direct cash assistance to help them purchase basic necessities. In 2016, 7.28 million recipients received between RM400 and RM1,050, depending on their level of household income and needs, amounting to a total disbursement of RM5.36 billion, achieving 100% of its KPI.

This amount has been increased from previous years to help low-income households cope with living costs, which tend to rise gradually over time. While the number of applicants in 2016 declined from the previous year, the Government has allocated RM6.8 billion for BR1M in 2017, which will be delivered to an estimated 7 million households.

In 2017, BR1M cash transfers to eligible recipients will be increased as per Table 1:

Expanding Access of Basic Goods

Other COL NKRA initiatives target specific groups of households and their distinct needs, such as parents with school-going children and low-income households. These initiatives comprise both direct cash assistance as well as Government and private-sector programmes offering more affordable goods and services, especially in remote and rural areas.

BKAPIM and BBIM are targeted at helping households manage expenses on education. BKAPIM commenced from 2013 until 2015 and was given to all students from Year One to Form Five. In 2016 the scope of distribution of BKAPIM was narrowed down to focus on students from Year One to Form Five from households that earn less than RM3,000 per month to ensure the aid is channelled to the rightful parties. However, despite its success in reducing parents' burdens, BKAPIM will be discontinued in 2017 following rationalisation exercises carried out in Budget 2017.

Since 2012, BBIM has assisted 6.4 million tertiary students, including Form Six students, in the purchase of course textbooks through book vouchers of RM250 given to each student. BBIM is slated to be replaced by the Kad Debit Pelajar (Student Debit Card) programme in 2017. The debit card will carry a value of RM250, which can then be used to pay for books, stationery, computer accessories and Internet access. The new programme is aimed at addressing systemic issues that BBIM has faced since its inception, including forged and counterfeit vouchers, students selling the vouchers to third parties for petty cash, redemption of more than five vouchers by individual students, theft and loss of vouchers as well as unauthorised redemptions of the vouchers for goods other than books.

The B40 and other lower-income communities, such as the urban poor, also benefited from the COL NKRA initiatives designed to expand their access to essential basic services and public amenities. These include KIM, KR1M, KFR1M, and KK1M, which allow the low-income segment to purchase groceries, food, medical services and fabrics at affordable prices.

179 KR1M stores nationwide stock a variety of both premium-branded grocery goods as well as 234 types of Produk Rakyat 1Malaysia goods, which are also available in 569 non-KR1M stores. Other essential goods are also sold at least 15% cheaper than similar premium brands. Of the 185 KR1M existing in 2015, six have since closed down; two in Malacca and one each in Kedah, Perak, Pahang and Sarawak, with no new stores taking their place. This was in part due to budget rationalisation, as well as the inability to secure strategic business locations at a reasonable cost in terms of rental, logistics and infrastructure. Nonetheless, RM10 million has been allocated for KR1M for 2017, which will

Eligibility	Disbursement per recipient
Households Listed In E-kasih Database (Poor And Hardcore Poor)	RM1,200 per year
Households earning under RM3,000 per month	RM1,200 per year
Households earning RM3,001 - RM4,000 per month	RM900 per year
Individuals earning RM2,000 per month and below	RM450 per year

TABLE 1: BR1M Eligibility Criteria & Cash Handout Amounts

In 2016, 7.28 million BR1M recipients received between RM400 and RM1,050.

PROVIDING THE RAKYAT WITH ACCESS TO AFFORDABLE HEALTHCARE



With an increasing number of patients frequenting KIM, several KIM have been upgraded to larger and better facilities. KIM PPR Muhibbah is one of them; it is now operating from Muhibbah Community Centre which was built for this purpose, by DBKL.

Since its establishment in 2010, Klinik 1Malaysia (KIM) has seen a steady increase in client treatment from 1.23 million to 6.47 million in 2016. Having started with 53 clinics nationwide, the clinics have grown to 360 as at the end of 2016, providing access to healthcare from as low as just RM1, targeting the low-income groups who may face constraints in receiving basic healthcare due to the higher costs at traditional clinics.

The KIM are especially beneficial as their locations are concentrated in urban centres with significant

low-income populations. "Since its inception in 2010, we have received multiple feedback from the masses. The *rakyat* has high expectation from services at KIM and they are generally satisfied since the new KIM is in their neighborhood and close to their home. They need not travel far to seek medical attention," says Dr Hayati Mohd Rodzi, the Director of the Ministry of Health's (MoH) Family Health Development Division. The Division is responsible for the planning, budgeting for KIM, as well as advising the Ministry on the

human resource requirements for optimal operation of the clinics.

"In order to keep operational costs low for these clinics, MoH advocates resource sharing with the main health clinic (Klinik Kesihatan Induk) which is also responsible for overseeing the KIM," Dr Hayati explains.

Furthermore, to ensure the clinics are adequately staffed to cater to its clients, MoH has implemented an extensive redeployment and redistribution exercise. With KIM operating beyond the normal 8am-to-5pm working hours, the Ministry also came up with flexible working shifts that reduced the long working hours at KIM, creating a more conducive environment for the staff.

In future, the Ministry is planning to improve the quality as well of scope of services provided at KIM. These would include providing continuation of treatment for stable Chronic Non-Communicable Diseases (NCD), especially hypertension and diabetes. "We are also posting Medical Officers at KIM and as of 2016 there are already 100 KIM with Medical Officers, mainly in the states of Selangor, Kelantan, Sabah and Sarawak," says Dr Hayati.

go towards building 25 more KR1M stores in areas currently unserved by the stores. A further 50 stores are planned to be built in 2018 and 2019, in line with the Government's aspiration of having at least one KR1M store in each parliamentary district.

Not all the COL NKRA initiatives are Government-led. KFR1M is a Pahang private-sector initiative to offer a cost-effective menu, currently available at four public higher

learning institutes (UIAM Kuantan, Politeknik Sultan Ahmad Shah, Kolej Matrikulasi Pahang, and Kolej Poly-Tech MARA Kuantan), as well as Kompleks Teruntum in Kuantan. KK1M is yet another initiative fully run by the private sector, aiming to provide cost-effective fabrics to B40 communities. There are currently 30 stores across Malaysia.

In an effort to provide the *rakyat* with access to affordable healthcare,

356 KIM clinics have been set up across Malaysia, charging a nominal fee of RM1 per visit, while senior citizens are fee-exempted. KIM is targeted at *rakyat* living in less developed areas, as well as the urban poor. Aside from outpatient treatment, health services provided at KIM include minor surgeries, women- and children-centric services, stitching, wound cleaning and dressings, as well as treatment for chronic diseases such

ADDRESSING THE RISING COST OF LIVING



One of the high-frequented KIM in the country. Conveniently located at the commercial area of Taman Masai, it also serves the surrounding community of Pasir Gudang.

as high blood pressure and diabetes. Since 2010, 26,744,887 visits have been made to KIM clinics. In 2016, 20 new KIM clinics out of the 33 targeted for the year have begun operations. This has led to a total of 6.47 million visits to KIM clinics, an increase of 6.1% from 2015's 6.1 million visits.

The expansion of the KIM programme in 2016 was however hampered by staffing constraints, as experienced across Malaysia's public healthcare industry. Additionally, the programme has been unable to secure locations with reasonable rental rates for the new clinics. However, the Government will ensure that all KIM are appropriately staffed while also expanding the healthcare services available, especially those relating to

the treatment and management of chronic diseases in more KIM clinics across the country.

Providing a Home for All

In the effort to provide quality, comfortable and affordable housing for the *rakyat*, the Government established the National Housing Department (Jabatan Perumahan Negara - JPN) under the Ministry of Urban Wellbeing, Housing and Local Government (Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan - KKBPKT) to manage the quality and organisation

of the housing development sector in Malaysia. The Government is committed to assist the *rakyat* in coping with the rising cost of living and has introduced several initiatives that has truly impacted the *rakyat*, one of them being the drafting of the National Housing Policy (Dasar Perumahan Negara - DRN).

On 6 April 2016, parallel to the National Housing Policy, KKBPKT launched the MyDeposit scheme to assist middle income individuals and households to own their dream homes. The scheme is offered to all Malaysians above the age of 21, earning between RM3,000 to RM10,000. To date, 2,776 Malaysians have benefitted from this project.

Another significant initiative by the Government to provide basic housing to those in need is the Projek Perumahan Rakyat (PPR). The initiative is focused on relocating squatters and fulfilling the need for proper housing for low-income households. There are two categories of PPR houses; PPR Dimiliki and PPR Disewa. For PPR Dimiliki, low-cost terrace houses and semi-Ds are built and sold at a subsidised price ranging between RM30,000 to RM35,000, while for PPR Disewa, a minimal rent of RM124 is imposed upon residents.

All houses built under both PPR categories are required to meet certain specifications of planning and design of low cost houses that are set in the Standard Perumahan Kebangsaan Bagi Perumahan Kos Rendah Rumah Pangsa (CIS2). Each PPR unit is at least 700 square feet, comprising of three bedrooms, a living room, kitchen and two bathrooms. Within the PPR vicinity, residents of PPRs enjoy basic amenities such as a community hall, praying area, business area, pre-schools, OKU facilities, playground and recreational area, including waste management.

In 2016, 20 new KIM clinics out of the 33 targeted for the year have begun operations. This has led to a total of 6.47 million visits to KIM clinics, an increase of 6.1% from 2015's 6.1 million visits.



KIM is run by trained paramedics and supported by a whole team of dedicated staffs.

MOVING FORWARD ►

In 2016, changes in the global economic environment brought upon challenges not only to the country's economic activities but to the *rakyat*. The Government will always continue to strive to do its utmost best to ensure to carry out initiatives to help the *rakyat* in coping with the rising cost of living.

While the public and private sector have adapted to the implementation of GST, and much awareness has been created on how the GST will help sustain the governance and development of Malaysia, the Government acknowledges that attention still needs to be given to many areas of social welfare to ensure the wellbeing of the *rakyat*.

In standardising the prices of controlled essential goods across the country, the Government will open more and upgrade existing KRIM outlets. The mobile version of KRIM is also being introduced in rural/remote areas, providing the *rakyat* with more options for affordable products.

The initiatives by the Government under this NKRA is widespread, in which all basic necessities, such as food, education, medical facilities and housing are accounted for and prioritised in allocation of funds and drafting of policies. As such, the Government remains committed in ensuring that all Malaysians will benefit from effective governance and inclusive provisions of assistance.

IMPROVING RURAL DEVELOPMENT

**DATO' SRI ISMAIL
SABRI BIN YAAKOB**

Minister Of Rural And Regional
Development

The Improving Rural Development NKRA has delivered deep and impactful change to our rural communities, ensuring that even those in the most remote areas are not left out of our national transformation programme.

As a people-centric initiative, this NKRA has seen over 6.2 million of our rural folk benefit from rural development initiatives in the five-year period of 2010 to 2016, with new and upgraded roads, access to clean water and electricity and housing for the rural poor helping to uplift some of the more vulnerable groups among our population. With these basic amenities, rural communities will be opened up to a world of new opportunities, services and linkages as never before.

At the same time, the Government has put in place initiatives to help increase the income of rural folk, which will further help modernise the communities and ensure the sustainability of rural areas, which are usually home to the rich culture and heritage which Malaysia is renowned for.

While rural development initiatives are not without its challenges, mainly tied to land acquisition issues, I am pleased with the results delivered by this NKRA. In this respect, the civil service stakeholders have been instrumental in ensuring projects are implemented efficiently and effectively, ensuring far-reaching impacts.

As the civil service has clearly demonstrated its ability to take the lead in all aspects of this NKRA, in May 2016 this NKRA was fully transferred to the Ministry of Rural and Regional Development. With the stellar results achieved through this NKRA thus far, and the capacity and capability demonstrated by the Ministry and our other stakeholders in implementing this NKRA, I am confident we will be able to continue our systematic and effective delivery of rural development to ensure the Government achieves its goal of national transformation for all.

OVERVIEW

With inclusiveness forming a key driver of the NTP, the Improving Rural Development NKRA represents a vital component to ensuring that the initiatives of the national transformation benefit all Malaysians.

Activities under this NKRA are two-pronged: first, to ensure all Malaysians, especially those in rural areas, receive access to the basic amenities that allow them to go about their daily lives; and second, to achieve a sustainable standard of living through the provision of economic opportunities. These are undertaken by building and restoring rural basic infrastructure as well as through the 21st Century Village programme.

These initiatives in totality are designed to enhance socioeconomic balance in the country, in tandem with Malaysia's development into a high-income nation. It also allows all Malaysians to participate in opportunities created by the national transformation and that its impact is felt in all corners of the nation. In this way, the NKRA contributes to the Government's wider effort to ensure no one is left behind as the country transforms into a high-income nation by 2020.

Basic Amenities Provide Access to Opportunities

Since 2010, initiatives under the NKRA have focused on delivering a better standard of living to rural Malaysians with the provision of rural roads, access to clean water and electricity, as well as housing. In addition to narrowing the gap in development between urban and



Road building in progress

From 2010 to 2016, the Government has delivered 6,041.7 km in new rural roads and provided road maintenance for 2,378.5 km of roads.

rural areas, these activities aim to increase access of rural folk to services such as education and healthcare, as well as connectivity to the nearest towns to enable their participation in commercial and economic activities.

From 2010 to 2016, the Government has delivered 6,041.7 km in new rural roads and provided road maintenance for 2,378.5 km of roads. Additionally, 350,094 houses have gained access to clean water, while another 153,821 now enjoy connection to electricity. Furthermore, 94,604 houses have been built and restored for the rural poor. In total, these activities have benefited more than 6.2 million people living in rural areas.

For 2016 alone, 755.42 km of new roads were built, against the target of 601.5 km for the year. This was enabled through an additional budget of RM74 million over the pre-allocated budget of RM284 million for the Projek Jalan Kampung due to its

immediate and tremendous impact on the rural people. Each project was completed within one month. In addition to creating impact for the public, the construction of roads transformed the economic profile of villages, allowing rural folk to wider opportunities. Taking agriculture as an example, rural folk are now able to venture into retail activities (related to agriculture) with the newly established road networks.

In terms of connection to water services, the Ministry also overachieved its target of providing 3,000 houses with access to clean water by achieving connection to 4,429 houses. This followed the close monitoring and supervision by the Ministry, State Water Authorities and project consultants, ensuring physical progress of the projects stayed on track; while any issues were promptly reported to the relevant local authorities for action. Furthermore,

the State Water Authorities also took the initiative to conduct campaigns to promote application for treated water among villagers.

The Ministry's housing assistance initiative to build and restore houses for the rural poor also exceeded its target for the year, building 3,233 new houses and repairing 8,900 houses against the target of 3,055 and 8,168, respectively. The initiative also saw savings from the cost of repairs, which enabled the implementation of more projects.

As part of the Ministry's effort to develop quality and reliable electricity supply to rural areas, 9,921 houses were connected to electricity in 2016, above the targeted 9,875 houses. To ensure the comprehensive electrification of rural areas, the Ministry leveraged two approaches. The first is by extending electricity supply from existing gridlines provided by the National and State utilities; while for off-grid areas such as those in mountainous and island regions, the Ministry utilised alternative systems such as solar, medium-sized generator sets and solar hybrid power. Completed projects are then handed over to the State Electricity Authority for operation and maintenance.

These achievements were recorded despite issues surrounding

land acquisition, changes in project location and lack of data available to identify suitable villages for projects.

Nonetheless, these initiatives continue to impact the lives of rural people. In addition to improving villagers' basic sanitation through connection to clean water, electricity connectivity impacts villagers by helping to reduce their financial burdens from the use of costly diesel generators. It also improves the quality of schools, encouraging teachers to stay in the local community and increase their involvement in school activities. Furthermore, street lighting promotes better safety and security.

Empowering Rural Communities

Further to efforts to improve the standard of living and access to rural basic infrastructure for villages in Malaysia's remote areas, the Ministry's efforts since 2012 have also focused on enhancing the sustainability of villages and its people's livelihoods. This has been achieved through economic empowerment programmes such as the 21st Century Village programme, spearheaded by the Desa Lestari initiative which aims to develop the

rural economic sector through co-operative platforms. This is undertaken through economic projects proposed by the villagers themselves, based on their expertise and focusing on sustainable projects which would also generate income quickly.

Since 2010, the NKRA has developed Desa Lestari in 73 villages. During the year, the Desa Lestari project achieved 100% of its targeted 20 villages, which was achieved as a result of close cooperation and affiliation between Ministries, State agencies and villages.

Another initiative under the 21st Century Village programme is the Rural Business Challenge (RBC) which encourages entrepreneurship among rural youth. Since 2010, 85% of RBC winners have achieved an increase in income by more than 30%. For 2016 alone, the initiative recorded increased income among 19 of the 23 winners of RBC 2014, with the winners increasing their income by 30%.

Other achievements recorded through the RBC in 2016 include the completion of physical infrastructure for the business ventures on time. Winners were also encouraged to participate in marketing and promotions programmes for their products, such as through Karnival Usahawan Desa, Halal Fiesta Malaysia and the Malaysia Agriculture, Horticulture and Agrotourism (MAHA) festival.

Some challenges were indeed faced in both the Desa Lestari and RBC initiatives, mainly: (i) the development of human capital, (ii) ensuring the competitiveness of products (iii) as well as improving project planning. Despite this, the relentless



The provision of basic utilities was a core focus of the ministry in 2016.

MOVING FORWARD ►

The Ministry will continue to undertake the people-centric projects under the NKRA, focusing on short-term projects which will create direct impacts for rural folk. The flagship road construction and rural poor housing programmes will be ongoing with higher budget allocation for roads in Sabah and Sarawak, while 85% of the overall target of projects to be implemented for the rural housing assistance programme, which is segmented into building new houses and repair/restoration have

been identified for repair/restoration to ensure a wider impact. House repairs by village councils are also in the pipeline in an effort to create higher value for money, with cost savings to be channelled towards aiding more beneficiaries. For new houses, improvements will be made to floor plans, size and design of the houses to offer its residents more comfortable homes.

EDUCATION



STRENGTHENING THE FOUNDATION OF A HIGH-INCOME NATION



**DATO' SERI
MAHDZIR KHALID**
Minister of Education

The Education initiatives under the NTP have been instrumental in ensuring a holistic approach to the development of both public and private education in Malaysia. This is in line with our goal to develop a rich pool of talent to drive our high-income aspirations.

Entering into Wave 2 of the Malaysian Education Blueprint 2013-2025 (MEB), the foundation, set by the NTP and Wave 1 of the MEB allows the Ministry to accelerate improvement towards greater transformation.

Malaysia also supports United Nations Sustainable Development Goals (2016-2030) - *to ensure inclusive and equitable quality education and promote lifelong learning for all*. In line with this goal, the Education NKRA and MEB have focused on the implementation of priority initiatives to transform the education system to develop holistic individuals.

Initiatives started under the NTP since 2010 are still in place and have become permanent activities carried out by the Ministry. This substantiates the effectiveness of these initiatives and that transformation in education is possible with the right support and discipline.

On top of accelerating improvements made during Wave 1, Wave 2 of the MEB will also focus on introducing structural changes. These are bold initiatives include transforming teacher training institutions (IPG) to be at par with higher learning institutions, increasing level of higher order thinking skills (HOTS) in students' learning process and also organisational restructuring of the Ministry to enhance its capacity and capabilities in delivery.

Under the Education NKEA, the private sector remains key in contributing to quality and accessible early childhood care and education. The Ministry has continued supporting the private sector while challenging the industry to improve its quality.

After much deliberation and engagement with relevant government agencies and stakeholders, the Government has approved and announced a new qualification minimum of a diploma in Early Childhood Care & Education (ECCE) for pre-school teachers by 2020. While this was not an easy decision to make, it is in the interest of our children that ECCE educators are qualified while raising the bar for industry players.

In the future, I hope the qualification and criteria for childcare providers will also be raised as it is critical to support child development from an early age to prepare them for lifelong learning. Providing quality education in a child's formative years also has the capacity to pre-emptively begin closing the educational achievement gap between low and high-income students before formal schooling begins.

I am confident that with these comprehensive measures in place, Malaysia's education system is becoming fertile ground for the development of world-class, wholesome individuals who can command high incomes and excel in the face of a globalised, competitive economy.



**DATO' SERI HAJI
IDRIS JUSOH**

Minister of Higher Education

Malaysia is fast becoming the choice destination for international students seeking higher education. With 172,886 international students in 2016, we are on track to achieve our goal of 200,000 international students by 2020 as laid out in the Malaysian Education Blueprint 2015-2025 (Higher Education). With 10 foreign branch campuses in the country from the United Kingdom, Australia, and China (including those ranked within the top 100 in the world), Malaysia is geared towards becoming the leading education hub in the region. The focus now will be on enhancing the country's education branding with

unique marketing campaigns in targeted countries. It is thus vital to leverage on the nation's education reputation which is soaring upwards.

The higher education system aims to produce graduates that are learned and values-driven; professionals, researchers, educators, entrepreneurs, and innovators who have an international outlook and can propel Malaysia's development forward. In relation to that, the Education NKEA seeks not only to create a vibrant education sector but also to ensure that Malaysians exiting the education system will be marketable and employable. To this end, the discipline cluster Entry Point Projects (EPPs) have made commendable progress towards improving the quality of the system, the graduates, and in enhancing our national talent input. The discipline clusters also act as enablers for other key economic sectors in Malaysia in developing specific expertise and driving growth of the sectors.

EDUCATION



Efforts under Discipline Clusters of Education NKEA have resulted in producing quality graduates that can meet the needs of the nation.

OVERVIEW

Education initiatives under the NTP aim first and foremost to improve student outcomes to develop intelligent, well-rounded Malaysians who can excel amid fierce competition for talent, both locally and globally within the context of a high-income nation. At the same time, the education sector has been identified as an engine of economic growth, presenting opportunities for private investment and education exports.

These initiatives are delivered through the Education NKRA and the Education NKEA. The NKRA focuses on raising standards of the public education system by strengthening its fundamentals through holistic reforms. Efforts are cascaded through critical education touchpoints such as policy, teaching standards and students themselves, encompassing education in the early years through

to the secondary school level to cultivate specific skills and capabilities which enable the creation of highly skilled human capital.

The Education NKEA, meanwhile, is geared towards private education services to not only offer world-class education to Malaysians to nurture a talent pool which can command high incomes, but also position Malaysia as a global education hub. At the same time, the development of the Education NKEA through the establishment of new education institutions and expansion programme offerings and services also contribute to the national aspiration in terms of jobs, GNI and investment in Malaysia.

Within the K-12 education space, with the announcement of the minimum qualification requirement for preschool teachers that will be effective in 2020, parents will be confident to send their children to preschools to ensure that they get the right education fundamentals to excel in school, thus resulting to a higher

private preschool enrolment rate.

Malaysia has also been successful in attracting the establishment of international schools with a current count of 116 international schools against a target of 87 by 2020. However, more effort needs to be taken to increase enrolment into these schools to meet the 75,000 student target. International schools were advised to market themselves by establishing unique selling propositions or adjusting their fee structure to encourage additional enrolments.

Currently, the Ministry of Education (MoE) is reviewing the approval criteria in approving new international school licences to ensure that the quality of education is not compromised in the setting up of international schools.

In the higher education space, continuous dialogues and discussions have been held with private higher education institutions, national education associations and the

Ministry of Higher Education to problem solve matters that inhibit efforts to position Malaysia both locally and internationally as a competitive education destination of choice. These challenges involve matters such as programme quality, fee setting and course approvals, all on an education institution level in addition to the on-going challenges on visa approval time.

With vibrant education offerings, Malaysia's education sector has been identified as a key export area by the National Export Council chaired by YAB Prime Minister. As such, one of the main focus areas for the Education NKEA in 2016 and beyond will be the enrolment of international students. As global international student mobility is expected to increase to about six million by 2020, of which 70% are expected to come from the Asia Pacific, much more work will have to be coordinated with multiple Ministries and agencies to ensure that the national target of 200,000 international students by 2020 is met.

Since 2013, the NTP's initiatives have also been supplemented with the introduction of the MEB, which builds on the NTP's efforts to accelerate the transformation of the education system and improvement of student aspirations to realise a globally competitive education system.

It is important to note that these initiatives take a long-term view on enhancing Malaysia's education landscape. Hence, results will not be visible overnight. However, the country has started to witness encouraging progress since the start of the NTP and MEB, setting the stage for lasting change.

This includes improvements against international benchmarks, such as the Trends in International Mathematics and Science Study (TIMSS), which has seen Malaysian students' performance in Mathematics



Education initiatives under NTP have improved the quality of teaching and learning in the classrooms.

and Science improve significantly following the introduction of the NTP and MEB. The study is conducted every four years and in its latest instalment in 2015, released in 2016, Malaysia registered 465 points, a 25-point improvement from 2011 in its Mathematics score. Among the 16 countries that have improved in Science, Malaysia showed the biggest improvement, with a 44-point jump, and scored 471 points. Malaysia aims to be in the top one third of participating countries in international assessments by 2025. Currently, based on TIMSS 2015 results, Malaysia is placed among the top two thirds of participating countries in international assessments, as it placed 22nd for Mathematics and 24th for Science, out of 39 countries participated.

In another global benchmark, the Programme for International Student Assessment (PISA), Malaysia also recorded improvements in Mathematics, Reading and Science in 2015, registering 446, 431 and 443 points, respectively against 421, 398 and 420 in its last assessment in 2012. This means that Mathematics, Reading and Science have improved by 25, 33 and 23 points respectively.

Among other milestones achieved in education include the country being singled out as a top

performer in terms of national policies on openness to international higher education in the British Council's The Shape of Global Higher Education: National Policies Framework for International Engagement research paper. Furthermore, the QS Best Student Cities index ranked Kuala Lumpur as the most affordable city for university students. Overall, in 2016, the Education NKRA achieved 90% of its KPIs, and the Education NKEA achieved 118% of its KPIs.

Although challenges remain mainly due to the sheer breadth of initiatives being undertaken, the Government remains confident that the country has embarked on the right track to elevate the education system for the development of a highly-skilled workforce.

Malaysia aims to be in the top one third of participating countries in international assessments by 2025.

EDUCATION



Since the launch of the NTP, pre-school enrolment rate has increased significantly to 85.56% in 2016.

In 2016, the national preschool enrolment rate increased to 85.56%, representing 865,464 4+ and 5+ year-old children.

Sowing the Seeds of the Future

The Government has recognised that efforts to enhance student outcomes must start from the early years. Initiatives under both the NKRA and the NKEA aim to improve enrolment and the quality of ECCE, with the NKEA geared towards tapping private sector participation to achieve targets.

In 2016, the national preschool enrolment rate increased to 85.56%, representing 865,464 4+ and 5+ year-old children. It should be noted that the enrolment rate for 5+ age group is almost universal at 92.1%, although there remains a shortfall in

the 4+ age group with only a 79.4% enrolment rate. This is mainly due to a shortage of classes in public preschools and parents' awareness that children can benefit from preschool education as early as 4 years old.

Meanwhile, the NKEA recorded the enrolment of 439,543 students aged 4+ and 5+ in private preschools, making up 52% of total preschool enrolment. Additionally, 417 new private preschool centres and 239 new private childcare centres were established during the year, bringing the total number of private preschool centres and childcare centres to 7,360 and 3,525 respectively.

Furthermore, to ensure the provision of quality preschool education, the Government

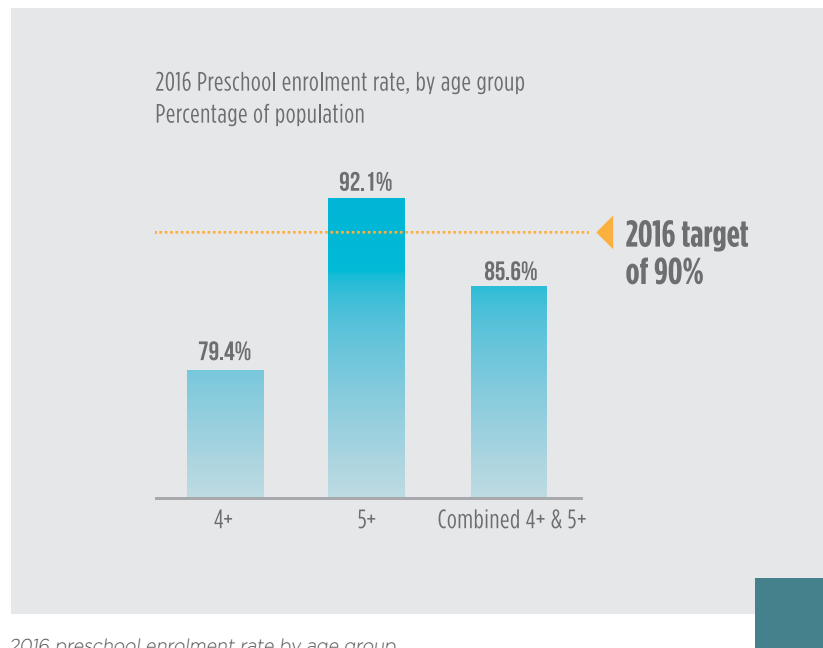
announced on 1 April 2016 that all public and private preschool teachers must possess a minimum qualification of a diploma in ECCE, with full effect from 2020. While new teachers will be required to abide by the new policy starting January 2017, there will be a three-year grace period for existing teachers to upskill themselves to diploma level. This is in view that approximately 80% of total preschool teachers still do not have a minimum diploma in ECCE qualification.

Also towards ensuring quality preschool education, 22,975 preschools have participated in the National Preschool Quality Standard assessment following its introduction in 2015. Of these, 22,549 or 98% were found to have met the minimum quality standards. The School Inspectorate and Quality Assurance (Jemaah Nazir dan Jaminan Kualiti - JNJK) coordinated verification activities of the self-assessed tool on 543 preschool centres with the help of the inspectorates from the Community Development Department (KEMAS), the Department of National Unity and National Integration (JPNIN) and MoE's Private Education Division.

Enhancing the Education Ecosystem

As students' main educational touchpoint, schools form a critical part of the education landscape in improving student outcomes. Undertaken through the NKRA, efforts are therefore focused on close monitoring of the performance of schools to ensure a targeted approach to the delivery of improvements.

Launched in 2010, the School Improvement Programme (SIP) provides targeted support to all 10,000 Government primary and



2016 preschool enrolment rate by age group

secondary schools in Malaysia, especially lower-performing schools, by banding the schools into seven categories. This allows the MoE to focus efforts and resources on underperforming schools (Bands 6 and 7) while making schools more aware of their performance to motivate them to raise their ranking.

During the year, primary schools continued to improve with more schools moving up to higher bands. The overall number of schools in Bands 1 and 2 which are the top achieving schools in Malaysia rose to 3,980 in 2016 from 3,105 in 2015. However, secondary school banding shifted downwards due to the exclusion of Form 3 Assessment (PT3) from school banding calculation. This is as PT3 is not an externally-assessed exam, making it difficult to be used objectively for national banding. As a result, the overall number of schools in Bands 6 and 7 rose to 199 in 2016 from 139 in 2015. As assessments in the school system have undergone significant changes in recent years, there is an opportunity to review and enhance the existing school

banding methodology in 2017. As a result, school banding will not be tracked as a KPI in 2017 while a new methodology will be developed for school banding.

The High Performing Schools (HPS) programme, meanwhile, aims to improve the quality of Malaysia's best schools and raise the bar for all schools. Since 2015, 132 schools have been identified as High Performing Schools. No new HPS were identified in 2016 however, as the Government exercised stricter selection of schools to maintain the quality and prestige of HPS. Efforts were focused instead on ensuring HPS help surrounding schools move upwards through coaching and networking.

The Literacy and Numeracy Screening (LINUS) programme will also be continuously implemented and monitored. As the programme has run for seven years and undergone several revisions and improvements, LINUS will remain as a vital component of the new Primary School Standard Curriculum (KSSR) syllabus for primary schools to ensure students obtain basic

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DUAL LANGUAGE PROGRAMME

A WIN-WIN FOR STUDENTS AND TEACHERS



*Dr. Logendra Stanley Ponniah,
Dean of the Education Faculty at Taylor's
University, which supported SK Convent
Bukit Nanas (CBN) 1 & 2 in their
DLP Programme*

Fourteen third-year students from the Education Faculty of Taylor's University participated in a 10-week Math and Science workshop with SK CBN 1 & 2 in the second semester of 2016 as part of the Government's efforts to support the school's implementation of the Dual Language Programme (DLP). All 14 students went into the programme with much enthusiasm and passion to teach and to learn. They completed the workshop with remarkable skills which they could not have learnt from books such as classroom management and clinical teaching methodologies, says Dr. Logendra Stanley Ponniah, Dean of the Education Faculty at Taylor's University Malaysia who oversaw the workshop.

SK CBN 1 & 2 were selected to participate in this programme as the schools requested for assistance in teaching students who were weak in English, especially in its usage for Math and Science subjects. Nevertheless, the students were willing to learn in English as the programme provides opportunities to improve language mastery through increased exposure to the language. These two schools also fulfilled the NTP's urban poor public school criteria in the DLP programme.

Education faculty students from Taylor's were stationed at the schools twice a week for the workshop, bringing with them multiple specially-designed tools and games in English. Selected Year Four students would take turns to participate in the workshop; their respective subject teachers were also present to manage the class and participate in the learning process. Pre- and post-workshop Math and Science test performances of the students were recorded from which the findings showed a significant improvement in their test results.

Dr. Logendra proudly emphasises, "Students, teachers and principals of SK CBN 1 & 2 were very pleased with the outcome and were ready to adopt the learning of Math & Science in English with a new perspective." Teachers discovered that prior to the workshop, the Year Four students struggled with a poor English vocabulary that led to poor understanding of mathematical and scientific principles. Dr. Logendra continues, "The workshop helped the teachers to see new and creative methods in teaching Math & Science in English and the focal issue to be emphasized on when teaching the

"The workshop helped the teachers to see new and creative methods in teaching Math & Science in English and the focal issue they should emphasise when teaching the subjects in English."

subjects in English. In the meantime, the Taylor's University students had an experiential field exposure where they learned to manage the class from the school teachers who were present throughout the workshop."

Although this DLP workshop was only an experimental programme, it has proven that the principles in Math and Science were not the core difficulty in learning for the Year 4 students. It was the language proficiency that hampered the learning process of the students. With this significant finding, both the MoE and Taylor's University will propose their recommendations to improve English language learning capacities and environments for school children at various levels.

MINISTRY OF EDUCATION REVITALISES TEACHER TRAINING



Dato' Haji Mahmud Karim, Director of MoE's Teacher Training Division

The private teacher training programme was the first in Malaysia's history of teacher training to have new recruits trained by private higher education institutions. As part of the the NTP's Education initiatives, it was the first public-private sector collaboration in a teacher training programme, with selected private institutions including SEGi University, Universiti Tunku Abdul Rahman (UTAR) and UCSI University.

According to the Director of the MoE Teacher Training Division, Dato' Haji Mahmud Karim, the Ministry saw that the private institutions would be able to provide a more wholesome campus experience to the trainees who may be from the remote rural areas. The private institutions provide a diversified learning environment where their students may

be from different parts of the world. The trainees would also be given opportunities to experience a vast array of learning methods and have access to top-notch libraries and labs.

Seventy-three new teacher recruits were selected to participate in this inaugural collaboration between the MoE and private institutions and enrolled into the English teaching programme. The main criteria of the selection process was a minimum of 5As in their SPM results. "The trainees were trained to be English teachers for primary schools (Sekolah Rendah) nationwide. All the 73 trainees' tuition fees, room and board expenses at the private institutions were fully sponsored by the MoE," Dato' Haji Mahmud Karim says.

"All 73 trainees completed the diploma training at the end of 2016. They will be channelled to various primary schools nationwide through the usual teacher placement process; there is no special process to allocate these newly trained teachers to any specific urban or rural schools," Dato' Haji Mahmud continues, "All placements will be processed according to the vacancies raised by the respective schools through the state education office. The need for English teachers in schools is the priority of the Education Ministry."

The main challenge of this programme is the selection of trainees to be enrolled in private institutions. The selection committee spent the most time reviewing the quality and character of the applicants to ensure their suitability and commitment. The committee is responsible for ensuring that the Ministry's investment in sponsoring the selected trainees would be returned through the trainees' full commitment to teaching upon graduation.

Another challenge was the selection of suitable higher institutions

to collaborate with the MoE. This was overcome through a three-way approval process for the institutions that applied to join the programme. The three approval parties were the MoE, the Ministry of Higher Education (MoHE) and the Malaysian Qualifications Agency (MQA).

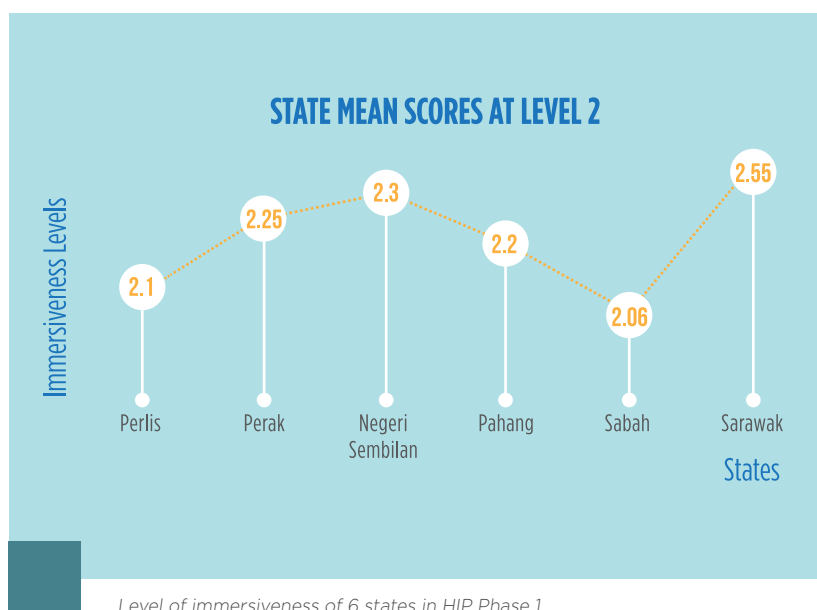
As the first batch of trainees have just graduated from training, it is too early to make any assessment of their teaching quality. However, in the future, the Ministry looks forward to having more dynamic forums and two-way dialogue with participating private institutions for more value-added training curricula to be provided. It is also the desire of the Ministry to see more quality private institutions apply to collaborate in such initiatives.

The Ministry expects teachers trained by these private institutions to have attained more unconventional and creative teaching methods and philosophies. These teachers should be able to train school children to think more dynamically rather than just rote-learn.

Ultimately, these collaborations will benefit Malaysian children in their education. The MoE is always committed to work with private institutions to improve the training of Malaysian teachers to bring about positive change to the country's education system.

"The need for English teachers in schools is the priority of the Education ministry."

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Level of immersiveness of 6 states in HIP Phase 1

Source: Monitoring and Support Visits Phase 1 Report by English Language Teaching Centre

literacy (Bahasa Malaysia and English) and numeracy by the end of Primary Year 3.

Nurturing Globally Competitive Students

Enhancing the proficiency of students in the English language makes up a key thrust of the NTP's efforts to cultivate students who are globally competitive. Through the NKRA, initiatives are centred on two approaches: The Dual-Language

Programme (DLP) which gives schools the option to teach Science and Mathematics in English or Bahasa Malaysia to Year One, Year Four and Form One students; and the Highly Immersive Programme (HIP), which aims to increase English proficiency of pupils through increased immersion in the English language through in-class and out-of-class activities, extra classes and outreach programmes.

The DLP and HIP were introduced following an English language lab conducted in 2015. It is to ensure that students are more proficient in the English language, given that they are

exposed to more English language activities and longer duration of language exposure through the teaching and learning of Science and Mathematics subjects in English. In 2016 the Government implemented the DLP in 378 schools, comprising 132 primary and 246 secondary schools. Cambridge English Language Assessment conducted a baseline study to measure students' English language proficiency by administering a Cambridge English exam. The results were used to measure the impact of the DLP on students' English proficiency in comparison to students from non-DLP schools.

Based on the DLP baseline study conducted on 3,520 students (comprising both DLP and non-DLP students), the students involved in the DLP appeared to have benefitted in terms of strengthening their English language ability. Additionally, 75% of DLP students were placed at or above the target level of the test (60% at A2 and 15% at B1), as compared to 61% of non-DLP students. In terms of overall performance, some 62% of rural DLP students performed at or above the level of the test (57% at A2 and 5% at B1). While this is some way behind urban DLP at 79% (61% at A2 and 18% at B1), it is closer to the performance of non-DLP urban students at 67% (54% at A2 and 13% at B1).

The study concluded that DLP students clearly did better in terms of higher numbers achieving the standard and registering fewer students notably below the target. A stronger profile is also apparent among DLP students in schools that are only partially participating in the DLP.

Although the baseline study has been encouraging, the self-selection of students may mean that the students in the DLP schools already have better levels of English proficiency to be able to participate

Based on the DLP baseline study conducted on 3,520 students (comprising both DLP and non-DLP students), the students involved in the DLP have appeared to benefitted in terms of strengthening their English language ability.

in the DLP pilot. With the baseline study in place, the Ministry will continue to evaluate the impact of the programme next year.

The Ministry has also decided that UPSR papers for Science and Mathematics subjects will continue to be offered in dual-language. This is an important enabler for the success of the DLP.

Some schools have given feedback to the MoE requiring additional support to implement the DLP. Twenty-seven schools have also been identified as 'at risk' schools for various reasons. In an effort to ensure the success of the DLP, PEMANDU has engaged with other institutions and private organisations to support DLP schools by providing additional teaching and learning materials and training for teachers and students. Additional support has been provided to teachers through the provision of an online training programme developed by MoE's English Language Training Centre (ELTC).

For example, Taylor's School of Education supported Sekolah Kebangsaan Convent Bukit Nanas 1 (SK CBN 1) and Sekolah Kebangsaan Convent Bukit Nanas 2 (SK CBN 2) through a 10-week Mathematics and Science workshop for Year 4 students. Using a learner centric pedagogy approach that encourages collaborative learning, pupils developed better communication skills with the results of the summative assessment conducted before and after the intervention showing improvement in scores for both subjects. Other organisations such as Sri KDU and Cambridge University Press have also supported some DLP schools, focusing on the teachers. In order to join the DLP, schools must fulfil certain criteria. This limits the participation of schools in the programme as not all schools are qualified for the DLP. However, there is a need for more hours of English



Ninety-four schools in six pilot states were selected to embark on the first phase of the HIP journey, which commenced in March 2016.

in schools, making the HIP a good platform to allow more schools to participate in the DLP and gain more hours to conduct English activities.

A highly immersive environment for the English language is defined as a learning environment that is surrounded by English language usage. This environment is constructed using English language activities that are fun, game-, problem- and simulation-based. This simulates realistic scenarios and tasks that give learners the opportunity to practise their English language skills and interact with other learners using these language skills.

Ninety-four schools in six pilot states were selected to embark on the first phase of the HIP journey, which commenced in March 2016.

In its second phase which started in July, the programme was expanded to 1,106 schools in other states. In 2017, HIP will be scaled-up to 5,500 schools and will be fully implemented in all 10,000 schools by the year 2018. HIP practices in schools have been encouraging, recording significant progress. For Phase 1, Sarawak showed the highest level of English immersion among the six states. The level of immersion is categorised across four levels, with level 1 being the weakest and level 4 the strongest.

Data showed that no school had rated itself a Level 4 of the immersiveness scale. Twenty-one schools across the six states (22%) rated themselves a Level 3 of the immersiveness scale. The majority of the schools (71 schools: 76%) rated

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themselves a Level 2 and two schools (2%) rated themselves a Level 1 of the immersiveness scale. The two schools that rated themselves a Level 1 were from the state of Perak (1 school) and Sabah (1 school).

Similar to the DLP, PEMANDU has engaged with private organisations and facilitated a few collaborations to further support HIP schools. For example, Sunway University conducted a series of workshops to provide a platform for teachers of HIP schools in Perak to develop their own ideas for building an English language school culture that is affordable, realistic and sustainable.

Other examples include Pintar Foundation's support of 74 primary schools through the Action Song Programme to develop confidence and familiarity with the English language among younger pupils. This programme also develops skills in integrating the scripting of music and movement with language. The Edge Education Foundation has also been supporting some English

programmes in schools.

Further supporting the Government's efforts to enhance English proficiency among students, in 2016 84.5% of B1 teachers and 42.7% of B2 teachers that participated in the Professional Upskilling of English Language Teachers (Pro-ELT) programme in that year have improved their proficiency band. The year also marked the first time since 2013 that the upskilling training was conducted in-house by the MoE's ELTC trainers using the British Council's modules. Notably, the results are comparable to English teachers who were trained by the British council in 2013.

While Pro-ELT initiatives have improved our English teachers' proficiency level based on the Common European Framework of Reference for Languages (CEFR), it is important to ensure new English teachers entering the service have the right proficiency level as well. The Ministry requires all new English teachers to graduate from the Institute of Teacher Education

(Institut Pendidikan Guru - IPG) with C1 (effective operational proficiency). However, this fell short of targets during the year, with 64% of pre-service teachers achieving C1. Nonetheless, the MoE is confident that graduates in 2017 will perform better as this cohort underwent strict selection and have undertaken a strict IPG curriculum since the start of their five-year pre-service course.

Harnessing Talent through a Focused Approach

Under the NKEA, strategies have been identified to establish discipline clusters in the provision of private higher education to develop a pool of talent in specialised areas. These strategies address Malaysia's challenges to prepare a wide variation in quality graduates for key industries both locally and internationally

Under the NKEA, strategies have been identified to establish discipline clusters in the provision of private higher education to develop a pool of talent in specialised areas.

Common European Framework of Reference for Languages

Proficient user	C2	Mastery
	C1	Effective Operational Proficiency
Independent user	B2	Vantage
	B1	Threshold
Basic user	A2	Waystage
	A1	Breakthrough

and utilises a network of education institutions, international institutions and industry to collaborate and develop relevant academic offerings.

Private Skills Training and Education

Technical Vocational Education and Training (TVET) has formed one of the Government's key thrusts in enhancing Malaysia's talent pool in line with its high-income aspiration. This focus area aims to rapidly scale up and increase the quality of private skills-training institutions and attract international vocational students. This will be achieved by increasing public-private partnerships with technical and vocational schools and facilitating industry investment in training to provide students with an alternative option for learning and establish closer ties with the industry.

Highlights of the initiative during the year include Malaysia emerging as overall champion at the 11th ASEAN Skills Competition held on 19-29 September 2016 with an impressive haul of 24 gold, four silver and five bronze medals.

In other developments, the Department of Skills Development under the Ministry of Human Resources has shifted its focus towards the quality of trainers in institutions. Under the KPI of improving the knowledge and expertise for TVET instructors, approximately 13,923 have been trained through short-term and long-term courses.

Islamic Finance and Business Education Cluster

The Islamic finance and business education cluster aims to cultivate talent in Islamic finance and business to meet the sector's human capital needs, while leveraging Malaysia's dominance in Islamic finance. The target for this cluster is to establish a standard national curriculum for an education in Islamic finance and business of which will be used to

further develop an international-recognised professional certification, which is critical in major markets like the Middle East. On top of this, EPP7's project lead will be undertaking plans to develop a concerted marketing campaign on these education disciplines to increase enrolments of students in related courses. In 2016, the International Council of Islamic Finance Educators (ICIFE) has attracted 145 new individual and institutional members, locally and internationally. The globally recognised professional association for Islamic finance educators has attracted close to 400 individual and institutional members in total. This

discipline cluster also aims to increase student enrolment in Islamic finance and business programmes to 54,000 by 2020. In 2016, 15,606 students were enrolled. This EPP's progress is tracked by the number of enrolled students into Islamic finance and business programmes

Health Science Education Cluster

As reported in the past, this EPP was shelved previously as development plans were still being reviewed by the EPP project owner. It was reactivated two years ago and the Health Science Education Cluster EPP is gaining traction again. The target of this EPP is to ensure medical



The Discipline Clusters have been successful in producing graduates that have strong exposure to industry practices through collaborations with industries.

In 2016, 15,606 students were enrolled in Islamic Finance and Business Programmes.

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At the end of 2016, a total of 850 students including Peneraju scholars were enrolled in professional accounting courses through public and private partnerships with various universities.

and health students gain employment upon graduation, through the establishment of the UCSI University's Teaching Hospital as a start to lead the cluster development to set the stage as a training ground, crucial for practicum placements as well as for the development of industry-relevant curriculum.

UCSI University's Teaching Hospital in Bandar Springhill, Negeri Sembilan is currently being set up to be the first private teaching hospital in Malaysia to bridge American medical practices and will be a leader in the teaching and training of Masters, MRCP and American Fellowship students via its first medical certification centre for the Educational Commission for Foreign Medical Graduates (ECFMG) examinations and training. It will also engage in world-class medical research collaborations with US, UK and Canadian universities and research centres.

The first phase of the hospital will have the capacity for 130 beds by

2017, catering for medical, surgical, obstetrics and gynaecological and paediatrics general wards as well as critical wards such as an Intensive Care Unit, Coronary Care Unit and High Dependency Unit.

Hospitality and Tourism Cluster

In an effort to support the growth of the tourism industry, the hospitality and tourism cluster aims to increase hospitality and tourism graduate output from 20,000 in 2009 to 50,000 by 2020, led by the Malaysia Centre for Tourism and Hospitality Education (MyCenTHE). With the target to have 50% of the industry tourism and hospitality workforce trained or reskilled, MyCenTHE aims to raise the quality of the workforce with the combined efforts of its 15-member institutions and seven cluster leaders across the nation.

In 2016, MyCenTHE revitalised its branding and promotional efforts by holding marketing campaigns, as well as reaching out to the youth and public using social media to educate and create more awareness on the future of the tourism and hospitality industry as well as related career aspects. In its awareness and marketing campaigns, it also introduced its Events and Retail Discipline Leader, Berjaya University College of Hospitality.

Making its contributions together with leading education providers in Malaysia, MyCenTHE with coordination by the Ministry of Higher Education will work with Sunway University, Taylor's University and KDU University College to continuously collaborate and organise events to promote hospitality and tourism education in Malaysia as well as collaborations with associations in the ASEAN region.

Accountancy Education Hub

Championed by Sunway TES, this discipline cluster was established specifically to build a sustainable pool of talent by incorporating professional accounting qualifications into existing accounting degree programmes offered by public and private institutions of higher learning. Besides the public and private partnership initiative, Sunway TES also supports the effort in increasing the numbers of Bumiputera professional accountants under the Yayasan Peneraju Pendidikan Bumiputera (Peneraju) sponsorship programme. The target is to produce 5,500 chartered professional accountants by 2020. The progress of this discipline cluster is tracked by the number of enrolled students in Sunway TES programmes which are in collaboration with public higher education institutions and Peneraju.

During the year, Sunway TES signed an MoU with the Department of Polytechnic Education (Jabatan Pendidikan Politeknik - JPP). Under the agreement, Sunway TES and polytechnic institutions will be collaborating with ACCA to promote the professional accounting certification programme to students. The initiative includes a Train-the-Lecturers programme, intensive English courses and preparatory classes for selected ACCA papers. Politeknik Port Dickson (PPD) has been identified to pilot the programme. Also to note is the support of Peneraju towards this initiative as scholarships will be provided to candidates who meet the requirements under "Program Profesional Akauntan Muda" by Peneraju.

At the end of 2016, a total of 850 students including Peneraju scholars were enrolled in professional accounting courses through public and private partnerships with various universities.

Positioning Malaysia as a Global Education Hub

Malaysia has established itself as an international education hub through initiatives under the NKEA to leverage the country's value for money, wide range of courses and schools available, safe environment and multicultural population. In 2016, the country recorded 172,886 international students, encompassing international school-level and tertiary-level students, and is on track to meet the target of 200,000 international students by 2020.

Reflecting the success of this initiative, UNESCO in its latest International Students Mobility Survey ranked Malaysia the ninth-preferred destination for tertiary education among international students, from 12th in 2014. Efforts under this initiative include closely monitoring students and schools to maintain the quality of the country as an education hub. Additionally, while attracting international names in tertiary education is vital to support this initiative, the Government will remain selective in approving the establishment of foreign university campuses here, where there are currently 10.

To further support the country's status as an education hub, the Government will facilitate Tier One institutions to establish foreign branch campuses in the country. One of the 10 branch campuses set up in this country is the Heriot-Watt University Malaysia, which was established in Putrajaya in 2014 and offers foundation, undergraduate and postgraduate programmes.

In 2016, the university welcomed its third cohort of undergraduate students, including students from two

new programmes; Accounting and Business Finance and International Business Management. Also among them were more than 30 transfer students from its UK and Dubai campuses. In April, it registered its largest batch of nearly 200 foundation students.

During the year, the Malaysia campus, together with the university's two other main campuses in Dubai and the UK signed an agreement with the Chinese Service Centre for Scholarly Exchange and its study abroad centre to collaborate to send students from China to study abroad at any of Heriot-Watt's campuses. An agreement was also signed with Guizhou University that will allow Guizhou University students to undertake the first and second year of the programmes under Heriot-Watt's School of Social Sciences in China, before continuing their final year at any of the university's other campuses.

The EduCity@Iskandar initiative further marks Malaysia's strategy as an education hub. It also plays an integral part in the success of Malaysia's Economic Transformation

programme. EduCity@Iskandar is a fully integrated education hub comprising of institutes of higher education, student accommodations as well as recreational and sports facilities. A number of renowned institutions have established themselves at EduCity over the years with both international and local student numbers gradually increasing as institutions continue to expand its programme offerings.

During the year, it also welcomed two new campuses with the opening of Multimedia University's (MMU) Johor Campus and University of Reading Malaysia (UoRM)'s first overseas, full-fledged campus.

The University of Reading Malaysia (UoRM) will also be home to the internationally renowned, triple-accredited Henley Business School and its prestigious Henley MBA. The programmes will allow undergraduates and postgraduate students to split their time between the UK and Iskandar campuses.

MMU's third campus in EduCity offers the Bachelor of Cinematic Arts (Honours) programme in collaboration with the University of



The EduCity Stadium and Sports Complex has a seating capacity of 14,000 and houses sporting facilities of international tournament standards.

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Southern California. Since its opening on 25 January 2016, a total of 153 students have enrolled in MMU. UoRM opened its doors a month later to offer courses fully accredited as University of Reading degrees.

In addition to MMU and UoRM, EduCity currently houses the Newcastle University of Medicine Malaysia, Marlborough College Malaysia, University of Southampton Malaysia Campus, Netherlands Maritime Institute of Technology, Raffles University Iskandar, Management Development Institute of Singapore and the Raffles American School.

In February 2016, PEMANDU and EduCity Iskandar Malaysia Sdn Bhd held a round-table discussion with various corporate bodies, education foundations and universities in Educity, on the grant of scholarships and sponsorships. EduCity celebrated another important milestone in July 2016 as the first batch of 18 engineering students from the University of Southampton Malaysia Campus graduated.

To widen its reach for potential students, EduCity collaborated with Education Malaysia Global Services (EMGS) and held several exhibitions in Pakistan, Kazakhstan, Jakarta and

Thailand. The roadshow received 65 applications for the 2017 academic year which were forwarded to the respective universities.

It also undertook several infrastructure upgrades in 2016, including the increase of Internet bandwidth at the student village and the introduction of an additional free bus service from Puteri Harbour to Larkin Sentral with a stop at EduCity. This new service enhances the current EduCity bus that runs on Fridays, weekends and public holidays from the student village to Anjung Nusajaya, Bukit Indah and Larkin Sentral. In 2017, it will undertake a RM1.9 million expansion of its gymnasium. Its sports complex also currently hosts training for JDT football teams (under 12 and 15), with 70 of the young footballers staying at the student village. The complex is also used to host other state-level events.

Further supplementing the NKEA's initiative to position Malaysia as an education hub, efforts have been taken to increase the number of international schools in the country to accommodate the education needs of the influx of expatriates and returning diaspora. This will also allow Malaysia diaspora to benefit

from the foreign exchange income earned from international school spending.

During the year, a private-partnership programme agreement was signed between the International School of Kuala Lumpur (ISKL), the Employees' Provident Fund (EPF) and the Federal Land Commissioner for the establishment of ISKL's new campus. ISKL will invest RM350 million in the new campus that is scheduled to open its doors in August 2018 offering early years, elementary, middle and high school education. The new school is expected to attract students, teachers and administrators from around the world and enhance Malaysia's reputation as a centre of world-class education.

There are currently 116 international schools operating in Malaysia, exceeding the targeted 87 schools by 2020 as identified under the NKEA. However, the initiative has yet to reach the target of 75,000 students as most international schools operate below capacity. Efforts are therefore required to monitor the quality of education provided by the schools to attract more students.

In view of this, the MoE has developed action plans to be more stringent in approving new licences as well as monitor "at risk" schools to ensure that the interests of students and schools are protected. The key objective of this action plan is to provide quality education. Focus will be given more to the existing providers by elevating the quality of all international schools in order to reduce the capacity gap. Simultaneously, the policies under various Ministries to attract international students must be reviewed and streamlined.

In addition to MMU and UoRM, EduCity currently houses the Newcastle University of Medicine Malaysia, Marlborough College Malaysia, University of Southampton Malaysia Campus, Netherlands Maritime Institute of Technology, Raffles University Iskandar, Management Development Institute of Singapore and the Raffles American School.



MOVING FORWARD ►

The Ministry of Higher Education aspires to attract more talented students for post-secondary education in Malaysia. While the target of student enrolment is being met, the Ministry is committed to improve its international students and tertiary education policy and service delivery through business process reengineering to further improve the country's competitiveness as an education hub.

Education NKEA EPPs will continue to be developed with more collaborations between institutions and associations to ensure the quality and education offerings are robust and relevant with marketing initiatives undertaken locally and internationally to attract international students to study in Malaysia.

Discipline clusters will continue growing their members as well as affiliations with relevant industry associations and players. For example, MyCenTHE under the initiative to build a hospitality and tourism discipline cluster of the Education NKEA will expand its collaboration with more hotels as well as relevant hospitality and tourism associations to ensure that students gain exposure to the world of work prior to graduation,

acquire relevant skillsets to ensure job compatibility as well as support the employment of graduates.

In this regard, the Ministry of Higher Education has and will continue to provide strong support to discuss and facilitate the development of the Education NKEA EPPs to overcome challenges that have been inhibiting growth.

Efforts under the NKRA meanwhile will focus on achieving aspirations under the MEB. This includes being bolder in carrying out structural changes to accelerate transformation in the education system, such as tightening the selection criteria for new teachers, setting a minimum level C1 English proficiency for new English teachers and enhancing the pedagogy approaches of teaching to embrace technology as well as student-centred and collaborative learning.

The Ministry of Education recognises that concerted effort and participation from all stakeholders, including parents, the community and the private sector is imperative to the success of the transformative journey. To realise this collaboration, every party should be open and receptive to new ideas and ways of working,

including forming public-private partnerships in education.

Approximately 838 more schools are targeted for the adoption of the DLP in 2017, while lessons will be made more interactive. Efforts will also be taken to ensure sufficient resources such as textbooks, reference books and learning materials are aligned with the latest syllabus. Additionally, initiatives will focus on ensuring teachers are well-trained to teach Mathematics and Science in English. The selection of teachers involved in the Teaching and Learning of Science and Mathematics in English (PPSMI) will be prioritised, as well as the co-training of new teachers.

Under the HIP, pilot schools will be encouraged to share their best practices with others. The State Education Departments and District Education Offices must play an important role to anchor HIP schools and guide them towards better immersion in English. The number of HIP schools will increase to 5,500 in 2017, with a target to have all schools running HIP by 2018, requiring heightened monitoring to track and report the immersion level consistently and efficiently.

GREATER KUALA LUMPUR/KLANG VALLEY



**DATUK SERI UTAMA TENGKU
ADNAN BIN TENGKU MANSOR**

Minister of Federal Territories

The Greater Kuala Lumpur and Klang Valley (Greater KL/KV) region, a source of pride for many Malaysians, has continued to grow from strength to strength. In 2016, we saw a number of major projects coming to fruition after the last six years of hard work from stakeholders involved.

A major game changer eagerly anticipated by Malaysians and Singaporeans alike is the High Speed Rail (HSR) connection between Kuala Lumpur and Singapore. A bilateral agreement was successfully signed on 13 December 2016, establishing guidelines and protocols required for the commencement of the HSR project and acting as a framework to start the construction process. Expected to be completed by 2026, the HSR will spark a new era of improved and thriving relations between two of the most prominent cities in Southeast Asia.

The commencement of operations of the Mass Rapid Transit (MRT) on 16 December 2016 marked another feather in our cap after five years of construction. I am pleased to note that the first phase of the Sungai Buloh-Kajang Line was completed ahead of schedule and enabled cost savings of RM2 billion, and bears testimony to the Government's commitment to fulfilling its promises to the rakyat.

Projects such as the HSR and the MRT can only cement Greater KL/KV's position as an economically vibrant metropolitan area, attracting both local and foreign talents. From 2011 to 2016, TalentCorp's Returning Expert Programme (REP) facilitated the approval of more than 4,000 skilled Malaysians from abroad to contribute to the growth of the nation. Concurrently, InvestKL continues to draw multinational corporations (MNCs) in setting up their regional operations here in Greater Kuala Lumpur, and in 2016 drew 13 new companies, bringing the total number of companies which have set up their bases here to 64. The River of Life (ROL) project, which aims to transform the iconic Klang and Gombak rivers to their former glory while spurring more commercial and recreational activities, also recorded encouraging progress with the river beautification portion starting to show tangible results.

Overall, the growth and development of Greater KL/KV has made it one of the most vibrant cities in Southeast Asia and I look forward to its continued advancement.

OVERVIEW

The transformation of Greater Kuala Lumpur and Klang Valley (Greater KL/KV) remained positive and progressive in 2016, with the region sustaining its position as a hive of economic activity, despite difficult operating conditions in the global landscape. In 2016, the Greater KL/KV NKEA achieved 115% of its KPIs.

This was reflected by developments in the NKEA's initiatives during the year. Highlights include the signing of a bilateral agreement between the Malaysia and Singapore Governments for the Kuala Lumpur-Singapore High Speed Rail (HSR) project on 13 December 2016. This paves the way for the implementation of the project, which is targeted for completion in 2026.

The enhancement of connectivity in and around Greater KL/KV is a vital component of the region's continued socioeconomic development. Following the milestone achieved by the HSR project, on 16 December 2016 the eagerly anticipated Mass Rapid Transit opened its doors to the public with the commencement of Phase One of the Sungai Buloh-Kajang Line.

InvestKL focuses on attracting large global multinationals such as Fortune 500 and Forbes 2000 companies to set up their regional business, innovation and talent hubs in Greater Kuala Lumpur and strategically grow their business in Asia. The mandate has successfully delivered a total committed investment of close to RM 9 billion and creation of over 5,000 regional jobs. The 2016 report card proves that Kuala Lumpur remains a key investment destination as InvestKL managed to achieve a stretch target of securing 13 MNCs to establish their regional offices in Greater KL/KV or expand their footprint in the Asia



Masjid Jamek: The Heart of the River of Life Project.

region amid global uncertainties and economic slowdown.

A milestone currently in progress and anticipated for completion in early 2017 is the first package of the river beautification works under the River of Life (ROL) project. This project, carried out deep in the heart of Kuala Lumpur's Heritage Quarter and in the vicinity of Masjid Jamek and Bangunan Sultan Abdul Samad – two of the most important heritage buildings in Kuala Lumpur – is aiming to transform this area into a vibrant waterfront with a high economic and commercial value. The ROL project will continue its extensive river beautification works along the 10.7 kilometre stretch of the Klang and Gombak rivers starting from Puah Pond in the north to the borders of Mid Valley in the South.

To make Greater KL/KV a greener, sustainable and more vibrant city, concentrated efforts were focused on the GPS-tagging of 30,000 trees

and the adoption of four parks. To date, 135,734 trees have been planted under the Greener KL initiative, exceeding the 100,000 trees targeted for planting by 2020. Additionally, an outcome study conducted by DBKL and the Ministry of Federal Territories and presented to the Prime Minister's Department and the Implementation Coordination Unit (ICU) in October 2016 showed that the trees planted have resulted in a 64.9% increase in shaded area, equivalent to 1.22 million square metres, successfully reducing the surrounding temperature by 2.7%.

A comprehensive master plan is underway to develop pedestrian walkways and cycle lanes in Kuala Lumpur. Works are also progressing in the areas of enhancing basic services, such as near-end construction of sewerage pipe networks to cater the growing number of Greater KL/KV population and more sustainable solutions for sanitation and solid waste management.

GREATER KUALA LUMPUR/KLANG VALLEY



At the MRT Sungai Buloh-Kajang Line Station: MRT staff greeting its users.

Improving Connectivity of a Growing City

As the country's centre of economic activity and the base of thousands of home-grown and international businesses, it is important for the Government to continually invest in infrastructure improvements to cater to the long-term growth of Greater KL/KV. Key to this is improving connectivity within the city, not only to enable efficient and convenient movement of people and goods, but also to avoid the time-wasting congestion and pollution seen in other bustling cities.

The Government has thus placed priority in improving connectivity through train networks. As one of the most efficient and environmentally sustainable modes of transport, efforts to increase the number of

trains and extending railway lines have been crucial towards meeting Greater KL/KV's transportation needs. The Klang Valley Mass Rapid Transit (KVMRT) represents the flagship project under this initiative, comprising the Sungai Buloh-Kajang Line and the Sungai Buloh-Serdang-Putrajaya Line.

The Mass Rapid Transit project reached a crucial milestone with the launch of the first phase the Sungai Buloh-Kajang Line on 16 December 2016, serving 12 stations from Sungai Buloh to Semantan. Upon the completion of the second phase scheduled for Q3 2017, running from Semantan to Kajang, the 51km line is expected to serve an estimated daily ridership of 400,000 passengers. The line will be served by a total of 58 trains, of which 52 were received at the Sungai Buloh Depot in 2016, the delivery and testing ground for new trains for the MRT.

The successful completion of phase one of the Sungai Buloh-Kajang

Line is credited to the collaborative efforts and strong institutional set-up via the project's developer and asset owner, MRT Corp and the MRT Exco body chaired by the Chief Secretary of the Government, which ensured timely delivery of the project. The same entities will concentrate efforts for the construction of the second MRT line, the 52.2km MRT Sungai Buloh-Serdang-Putrajaya Line. To date, 14 out of the initial target of 11 packages for the second MRT line have been awarded, registering a KPI of 127%. The work packages consist of underground, viaduct and system works packages. The line is expected to commence full service in Q2 2022, with a capacity to serve a daily ridership of 529,000 passengers.

The safety aspect of the MRT project is also a priority. It is imperative that the new train line and its operations gain trust from riders prior to its operational launch date. Strict safety measures put in place have resulted in low accident frequency rate (AFR). The project

The MRT project reached a crucial milestone with the launch of the first phase the Sungai Buloh-Kajang Line on 16 December 2016, serving 12 stations from Sungai Buloh to Semantan.

cumulative AFR is 1.0 for 1 million man hours worked compared to the set KPI of less than 1.5 accidents per 1 million man hours worked.

Connectivity in and around Greater KL/KV will be further enhanced with the HSR project slated for completion in 2026. The signing of the bilateral agreement for the Kuala Lumpur-Singapore High Speed Rail on 13 December 2016 demonstrates the Malaysia and Singapore Governments' commitment to the project. Built on discussions held since a 2013 leaders' retreat, the agreement furthers the good progress made by both sides since the signing of the Memorandum of Understanding on 19 July 2016. The high speed rail is expected to cut travel time between Singapore and Kuala Lumpur to about 90 minutes via a 350km line, with 335km in Malaysia and 15km in Singapore. This HSR project is expected to bring the two countries even closer together, improve connectivity, deepen people-to-people ties and catalyse further economic cooperation.

Leveraging Greater KL/KV as an Engine of Economic Activity

As the pulse of Malaysia's economic activity, Greater KL/KV remains a competitive regional headquarters location for MNCs. This has been reflected by InvestKL's success in attracting 64 MNCs to date since 2011 which has resulted in the creation of 5,012 jobs and RM2.9 billion in realised investments. In 2016, some notable MNCs that have chosen Greater KL/KV as their regional base include Voith, Oracle Corporation, Novartis International, Oceaneering International Inc. and China Railway Engineering Corporation. Greater KL/KV's strong propositions have

enabled MNCs to decide and provide their stamp of approval to set up regional headquarters here despite the challenging global economic and operating conditions.

InvestKL also exceeded its target of 600 new high-skilled jobs committed and approved in Greater KL/KV. As of 31 December, some 1,862 job creations were committed in 2016. Oracle, Novartis and CREC contributed the highest number of regional jobs of over 1,500. These employments will come into fruition in the next five years bringing the

total number of jobs committed to just above 9,000 since the inception of InvestKL in 2010.

Collaborating closely with key stakeholders in the public and private sectors, TalentCorp worked to ensure Malaysia's leading employers in Greater KL/KV continued to have access to a pool of home-grown and global talent capable of fuelling their growth and investment. Last year through the Scholarship Talent Attraction and Retention (STAR) programme, 1,217 Government-funded graduate scholars successfully served

The 2016 report card proves that Kuala Lumpur remains a key investment destination as InvestKL managed to achieve a stretch target of securing 13 MNCs to establish their regional offices in Greater KL/KV or expand their footprint in the Asia region.



Member of the PEMUDAH DBKL taskforce, Dato Pardip Kumar Kukreja, explaining the ITIS Traffic Management System to Ambassadors and Embassy representatives at the visit to DBKL ITIS Centre, organised by InvestKL in May 2016.

GREATER KUALA LUMPUR/KLANG VALLEY

their bond of service by working in MNCs, GLCs or established Malaysian companies. Meanwhile, the REP approved 398 applications from high-value Malaysian professionals abroad despite the softening job market and weaker global economic conditions throughout the year. Moving forward, TalentCorp will intensify its efforts to engage Malaysian professionals abroad utilising digital platforms such as LinkedIn and strengthening cooperative ties with Malaysian embassies.

To better facilitate access by leading investors and employers to foreign skill sets needed, the Immigration Department and TalentCorp jointly oversee the Malaysia Expatriate Talent Service Centre (MYXpats Centre) which processes and issues all Employment Pass (EP) applications and other EP-related passes for expatriates working in Malaysia. In 2016, 82% of EP applications processed by MYXpats were approved within its five-day client charter.

The Residence Pass-Talent (RP-T) meanwhile, is an initiative by TalentCorp and the Immigration Department which enables highly qualified expatriates to stay and contribute in the longer term to Malaysia's economic growth. 1,234 expatriates were approved for the RP-T in 2016.

Enhancing the Beauty of Greater Kuala Lumpur and Klang Valley

It is important for a growing metropolis like Greater KL/KV, which is expected to reach a population of 10 million by 2020, to have sufficient green space for its residents. As backed by multiple scientific studies, greener environments can improve

liveability in cities and boost residents' physical and mental health. This is hoped to indirectly result in increased productivity and higher economic potential to workers in all types of professions.

In line with the Malaysian Government's commitment to increase the well-being of residents living in this region, significant investments and collaborative efforts have been initiated, carried out and completed since 2010. These efforts have been supported by participation from stakeholders within the public sector, private sector and the general public. One of the examples of a successful partnership is Wilhelmsen Ships Services (WSS) and Wilhelmsen Ships Management (WSM), which jointly sponsored 100 trees to be planted in one of the parks within Kuala Lumpur. Both companies also strengthened their presence in the Greater KL through InvestKL, highlighting the unique factor that Greater KL possesses as both an economy and a livable destination.

Among the many initiatives planned and designed to elevate the liveability of Greater KL/KV to greater heights is the ambitious River of Life project. Planned for completion by 2020, this project aims to clean the Klang River and its tributaries to Class IIB (safe for recreational activities) and at the same time revitalise underperforming areas, particularly riverbanks and surrounding sites into urban hotspots booming with cultural and commercial activities along a 10.7 km stretch of the Klang and Gombak rivers.

Comprehensive efforts have been channelled towards river cleaning and improving the sewerage and drainage systems. The year 2016 has seen improvements of water quality index (WQI) at two water quality monitoring stations. Since the beginning of the ROL, the WQI readings at the Klang and Gombak

rivers have been improved to Class III from Class V (unfit for contact).

Proper wastewater management is crucial for the acceleration of river cleaning works. In this regard, interceptors – pre-treatment plants that filter and treat wastewater and sillage – play an important role and is included as part of river beautification efforts. As planned, the first four interceptors located at Bangunan Sultan Abdul Samad, Masjid Jamek, the former D' Tebing food court and across the Pasar Seni LRT station have been successfully completed, working to ensure the water discharged into the river is at Class IIB.

With a catchment area almost four times the size of Kuala Lumpur, the River of Life project is a mammoth undertaking. Having to clean up eight rivers and tributaries running at 110km in length is not an easy feat. In spite of this, infrastructure such as communal

Through the Scholarship Talent Attraction and Retention (STAR) programme, 1,217 Government-funded graduate scholars successfully served their bond of service by working in MNCs, GLCs or established Malaysian companies.

grease traps, flood retention ponds, log booms, river water treatment plants, waste water treatment plants and sullage water treatment plants have been completed and are helping to filter and clean the waste water being discharged into the rivers. Sewage pipes have been replaced, upgraded, extended and new ones have been built while sewage plants have been rationalised, upgraded or new and larger ones are being built to cater for a growing population. All this is done to achieve the target of Class IIB by 2020.

The second portion of the ROL project, comprising river beautification at Precinct 7 Phase 1, reached 84.5% completion during the year despite challenges in procuring materials and resource management. A major milestone for the river beautification project is the completion of the four interceptors in the Heritage Quarter. The four interceptors capture sullage discharged by businesses within the area and clean it to ensure the discharge is class IIB water. Phase 2 at the surrounding areas of Dataran Merdeka, Jalan Tun Perak, Jalan Tun Tan Cheng Lock, Jalan Masjid India, Dang Wangi, PWTC and Brickfields were awarded in late 2016. The remaining package, Titiwangsa Park, is expected to be awarded by the first quarter of 2017.

Another initiative under the Greater KL/KV NKEA tracks the number of trees planted by sponsors and has made Greater KL/KV home to thousands of new trees. Despite lacking direct funding from the Government, a partnership between DBKL, Yayasan Hijau Malaysia and corporate citizens such as ThinkCity has proven fruitful and attracted many sponsorships. This collaboration – the first public-private sector partnership of its kind – has resulted in the planting of 3,303 new trees, with the top contributors being MRT Corp and Jabatan Perhutanan Wilayah



The launch of Tesco's park – adopted in Dec 2016 in Bandar Manjalara, Kepong, Kuala Lumpur.

Persekutuan Kuala Lumpur. Each tree sponsored is an embodiment of residents' ownership and commitment in making Greater KL/KV a greener, more sustainable city.

Yayasan Hijau Malaysia and InvestKL have played a vital role in spearheading this initiative, providing awareness on green tax incentives provided by the Ministry of Finance through Yayasan Hijau Malaysia to participating companies. In support of this initiative, as many as 15,636 trees have been sponsored by companies through DBKL's One Stop Centre, as a part of development orders (DOs) that requires developers to provide green spaces in their development plans.

Following successful park adoption implemented in many major cities around the world, a park adoption or sponsorship programme was initiated with the aim to invite and

attract the private sector to adopt local parks. In return for assistance provided towards the parks' general upkeep and maintenance, companies enjoy corporate tax exemption. Currently, four parks under this initiative are in various stages of construction.

Further efforts to enhance the overall attractiveness of Greater KL/KV include the establishment of iconic landmarks and attractions. Following this, three Heritage Trails, comprising guided pedestrian walks through landmark sites such as Dataran Merdeka, Medan Pasar and Central Market have been introduced since 2013. DBKL has conducted a study on the trails which showed that the rental rates of premises located along the Heritage Trails have increased 50% and in 2016, the trails received 31,477 visitors, exceeding the targeted 24,000 visits a year.

GREATER KUALA LUMPUR/KLANG VALLEY

INVESTKL'S FOCUSED EFFORTS ATTRACT MNCs TO MALAYSIA

The CEO of InvestKL, Datuk Zainal Amanshah, believes in three things: effective communication, the significance of word-of-mouth referrals and the importance of being proactive at work. These factors are the reasons behind InvestKL's success in drawing multinational corporations (MNCs) to set up new regional operations in Greater Kuala Lumpur and Klang Valley (Greater KL/KV) – a task it has embarked on since 2011 but faced challenges in achieving in 2016 due to the slow global economic environment.

Despite the odds, it can boast that it is directly responsible for the opening of 1,862 new positions in 2016, against a goal of 600, as it succeeded in attracting all 13 of the new MNCs it targeted to bring in to Greater KL/KV this year. The numbers were "hard-fought", especially given prevailing economic conditions, with many companies taking a 'wait-and-see' attitude towards investment. "We prayed a lot," jokes Datuk Zainal. "However, we believe that the true potential of Malaysia as an excellent operational hub revealed itself [to the MNCs]. 2016 was an exciting, if tough year for us. As a country, we are very blessed [with what we have to offer]."

There is indeed much to shout out about Greater KL/KV and Malaysia. Feedback received from existing investors is overwhelmingly positive: business-friendly policies, a strong talent pool, low and consistent operating costs, interesting culture and heritage, and stability of government all contribute towards MNCs' decision-making process.

Other factors that make Malaysia favourable as an operational hub include strong IP laws, good regional location with easy access to ASEAN and Asian countries, as well as the planned high speed rail between Malaysia and Singapore and the planned East Coast rail line. "The protective laws and ease of connectivity are good foundations for businesses operating from Malaysia," says Datuk Zainal.

Catering to the needs of MNCs means catering to the needs of its people. Greater KL/KV offers a wide variety of appealing neighbourhoods and a strong expatriate community, who are also attracted to Malaysia's tourism sector and affordable healthcare services – one of the best in the world. The Government's enhanced efforts to increase liveability via additional rail lines and the River of Life (ROL) project also show commitment to continuous progress.

"We have cases where retired expatriates choose to remain in Malaysia after their tenure," reveals Datuk Zainal. "Some expatriates living here also actively promote Malaysia to their friends, families and colleagues. Their word-of-mouth referrals are the truest form of testimonial – we try to collect them for our case studies."

WORKING WITH STAKEHOLDERS

Tasked with a role that requires extreme tact and transparency between high-level stakeholders, Datuk Zainal and InvestKL sits on multiple Steering Committees. He believes the sessions are important. "We engage in a lot of clarification sessions on behalf of MNCs and actively push for favourable policies that can ease their set-up process here in Malaysia. For example, we are working to streamline processes with the Immigration Department of Malaysia, so that expatriates can enjoy more efficient services. Our plan is to make the services as simple as 'plug and play' [automated]," he explains.

Being the main point of contact for MNCs looking to set up operations here in Greater KL/KV has also required InvestKL to play its role in providing effective interventions. The organisation takes feedback seriously and takes proactive actions in providing solutions, which range from customs to talent acquisition to tax and accountancy services. In one example, InvestKL assisted Schlumberger – the world's largest oilfield services company – to

shorten clearance time from eight hours to just one hour.

Yet the work is not without its unique challenges. "They [investors] don't like surprises," Datuk Zainal notes. "Therefore, when various Government agencies make new changes in policies and procedures, [InvestKL takes the initiative to] provide clarity on how those changes will affect their operations in Malaysia."

The true impact of InvestKL's work is far-reaching. Aside from direct job creation, the organisation also engages with universities. "InvestKL works with reputable universities like University of Malaya (UM) and Universiti Teknologi Petronas (UTP) to channel students as interns for MNCs operating in Malaysia. Some of them are absorbed into the MNC's workforce," says Datuk Zainal. "There are also MNC-university collaborations that resulted in positive R&D. One research effort created non-concrete cement that can reduce the cost of house-building, while another created a more efficient type of biomass."

THE MODEL THAT WORKS

With three years to go to 2020, Datuk Zainal reaffirmed InvestKL's commitment to hitting the big goal: 100 MNCs setting up regional operations in Malaysia. The service-focused approach will be continued for a simple reason – it works.

"Going forward, we plan to remain targeted and proactive," says the CEO. "We will work with alliances that provide services to MNCs, such as tax and advisory firms. We plan to provide support to Government agencies like MITI, DBKL and the Ministry of Federal Territories so that the ease of doing business here is better. We will also compile more testimonials and case studies from existing MNCs to help promote Malaysia's good name. This will strengthen the believability of our claim – that Malaysia is an excellent location for MNCs to operate from in this region."



MOVING FORWARD ►

With many initiatives under this NKEA well under way, the gears are in motion for the continuation of Greater KL/KV's progress towards becoming a world-class city by 2020. The successes achieved so far have brought to forefront the strength, resourcefulness and the power of collaboration among all stakeholders.

With the commencement of phase one from Sungai Buloh to Semantan on 16 December 2016, the full implementation of the MRT Line 1 project which extends from Sungai Buloh to Kajang will be completed in Q3 2017, with the full line to serve a corridor of up to 1.2 million people. MRT Line 2 will connect the existing Sungai Buloh station, pass through Serdang and end in Putrajaya. Construction work has started and remains in progress, with its completion targeted for Q2 2022 and is expected to serve a corridor of 2 million people.

Having secured 64 companies to date since 2011, InvestKL remains focused on securing companies that provides opportunity for high value jobs to enable Greater KL/KV to move up the value chain and stay competitive. This, in turn, increases

the quality of the local talent pool that will spur a ripple effect of attracting more MNCs to Greater KL/KV. With the ultimate aim of securing 100 MNCs by 2020, despite external challenges, InvestKL is poised to go forward strong in attracting more MNCs to Greater KL/KV even beyond 2020.

Phase 1 of the River of Life project at the Heritage Quarter along with the collapsible weir which acts as a dam to raise the water level of the Gombak and Klang rivers is scheduled to be completed in Q3 2017. The completion of the first phase would hopefully herald a paradigm shift in the rakyat's attitude towards preserving the beauty of the rivers. When the project is fully completed by 2019 it is hoped that the River of Life can be on par with other world-renowned river transformation projects such as the Cheonggyecheon in Seoul.

Moving forward, the momentum towards improving Greater Kuala Lumpur and Klang Valley towards becoming a truly world-class city continues unabated. With the partnership of all stakeholders and the rakyat, this is certain to become a reality.

OIL, GAS & ENERGY



**DATUK SERI
PANGLIMA DR.
MAXIMUS ONGKILI**

Minister of Energy, Green
Technology and Water

The global oil market experienced unprecedented volatility in the 2014-2015 period, as a supply glut placed downward pressure on global oil and gas prices. However, this scenario has not detracted from the Government's aspiration to sustain domestic production, while also aspiring to grow the industry through new, high-value activities.

A heartening development in this era of low crude oil prices is that more innovation is being embraced in the development and production of oil, as the industry works to reduce oil production unit cost. The end game is a stronger, leaner oil and gas industry that can better withstand the future vagaries of the industry and global economy.

The Government also remains mindful of the impact of the utilisation of fossil fuels on the environment, amid concerns on climate change. As such, we will continue efforts to decarbonise our economic growth by gradually shifting from the use of conventional fossil fuels towards renewable sources. This is in line with our commitment to the 21st Conference of Parties (COP 21) in Paris, where we have targeted to reduce carbon emission intensity by 45% by the year 2030, relative to our carbon emissions intensity in 2005. The Government had also committed to meet the stipulated renewable energy target of 23% by 2025, through the implementation of Large Scale Solar (LSS) and Net Energy Metering (NEM) in addition to the continuation of the Feed-in Tariff programme.

In the years to come, the Government, in partnership with the private sector, will continue to strive to establish a more robust energy infrastructure, diversify Malaysia's sources of energy, and shift towards market-based energy pricing.



Regasification Terminal at Sungai Udang, Melaka.

OVERVIEW

The oil, gas and energy industry contributed to 14.5% of the country's GDP in 2016. As for Government revenue, only 14.7% attributed to oil & gas revenue. This, despite the current low oil price, is testament to this NKEA's success in diversifying the country's oil and gas activities. Overall, the NKEA achieved 98% of its KPIs in 2016. As at the end of 2016, the NKEA contributed RM179.7 billion in GNI and generated RM411.5 billion in investments.

The success is reflected upon PETRONAS' adoption of a prudent stance in evaluating projects. As the main driver of upstream-related activities, the national oil company has placed more focus on cost control to determine project viability.

The Government is committed to create an efficient domestic gas market in order to provide consumers competitive choices of the source of

their gas supply. Thus far, Petronas has been the sole supplier of gas in the market. With the Third Party Access (TPA), other suppliers can join the gas market and supply gas at competitive prices.

At the same time, downstream projects such as the Pengerang Integrated Complex (PIC) and Pengerang Deepwater Terminal (PDT) continue to act as game-changers for the country's oil and gas industry, creating new avenues for the industry's growth. This has started the ball rolling in the nation's interest to diversify the upstream and downstream, to create a better balance in the oil and gas industry. In addition, due to the continuous pressure to cut cost in the upstream side of the business, Oil & Gas Services and Equipment (OGSE) companies are responding through innovative processes and technology to help reduce costs.

Another encouraging development in energy policy this year is centred on sustainable energy, with progress

being made in preparation for Net Energy Metering (NEM) and Large Scale Solar (LSS) Initiatives in 2017.

Ensuring the Nation's Energy Security

The liberalisation of the gas market has been among the NTP's key focus areas, with the Economic Planning Unit and Energy Commission (*Suruhanjaya Tenaga* – ST) spearheading initiatives to enable a competitive gas pricing environment to benefit consumers; promote sustainable usage of energy to support growth; introduce market pricing for gas to attract new industry players; and encourage more efficient use of resources.

The effort is also expected to strengthen the country's energy security and enhance economic growth for the *rakyat's* prosperity and well-being. Following the shortage of domestic piped gas in 2008, the need for energy security has indeed been evident. The gas market liberalisation initiative has seen the implementation of key building blocks such as the development of LNG import facilities, with efforts in 2016 focused on completing the framework for Third Party Access (TPA).

The TPA will allow third parties to access and utilise regasification (LNG import), transmission and distribution facilities. With the amendment of the Gas Supply Act 1993, ST's role will also be strengthened to include regulating the tariff for utilising regasification terminal, transmission pipeline and distribution pipeline to ensure a level playing field for the implementation of the TPA initiative. The amendment to the Act received royal assent in August 2016 and was gazetted in September 2016, with implementation scheduled for January 2017. Key instruments such as the amendment of relevant regulations, regasification

OIL, GAS & ENERGY



As of 20 October 2016, Pengerang Deepwater Terminal (PDT) has received more than 758 vessels with a total of five Very Large Crude Carriers (VLCCs).

transmission and distribution codes, guidelines and online license application have also been put in place.

In May 2013, PETRONAS commenced the operation of the first regasification terminal (RGT) in Sungai Udang, Melaka. PETRONAS is also currently building a second RGT in Pengerang, which is expected to commence operations in the fourth quarter of 2017.

The implementation of the gradual regulated gas price revisions towards market-reflective pricing for the power and non-power sectors continued at an encouraging pace in 2016. The initiative is equally crucial to encourage the development of challenging gas fields in Peninsular Malaysia, which have yet to attract viable investment due to the existing regulated pricing.

Malaysia's continued economic growth is expected to drive further demand for natural gas, which powers more than 40% of the country's electricity production. This will require a diverse, stable and secure supply of

gas from local sources as well as LNG imports. A robust gas market will also catalyse new industries, creating new revenues for the country.

Diversifying Towards Downstream

Following the move to diversify the oil and gas sector, the downstream

The PIPC represents the single largest downstream infrastructure investment project in Malaysia.

segment is working towards capturing more value through the adoption of world class facilities such as that at the Pengerang Integrated Complex (PIC).

The Pengerang Integrated Petroleum Complex, which houses the Pengerang Integrated Complex (PIC) and Pengerang Deepwater Terminal (PDT) represents the single largest downstream/infrastructure investment project in Malaysia, with its anchor investors PETRONAS (for PIC) and DIALOG (for PDT) expected to invest approximately RM128 billion in total.

DIALOG has completed 1.3 million cubic metres of oil storage capacity under the first phase of PDT and is well on track for phase two of the oil/petroleum terminal. As of 20 October 2016, PDT has received more than 758 vessels with a total of five Very Large Crude Carriers (VLCCs) and has handled a total of 19 million metric tonnes (discharge/load) of petroleum products.

Meanwhile, PETRONAS' PIC is progressing on schedule and has achieved 50% completion at the end

of 2016. In sourcing for the best proven technology to ensure the highest efficiency of the PIC development, PETRONAS has recorded several milestones throughout the year, including:

- the arrival of the tallest and heaviest propylene fractionator process column on the shores of Malaysia on 25 June 2016. The installation of the column at PIC's Steam Cracker facility was officiated by the Prime Minister on 5 December 2016;
- the successful installation of the heaviest diesel hydrotreater (DHT) reactor for its refinery on 21 September 2016, an important component for the production of Euro5 Diesel, which will be enforced in Malaysia by September 2020; and

- the awarding of an engineering, procurement, construction and commissioning (EPCC) contract for Malaysia's first automated warehouse for polymer products.

The PIC is one of the largest oil and gas industrial developments in this region, as well as PETRONAS' largest downstream investment to date. It consists of a 300,000 barrels per day (bpd) refinery and petrochemical plants designed to produce premium differentiated petrochemicals. Not only will it meet domestic demand for petroleum products and the Malaysian government's future legislative requirements on the implementation of Euro5 specifications for petrol and diesel, but it will also capitalise on the growing need for petrochemical products in Asia in the next 20 years.

Apart from the refinery and petrochemical integrated

development, PETRONAS also invested in the development of the Pengerang Co-generation Plant, one of six associated facilities within the PIC. This plant will be one of the largest co-generation power plants in the region, using Siemens' latest H-class gas turbine technology together with a unique dual steam turbine configuration to ensure the highest efficiency. Apart from generating power, it will also produce steam for utilisation within the PIC. Slated for completion mid-2017, the 1,220 MW co-generation plant will provide a total of 600 MW of power to the national grid, while the remaining will be used for the PIC.

Another PETRONAS facility, Projek Air Mentah RAPID (PAMER), was fully completed and commenced operations on 18 July 2016, currently channelling 30 million litres per day (mld) to the Sungai Lebam reservoir to supplement the Johor State's existing water supply for public consumption in addition to supplying 230 million litres per day (mld) of water to the PIC.

In the long term, the PIC is expected to provide reasonable returns, thus it is important for PETRONAS to ensure effective execution of the project delivery. The PIC will not only expand PETRONAS' existing business portfolio, but also act as catalyst for further investments and create a multiplier effect on the nation. The PIC is poised for overall start-up in early 2019.

Effective Coordination at All Levels of Government

To further support private investment in the Pengerang Integrated Petroleum Complex (PIPC), the Federal Government together with



The YAB Prime Minister officiating PIC's steam cracker facility on 5 December 2016.

OIL, GAS & ENERGY

the State Government has planned for 25 critical PIPC infrastructure projects worth approximately RM2.49 billion as part of the 10th and 11th Malaysia Plans to meet the need for utilities, facilities and amenities at PIPC. This includes the installation of a comprehensive network of power, telecommunications and water supply, upgrading of roads to highways to facilitate movements of goods and services and the creation of a centralised management system for the effective and efficient removal of industrial waste products from the complex.

The Federal Project Steering Committee (FPSC) chaired by Tan Sri Dr. Ali Hamsa, the Chief Secretary to the Government, has been tasked with driving the delivery of these projects and has proven success in building the momentum and providing the support needed to Johor Petroleum Development Corporation (JPDC), the implementing agency for the development of the infrastructure and public amenities, as well as to nine other implementing Federal Ministries, and Federal/State support agencies such as the Implementation Coordination Unit (ICU), Economic Planning Unit (EPU), National Audit Department, Johor State Economic

Planning Unit and the Johor State Government Office.

The governance structure was adopted from the implementation of the MRT project, which was effective in driving integration and alignment between different project owners. As of 30 October 2016, seven out of 25 Federal project work packages for infrastructure and public amenities surrounding PIPC have been completed, with all projects expected to reach full completion by 2020.

Additionally, with the establishment of a dedicated Programme Management Team under JPDC's Capital Economy's umbrella, 31 packages of Federal and State Government projects are being monitored concurrently under internationally-recognised standards of Project Management Institute. The monitoring procedures enable JPDC to facilitate clients in mitigating their risks, problem-solve and ensure the timely completion of the project. For example, Klinik Kesihatan Taman Bayu Damai was able to commence operations less than one month after completion by the project implementer.

JPDC also plays an important role in securing investments to realise PIPC's vision as an integrated downstream oil and gas hub through the establishment of three additional industrial parks within PIPC in 2017. The additional investments are crucial to accommodate future downstream and support services.

Enhancing the Competitiveness of OGSE companies

The challenging operating environment is expected to continue in the mid- to long-term. This has served as a crucial impetus for Oil &

Gas Services and Equipment (OGSE) companies to explore opportunities to enhance their competitiveness and prepare for the next upcycle upon recovery. This may be achieved through consolidation or increased investment to become owners of technologies. In 2016, the OGSE sector has done well in its achievement of EPP targets.

One of the encouraging progresses in 2016 is the achievement of RM650 million in committed investments from both local and international OGSE companies. Investments have been secured towards the Sungai Rengit Industrial Park Phase 1, the WEG Group's Centralised Southeast Asia Warehouse, the Asian Supply Base Sdn Bhd purchase of equipment for its proposed new quay wharf and the development of supporting infrastructure for the Sipitang Oil and Gas Industrial Park. Apart from that, 46 companies had hitherto placed bids for projects in new market segments and/or countries, as part of the national target to take local OGSE companies to the global market. This is close to the target of 60 companies to be achieved by 2020. The achievements during the year were supported by specialised marketing missions to Kazakhstan, Vietnam, Iran, Brazil, Bahrain and Indonesia, among others. Of note, five new companies were registered with PetroVietnam subsidiaries after the Vietnam marketing mission, while SIRIM QAS International Sdn Bhd successfully established its Bahrain outpost with the assistance of the Bahrain Economic Development Board, Malaysia Petroleum Resources Corporation's (MPRC) MOU partner.

MPRC has also been putting in effort to attract MNCs to set up operations in Malaysia and partner with local firms. To date, seven MNCs have received assistance since 2012 to establish their global/regional operations in Malaysia, while 26 MNCs

The Federal and State Governments have planned 25 critical PIPC infrastructure projects worth approximately RM2.49 billion.



Malaysia Petroleum Resources Corporation MPRC's Innovation Pavilion at MOGSEC 2016.

have formed joint ventures or merged with domestic MNCs. 46 international OGSE companies that have relocated their regional HQs or engineering centres to cost-competitive countries, such as Malaysia, include:

- McDermott International, which designs oil production facilities and provides engineering solutions. The company completed its move from Singapore to Kuala Lumpur in mid-2016;
- Fulkrum Technical Resources, specialising in the provision of QA/QC and inspection personnel in upstream and downstream oil and gas, established its regional presence in Malaysia to provide QA/QC services to players in Malaysia and the Asia Pacific region; and
- Brazil-based WEG Group, specialising in electrical

engineering services, power and automation, established its regional HQ in Malaysia in 2016.

The year also saw partnerships being established between local and international OGSE firms, namely:

- SNC-Lavalin & Bizworth Sdn Bhd for the provision of modular gas services equipment;
- J&E Hall & Rasma Corporation Sdn Bhd for the provision of specialist refrigeration solutions; and
- Onyx Engineering & Green

Imaging Technologies to provide advanced core analysis and Nuclear Magnetic Resource (NMR) services.

Going forward, it is imperative for companies operating in the OGSE sphere to continuously ramp up their competitiveness to ensure optimum leanness and agility to respond quickly to changing conditions in the highly dynamic industry. Continued support from the Government to promote Malaysia as a regional OGSE hub has gone a long way to assist these companies in this

MPRC has also been putting in effort to attract MNCs to set up operations in Malaysia and partner with local firms.

OIL, GAS & ENERGY

PIPC – A MEGA PROJECT THAT BENEFITS MALAYSIANS OF ALL LEVELS

Pengerang, a district in Kota Tinggi Johor, is also known as a small customs cum immigration post. Blessed with many natural resources, sea life and unique landforms, it is a well-known seafood destination and has a beautiful seacoast.

Once a sleepy town home to mainly farmers and fishermen, Pengerang became tipped for modernisation with its selection by the Johor State Government as the site for a catalyst project for rural transformation: The Pengerang Integrated Petroleum Complex (PIPC) mega project under the Oil, Gas and Energy NKEA.

PIPC represents a giant step in adding value to the downstream oil and gas value chain in Johor and Malaysia, occupying a single plot measuring 20,000 acres. When completed, it will have the oil refining capacity to produce 1 million barrels per day, 11.8 million tonnes of petrochemical products per annum, 5 million cubic meters of oil storage space, and 3.5 million tonnes of LNG regasification capacity per annum.

Currently there are two investors within the PIPC project, Petronas, which is developing the Pengerang Integrated Complex (PIC) and Dialog Group Berhad, which is building the Pengerang Deepwater Terminal (PDT), both housed at PIPC. These two key players focus on the core activities of the project: naphtha crackers, power plants, LNG storage tanks, oil storage tanks, refineries, regasification plants, and petrochemical plants. Johor Petroleum Development Corporation Berhad (JPDC), a subsidiary of MPRC, which is mandated to transform Johor into a sustainable world-class downstream oil and gas hub, oversees the project.

In line with the construction of PIPC, planning and building new townships within Pengerang became the next focal activity. Development came alongside



Signing ceremony between JPDC and SME Bank, SME Corp, CGC & Teraju on SME Financial Assistance for Pengerang SMEs.

major changes within Pengerang itself. In 2014, some 400 households were relocated from the village to a new township called Taman Bayu Damai. The new township provided the village folk with new housing and facilities such as health clinics, a fishermen's complex, schools and community and daycare centres. The village chief, Tuan Haji Mohd Khairdir bin Ismail says, "This has been the most efficient village relocation plan." The residents now enjoy a well-built township, equipped with modern and orderly public amenities. Infrastructure and drainage systems are more efficient now; the villagers no face flooding or infrastructure problems.

Tuan Haji Mohamad Khaidir Ismail also highlights that with the rapid development of the PIPC, abundant job and business opportunities have emerged for the local residents. Household income has naturally increased over the last two years. Living standards have also improved along with their quality of life. Tuan Haji Mohd Khairdir himself has set up new businesses to meet the supply chain needs of the PIPC, with these opportunities further leading to

comprehensive growth and development of Pengerang.

Another local resident, Puan Hasnah binti Mahmood says she too has benefited tremendously from the PIPC. A small trader who sells her sewing in Pengerang, she managed to participate in a tender to supply upholsteries for the living quarters of the PIC and PDT. Her success in winning the bid has changed her socioeconomic status, and she expects her business to expand further with the proposed establishment of a camp for the complex's 22,000 workers is set up.

Puan Roszana binti Johari, who runs a food shop in Pengerang, also says her shop has been increasingly busy. Her business volume has doubled in the last one year. "My coffee shop is now many times busier than a year ago. I have to hire more workers to cook, to clean, wash and to serve at the tables." She also notes that more new businesses are opening in Pengerang, as new housing is built for the workers involved in the PIPC project, and the once-quiet township on the southern tip of Johor becomes more vibrant.

respect. More extensive industry research and international trade missions with agencies like MIDA, MATRADE and MITI will also provide a much-needed boost to the sector's efforts.

Strengthening Energy Sustainability

In 2016, the Government conducted energy audits and retrofitted buildings with energy-efficient cooling and lighting systems as well as implemented efficient energy management practices. Eight Government buildings (Parcels B1-B8) were identified as having an average annual electricity consumption of 15,253 MWh/year in the period of 2013-2015. The retrofitting exercise, which commenced in September 2016 and costing RM6.9 million, will yield an expected savings of 1,342

MWh/year (RM300,000/year), with a reduction of almost 1,000 tonnes of carbon dioxide emission.

This initiative is also hoped to spur the private sector to adopt the same approach as well as encourage energy companies to tap into opportunities for energy efficiency in the global building sector. To accelerate the rate of implementation, the Government provides conditional grants for companies to implement energy efficient measures, and thus far the response from the commercial sector has been welcoming. However,

to make this effort sustainable in the long term, there must be clear business case for proceeding in energy efficiency investments.

The implementation of energy efficiency initiatives will also catalyse new technological adoptions in Malaysia such as the use of high efficiency chillers, utilisation of smart sub-meter systems as well as energy efficient appliances. This provides a win-win situation for building owners and the Energy Services Companies (ESCO) to develop capacity in energy management as well as the adoption

The implementation of energy efficiency initiatives will also catalyse new technological adoptions in Malaysia.



Large-Scale Solar panels.

OIL, GAS & ENERGY

of the Energy Performance Contract (EPC) and International Performance Measurement & Verification Protocol (IPMVP) concepts. These upgrades such as those done in government hospitals will also improve the working conditions and the level of comfort of the public and staff.

Under the 11th Malaysia Plan, to incentivise energy-intensive industries to implement energy-efficient measures to reduce their operational costs, KeTTHA has reduced the Special Industrial Tariff (SIT) by 2%.

EPP 10: Building Up Renewable Energy and Solar Power Capacity supports existing initiatives such as those under the 11th Malaysia Plan where renewable energy capacity is expected to reach 2,080 MW by 2020, contributing to 7.8% of the total installed capacity in Peninsular Malaysia and Sabah. The Feed-in Tariff Programme (FiT) was continued to promote the contribution of FiT renewable energy sources to the national energy grid. A cumulative total of 412 MW has been generated as of November 2016, representing a 103% achievement of the targeted 400 MW for 2016. This programme has also made Malaysia the third-largest producer of Photovoltaic (PV) panels in the world.

In order to expand the renewable energy agenda in Malaysia, the Net Energy Metering (NEM) and Large Scale Solar (LSS) programmes were introduced in 2016. Launched in October 2016 and implemented in November 2016, the NEM programme is the first of its kind in the region, allowing electricity generation from clean energy via solar PV self-consumption and the sale of excess energy to utility companies which results in savings in consumers' electricity bills. The Sustainable Energy Development Authority of Malaysia (SEDA) and Energy Commission (ST) have been



YB Datuk Seri Panglima Dr. Maximus, KeTTHA Minister and YBhg Datuk Seri Ir. Dr. Zaini Ujang visit to IGEM 2016.

The NEM programme is the first of its kind in the region, allowing electricity generation from solar PV.

actively promoting this to domestic, commercial and industrial consumers.

The NEM programme is an inclusive initiative to encourage the participation of households and businesses in the nation's green agenda while contributing to power generation. Under the NEM programme, the Government targets to achieve 90 MW/year for Peninsular Malaysia and 10 MW/year for Sabah and Labuan in power generation from 2016 until 2020, amounting to a total of 500 MW.

Meanwhile, the LSS programme is also crucial for Malaysia to accelerate renewable energy growth, in line with the target to achieve 1,000 MW in energy generated from renewable sources by 2020. ST has been entrusted by the Government to implement the LSS programme, which invites the private sector to build, own and operate LSS PV plants to supply and sell energy to the utility companies under long-term power purchase agreements.



PETRONAS first Floating Liquefied Natural Gas (PFLNG Satu) facility.

MOVING FORWARD ►

Although oil prices have surged to a 17-month high in December 2016 after OPEC and non-OPEC producers agreed to reduce output in a landmark deal, it has yet to be seen whether oil prices will bounce back in 2017 or maintain its new norm. Nevertheless, Malaysia's oil, gas and energy industry continues to be in a position of strength and in the year ahead will steadily build stronger foundations for the country's energy and economic landscape.

Amid various challenges projected in 2017, the Government, in partnership with the private sector, will continue the efforts to ensure the robustness of Malaysia's energy infrastructure. Efforts to diversify the country's sources of energy and the move towards a market-based pricing will remain in the agenda. The coming year will focus on the implementation of the TPA with the completion of the second regasification terminal in Peninsular Malaysia located in Pengerang.

WHOLESALE & RETAIL



**DATO' SERI
HAMZAH ZAINUDIN**

Ministry of Domestic Trade,
Co-Operatives and Consumerism

The Malaysian wholesale and retail sector experienced timely and rapid growth in 2016. The accelerated development pushed forward through well-placed policies and initiatives from the public and private sector, has softened the effects of depressed commodity prices and slowing economy. Years of dependency on the oil and gas sector would have exposed us to tough challenges, yet the Malaysian economy remains stable, resilient and strong.

As evidenced by other oil-producing nations which suffered high inflation and stagnated growth, it is important for Malaysia to explore, diversify and retain multiple revenue channels. Investments in the retail sector have paid off; the wholesale and retail sector has grown by an average of 10% per annum since the start of ETP and now consist 15.15% of the total GDP, overtaking the Oil, Gas and Energy sector as the single largest contributor to Malaysia's Gross Domestic Product (GDP).

The strong growth pattern is expected to continue, driven by opportunities availed under developments within Large Format Growth and E-Commerce. Additional impetus from the Government in the form of the recently-announced Budget 2017 included measures designed to increase disposable incomes generated by Malaysians, which in turn supports private consumption.

Indirectly, Government initiatives in place that result in high online penetration among Malaysians has also paid off. According to data, we can expect the revenues from e-commerce retail to grow steadily at a rate of 23.7% annually until 2021. Such robust demand has created a thirst for new innovations in retailing practices and payment channels that ultimately benefit everyday Malaysians.

Traders, including small store operators play an important role in fulfilling domestic consumption demand. We are thankful for the media, which helped to highlight success stories as well as inspire many Malaysians towards entrepreneurship activities. Assistance to small retailers through the TUKAR and ATOM programmes saw evidence of self-sustaining SMEs that has made themselves attractive to consumers, which resulted in increased profits and better livelihoods.

Let us continue and contribute to this positive trajectory.



Mekan Bazaar at Medini Mall, Johor Bahru.

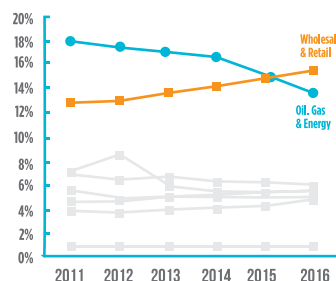
OVERVIEW

Six years since the implementation of the Wholesale and Retail National Key Economic Area (NKEA) initiatives, Malaysians have embraced the traditional and digital retail sector with open arms. The abundance of retail choices afforded to both locals and tourists have significantly contributed to the growth of the Malaysian economy.

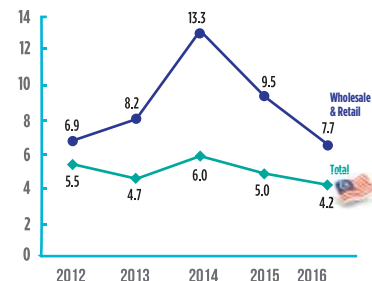
Investments made in the wholesale and retail sector totalling RM6.4 billion (as of 2016) in various initiatives have created a robust economic environment for both buyers and sellers. About half of the investments were channelled for Large Format Growth (RM3.1 billion), contributed by the establishment of seven new hypermarkets and 12 new superstores. Not only had we exceeded the target of Large Format Growth, LuLu Group, a major retail player in the Middle East opened its first premise in Malaysia.

Malaysia's retail growth has continued to grow faster than the overall economy and it is the largest contributor to Malaysia's Gross Domestic Product (GDP)

GDP contribution by sector Percentage



Wholesale & Retail GDP growth vs Total Malaysia GDP growth Percentage



At the same time, small and medium businesses were not ignored. We have seen how the NKEA efforts have transformed the livelihood of everyday Malaysians, including the economically vulnerable. In particular, small grocery retail stores greatly benefit local communities as it provides affordable shopping choices, convenience, and local job opportunities.

Second only to China and India, Malaysia was ranked third in the 2016 AT Kearney Global Retail Development Index (GRDI), its highest rank to date and up six places since 2015. In fact, Malaysia was ranked 17th prior to the implementation of NTP in 2010. This big improvement is a testament to the effectiveness of NKEA efforts. Currently, Malaysia is described as "the most business-friendly environment among Southeast Asian countries ranked in the GRDI".

WHOLESALE & RETAIL

amaxMALL: THE 'UNIQUELY MALAYSIAN' VIRTUAL MALL



Datin Dr. Nik Sarina Hashim
amaxMALL CEO

amaxMALL is a virtual mall catering to domestic and non-domestic Malaysian consumers, but with a very clear and distinct advantage. "We proudly offer hand-picked, high-quality, uniquely Malaysian products and services," says amaxMall CEO Datin Dr. Nik Sarina Hashim.

amaxMALL started as an e-marketplace in June 2015, but made a deliberate shift to become an e-commerce platform in October 2016. "The big difference between the two is that previously, merchants were solely responsible for their store presence, branding and operations, including payment channels and deliveries. With e-commerce, more support is provided from us so that small Malaysian retailers

can do what they do best: making great products and services," she explains.

The platform offers cost-effective digital stores and services to small and medium-sized businesses in Malaysia. The amaxMALL team helps in setting up e-stores, providing design and photo-enhancing services in addition to offering professional product photo shoots, manages payment gateways and deliveries, provides consultancy services, organises seminars and workshops and produces promotional content on behalf of the SMEs. The direct result is wider customer reach and thus increased potential revenue for Malaysian entrepreneurs using the platform.

The shift towards becoming an e-commerce platform will also encourage the adoption of cashless transactions, a positive step towards higher digital economy penetration in Malaysia. As opposed to potentially unsafe direct payments to bank accounts, amaxMALL retailers and consumers will enjoy increased trust, convenience and safety via trusted online payment gateways.

Helping the Little Guys

Datin Dr. Nik Sarina's passion for nurturing and providing an enabling environment for Malaysian SMEs shows. 500 merchants currently enjoy a digital presence in amaxMall without the large initial investment commonly required in setting up online stores. The virtual mall is supported by various Government agencies such as Majlis Amanah Rakyat (MARA) and Malaysia Design Development Centre (DDEC).

This synergy has brought local products previously overshadowed by bigger Malaysian and non-Malaysian companies into the spotlight. Aside from food, beverages, fashion, beauty

and health products, the sleek website also offers discounts to Malaysian-owned restaurants, ticketing services and various electronic products. "Afdlin Shauki-owned Comedy Planet and Old Market Square Cafe are listed in amaxMall as well, and we are working on amaxShopee for halal products," she adds.

In 2017, amaxMALL will focus on a leading pain point for online retail: tough competition online. "We are going to concentrate on our digital marketing efforts to attract more buyers. We will use social media and produce video content that target our desired audience: people who love and consume Malaysian products and services. For example, as you know, it is not uncommon for Malaysians to travel great distances for a taste of region-specific flavours. We simply make that access easier with amaxMALL – now they can buy them online."

"At the same time, we will also work with retailers – some of whom are from rural areas – to improve their branding. Good copywriting and professional-looking store images help boost sales as well," adds Datin Dr. Nik Sarina, noting amaxMALL's potential to boost local economies.

Undeterred by new, complicated challenges that pop up in the running of an e-commerce platform, Datin Dr. Nik Sarina stresses the importance for Malaysians to embrace e-commerce. "It is the future," she says.

"More and more Malaysians enjoy the variety, convenience and payment security offered by e-commerce platforms. We want to make sure that Malaysian SMEs, especially those from rural areas, can benefit from it as well. E-commerce is indeed the way forward for us Malaysians."

LULU HYPERMARKET CHANGING MALAYSIA'S RETAIL LANDSCAPE



“LuLu is planning on expanding to three more locations in the country: Setia City Mall in Shah Alam, Bangi Gateway in Bangi and Perling Mall Johor Bahru, with each store measuring 150,000 square feet each. By 2020, LuLu is targeting to open 10 stores nationwide.”

The retail industry in Malaysia is rapidly growing and is the number one contributor to the country's rising GDP. One new player in the local retail arena is the internationally renowned retail chain, the UAE-based LuLu Hypermarket & Department Store. An extremely popular choice for consumers in the Gulf region, LuLu currently has 132 stores in 31 countries globally and is actively expanding to South Asia and Southeast Asia by bringing unique products with exceptional value.

The LuLu Hypermarket & Department Store opened its doors in Malaysia in 2016, with its first-ever establishment strategically located at Capital Square in Kuala Lumpur. LuLu offers a modern shopping ambience, and a wide variety of good quality, 100% halal products. It also has extensive payment counters, ample parking spaces, play areas for children, a food court, currency exchange counters and ATMs.

“Malaysia is an attractive location for expansion as there is great market potential in the retail industry. LuLu has identified that there is a gap in the halal market. Therefore, the international retail chain decided to land in Malaysia to

establish the first 100% halal hypermarket in the country, with the goal to change the retail landscape. The highlight of its business is its 100% halal status, and the management has a very strict process of ensuring all ingredients in every product are halal before it reaches the shelves,” says Salim MA, a Director at Lulu Hypermarket Group.

He adds that being an Entry Point Project company under the Wholesale & Retail NKEA has definitely helped LuLu establish its presence in Malaysia, while the ease of doing business in Malaysia in terms of the smooth process of completing the requisite formalities was an encouraging factor for the retail chain to enter the country. The Government has also been tremendously supportive in providing infrastructure for business development, says Salim.

LuLu's presence has created employment opportunities to the local community, as 70% of the workforce behind the operations of the hypermarket are Malaysian. Some of them are sent for training in the UAE to equip them with the necessary skills unique to the company. This also adds value to the local workforce. Apart from that, many

of the products sold on LuLu's shelves, ranging from biscuits to paratha, are made locally.

As a new player in the industry, LuLu is aware that publicity will take time thus they are carrying out rigorous marketing strategies to ensure that sales pick up. Despite the slow economy, LuLu is definitely proving that it is creating a strong footing in this country. When it first started operations, the customer count was around 3,500 billing customers a day and within six months, that number has increased to 5,000 billing customers a day. They also receive 15,000 walk-in customers every day and they are expecting sales to boost in 2017.

According to Salim, LuLu is planning on expanding to three more locations in the country: Setia City Mall in Shah Alam, Bangi Gateway in Bangi and Perling Mall Johor Bahru, with each store measuring 150,000 square feet each. By 2020, LuLu is targeting to open 10 stores nationwide.

WHOLESALE & RETAIL



Driving the growth of large format retailers as part of retail modernisation

Enhancing Retail Concepts

Under Entry Point Project (EPP) 1, seven new hypermarkets and 12 new superstores were set up throughout Malaysia, exceeding the targets of six and five respectively despite a perceived market slowdown. This brings the total number of new large format stores since the start of the NTP to 46 hypermarkets and 58 superstores as of 2016. While existing local and foreign players such as Mydin, Econsave, Tesco, AEON and AEON Big expanded their business stronghold, UAE-based LuLu Group entered the Malaysian retail scene by opening a 250,000 sq ft premise in Kuala Lumpur. The Lulu Hypermarket is the first out of 10 planned outlets in the country, with a total investment of RM1.3 billion.

True to our gastronomy-focused culture, the Makan Bazaar initiative under EPP 5 leverages on our obsession with local and international cuisines. Positioned as both family- and tourist-friendly spots, these iconic food outlets combine the best hawkers in one large premium food centre, supported by other established eateries such as quick-service restaurants, cafés, bars and fine dining restaurants. Oasis Damansara Big Box Boulevard in Ara Damansara and Medini Mall in Nusajaya are presently operational Makan Bazaars that cater to flows of hungry visitors. This initiative aims to build 10 Makan Bazaar outlets in major cities by 2020.



The Big Box Boulevard is a family attraction and is becoming a Malaysian lifestyle.

The Oasis Big Box Boulevard development under the EPP 13 initiative is ongoing and on track to complete construction of its AutoCity component, a large shopping area for automobiles to complement numerous retail development and offices in the surrounding areas. With existing establishments such as Tesco hypermarket, Citta Mall, Oasis Makan Bazaar, Sime Plantations and other category stores, this will transform the location into an integrated retail hub.

Modernising the Shopping Experience

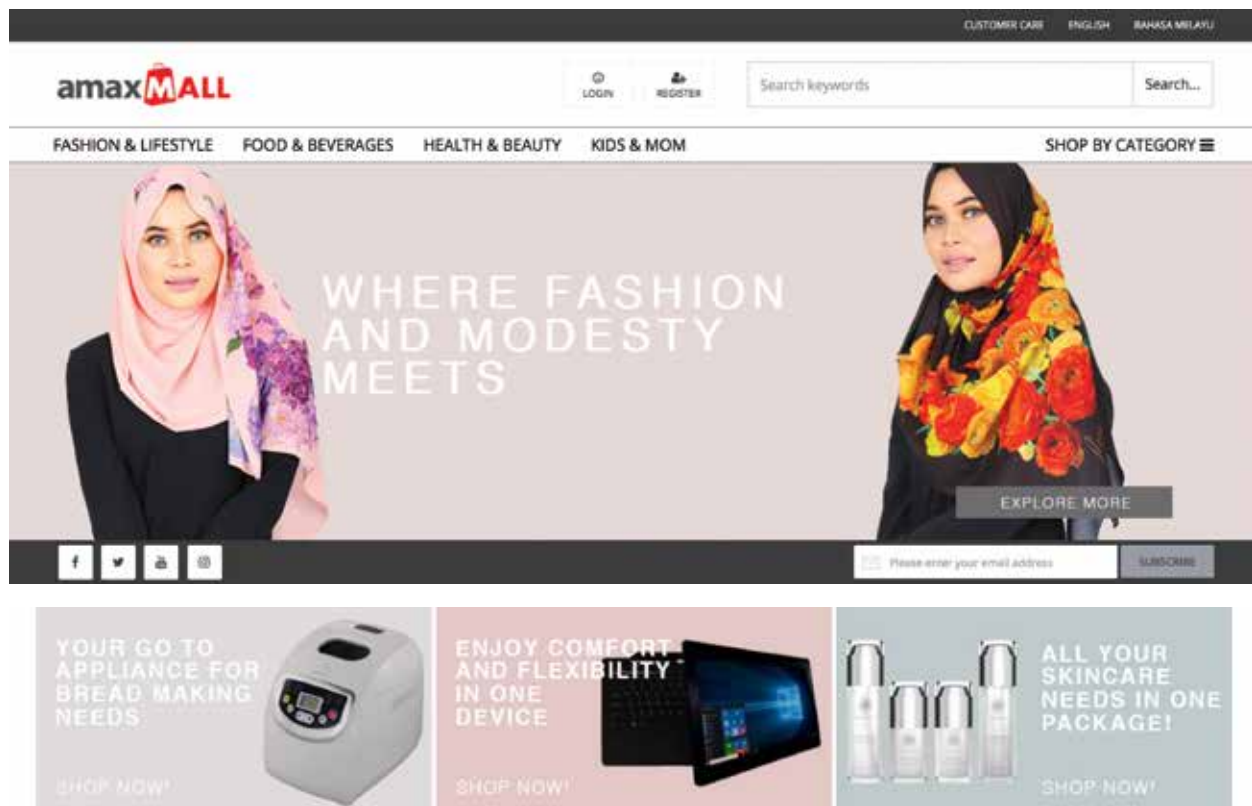
The rise of e-commerce retail in Malaysia is a success story worth USD894 million in 2016, with revenues expected to grow 23.7% annually until 2021.

Moreover, the thriving e-commerce ecosystem in Malaysia is expected to double the average revenue per user by the year 2021. The high number of user penetration and demand for price transparency, along with advances in mobile payment infrastructure, has brought forth innovations in retailing practices that enhance customer experience and satisfaction.

As such, the development of virtual malls under EPP 7 of the Wholesale and Retail NKEA answers to the ongoing need of modernising e-shopping for retailers of all sizes. One of the achievements of our virtual malls is amaxMALL, an online platform that supports small retailers to access larger audiences. By sharing the same e-commerce platform, small retailers enjoy minimal cost in operating online stores.

Established by AsiaSpace Sdn Bhd, amaxMALL saw almost 100% increase in participating small retailers from 2015, helped in part by collaborations with other government agencies. In particular, an official partnership with MDEC has

WHOLESALE & RETAIL



Consumers are spoilt for choice by shopping online

By sharing the same e-commerce platform, small retailers enjoy minimal cost in operating online stores.

encouraged participation of digital entrepreneurs under the eUsahawan programme. As of 2016, 646 sellers have been registered in amaxMALL offering a range of products and services.

Aside from digital entrepreneurship initiatives by public agencies, the Government is committed to provide an enabling environment for the private sector to flourish in cyberspace as well as increase linkages to international e-commerce actors.

SUNDRY SHOP OWNER CREDITS BETTER LIVELIHOOD TO TUKAR PROGRAMME

Johorian Zul Izzamin inherited Izzamin Mini Market from his late father in the year 2000. The sundry shop, serving mostly local communities in the Pontian district in Johor, is his family's bread and butter. Zul is a frequent attendee at state-sponsored seminars, constantly updating himself on new developments and knowledge related to small businesses.

In 2011, he chanced upon the Small Retailer Transformation Programme (Transformasi Kedai Runcit or TUKAR programme) under the Wholesale and Retail NKEA as advertised in the newspaper. Zul found that he was eligible thus enrolled and took the initiative to implement expert advice from TUKAR programme mentors. "Our (shop) income has increased by 100%-200% since then," he says modestly.

Zul says that he took a RM25,000 loan offered under the programme to renovate his shop, purchase new equipment and increase the number of products and services offered at Izzamin Mini Market. Among his major purchases were shop renovations, an updated POS (Point-of-Sale) system and a new counter and display racks.

Customer Experience is Key

"It is important to modernise the shop for improved customer experience," he acknowledges. "Customers have more (shopping) options nowadays, we have to keep up with the trends so they keep coming back. Look at South Korea – there, they can even buy groceries by scanning pictures with smartphones!"

The small business owner adds that mentors under the TUKAR programme were extremely helpful and took a hands-on approach. TUKAR mentors are experienced executives working in well-known hypermarkets operating in Malaysia, such as Tesco and Mydin.

"Teams of up to three people came to my shop, some travelling as far as Kuala Lumpur (to Pontian, Johor). They came a couple of times and gave constructive feedback. For example, they showed me how to organise the products so they look more presentable. The prices must be well-displayed. They told me, 'The easier it is for the customer to find the products and make the selection, the easier it is for them to make the purchase'," Zul recounts.

Ensuring Constant Progress and Improvement

Since the transformation, Izzamin Mini Market has enjoyed increased foot traffic. Some of his customers verbally commended and complimented the positive changes. Zul is now in the midst of repaying his loan under the TUKAR programme but has already made plans to apply for another in the future to grow his business further. He envisions Izzamin Mini Market as a modern one-stop centre with multiple branches, offering more products and services to customers.

Being among the first beneficiaries, Zul also lauds improvements to the programme. "They (TUKAR programme implementers) are open to our feedback. There is a better selection of contractors and suppliers now."

On advice to other small business owners, Zul says, "While programmes like these are helpful, success depends on the participants as well. We (small business owners in rural areas) can't just depend on the Government, we cannot just expect (handouts), we have to work hard to maintain our business and retain our customers. We have to take the initiative to learn and grow."



The Izzamin Mini Mart was amongst the small sundry shops transformed under the TUKAR programme.

WHOLESALE & RETAIL

Boosting Small Businesses

Small retailers were assisted via the TUKAR (Small Retailer Transformation Programme or Transformasi Kedai Runcit) and ATOM (Transforming Automotive Workshop) programmes, which bore a degree of success for some participants.

The TUKAR programme was formulated to help small retailers modernise and reverse slumping sales into profits, by implementing critical changes in line with customer expectation and demands. Small retailers were given assistance to improve areas in human capital, equipment, expertise, standard operating procedures, product display and inventory tracking.

For the automotive sector, assistance via the ATOM programme yielded positive transformation among its participants. Since launched in 2011, 764 automotive workshops all over Malaysia that participated in this programme were provided funding for tools and equipment. This was hoped to result in improved quality as well as expanding the range of expertise and services in automobile repair and maintenance-related businesses. While interest among target audience was lower than expected, a number of success stories emerged and serves as inspiration to others.



Encik Kamarul Anim, a participant of the ATOM programme.



ATOM - Before



ATOM - After



TUKAR - Before



TUKAR - After

2016 saw an increase of 151 new TUKAR and 100 new ATOM participants.

2016 saw an increase of 151 new TUKAR and 100 new ATOM participants. Moving forward, the focus of both programmes in 2017 and beyond is to improve the quality of the programmes and to reduce the number of non-performing loans. More efforts will be focused on achieving higher success rates.

Measurable indicators of quality include a percentage of participants experiencing a higher increase in revenue upon TUKAR and ATOM interventions and an increase of services offered by participants.



The retail scene in Malaysia is thriving.

MOVING FORWARD ►

Moving forward, the focus of both the TUKAR and ATOM programmes in 2017 and beyond is to improve quality and ensure sustainability and continuous growth. More efforts will be focused on achieving higher success rates. Measurable indicators of quality include a percentage of participants experiencing a higher increase in revenue upon TUKAR and ATOM interventions and an increase of services offered by participants.

As the biggest contributor to our GDP in 2016 at 15.15%, the Government is committed to support, improve and sustain developments in the wholesale and retail sector. Emphasis on digital innovations should ensure competitive edge at the global retail arena and help maintain Malaysia's position as one of the leading retail destination in the world.

PALM OIL AND RUBBER



**DATUK SERI
MAH SIEW KEONG**

Minister of Plantation Industries
and Commodities

With 5.7 million hectares of planted area out of 7.9 million hectares of agricultural land available, palm oil is one of Malaysia's most important commodities. Producing 17.3 million tonnes of crude palm oil, Malaysia is the world's second largest exporter. Total export value of crude palm oil and palm-related products earned us RM67.6 billion in 2016.

I am pleased to report significant progress and new developments that have occurred under the Palm Oil NKEA in 2016. From upstream to downstream, multiple new initiatives have been introduced as we embark on the 11th Malaysia Plan. It is my biggest hope that these new initiatives, in addition to current undertakings, will drive the economy towards our goal of reaching high-income status by 2020.

One major initiative driven by the Government is the full rollout of the Malaysian Sustainable Palm Oil (MSPO) certification. In 2016, 122,521 hectares and seven palm oil mills were certified, and a substantial pipeline has also been built for certification in 2017. Malaysian palm oil has erstwhile been produced sustainably and it is pivotal that we fully leverage the differentiation in quality and environmental compliance that is in fact much sought after by our customers globally. On the other hand, downstream integration continues to gain momentum with more new projects in the commercialisation of high-value oleo derivatives, food and health products as well as clinical trials globally to support the use of palm phytonutrients as health supplements. Under the 11th Malaysia Plan, RM280 million worth of grants have been allocated to support these initiatives.

The focus under the Rubber NKEA has been to increase the quantity of demand as well as the quality of supply. I am glad to note that the Malaysian Rubber Board is aggressively exploring new uses of rubber domestically and abroad, especially in the areas of green rubber for transportation and other industrial use. This was undertaken in collaboration with stakeholders in the public and domestic sectors to create true demand-driven growth.

On this note, I would like to express my utmost appreciation to all parties for their tireless efforts in realising the Palm Oil and Rubber NKEA. Together, we will make strides towards realising our vision of driving our expertise in the palm oil and rubber industries higher up the value chain to cement our global leadership in the commodities markets.



Workers harvesting fresh fruit bunches in palm oil estates.

OVERVIEW

2016 was a mixed year for the palm oil industry. The Crude Palm Oil (CPO) price breached the RM3,000 ceiling during the year, rising 49% to RM3,200 per tonne at the end of 2016 from RM2,151 per tonne a year earlier. While high prices are cherished, production was heavily impacted by a combination of the El Nino and La Nina climatic phenomena with the country witnessing dry seasons in the west coast area and floods in the east coast states.

Total fresh fruit bunch production fell 12% this year to 86.33 million tonnes as of December 2016, compared to 98.34 million tonnes in 2015. It is hoped that production yield will fully recover in 2017. The lower production volume was also reflected in major importing markets. The biggest importer, India, registered lower imports of 21% to 2.66 million tonnes. China and the EU also reported a reduction of imports at 24% and 13% lower, respectively.



The higher prices have however helped cushion the climatic impact and preserved palm oil export value. The industry exported upstream and downstream products worth a

combined value of RM67.6 billion in 2016, compared with RM63.2 billion in 2015. Overall, the Palm Oil and Rubber NKEA achieved 115% of its KPIs in 2016.

RM5.129 billion has been allocated to the Palm Oil and Rubber NKEA between 2011 until 2020. Up until 2016, all allocations have either been spent or committed to be spent on new and existing initiatives. The remaining funds will be staggered and released in stages until the projected completion of this NKEA in 2020.

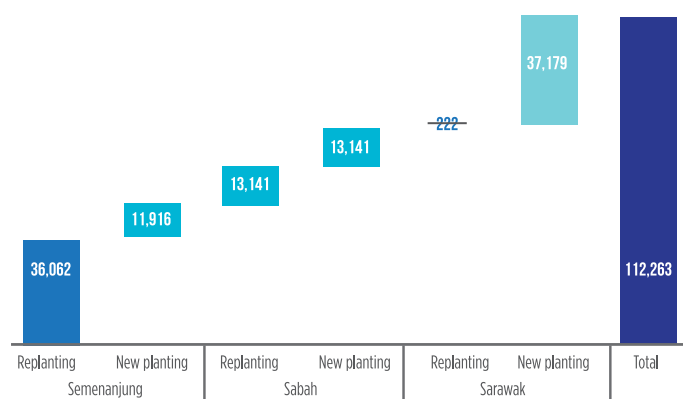
The CPO price breached the RM3,000 ceiling during the year, rising 49% to RM3,200 per tonne at the end of 2016 from RM2,151 per tonne a year earlier.

PALM OIL AND RUBBER

	Developmental Expenditure (RM mil)	10th Malaysia Plan 2011-2015 (RM mil)	11th Malaysia Plan 2016-2020 (RM mil)
 Rubber		1,544	1,384
 Palm Oil		788	1,449

Sourced from MPOB, LIGS, RISDA, and JPS

Oil Palm Replanting and New Planting (Ha)



2020 target* : Replant 365,000 hectares of land to achieve FBB yield of 26 metric tonnes per hectare annually.

Rubber Replanting and New Planting (Ha)



2020 target* : To maintain 1.2 million hectares of land planted with rubber through replanting of 40,000 ha/year and new planting of 30,000 ha/year.

* 2020 target includes both public and private sector replanting.

Ensuring Revenue Sustainability

Independent smallholders have benefitted greatly from replanting and new planting of palm oil and rubber. In terms of size of impact, the implementing agencies, namely Malaysian Palm Oil Board (MPOB), Rubber Industry Smallholders Development Authority (RISDA), Lembaga Industri Getah Sabah (LIGS), and Jabatan Pertanian Sarawak (JPS) have successfully implemented 319,340 hectares nationwide, or an area equivalent to 4.4 times the size of Singapore, in the past six years.

During the 10th Malaysia Plan, EPU disbursed a total of RM1.03 billion for oil palm planting to MPOB, and another RM748 million for rubber planting to RISDA, LIGS, and JPS. To ensure the continuity of planting efforts in the 11th Malaysia Plan and towards 2020, EPU has allocated RM540 million to MPOB. Meanwhile, for the rubber segment, RM767 million and RM644 million have been allocated to LIGS and JPS, respectively. The larger allocation in the 11th Malaysia Plan compared to the 10th Malaysia Plan for the rubber segment is intended to cover the five-year maintenance for rubber trees planted between 2012–2015 as well as 2016 onwards.

Starting 2016, efforts under this NKEA included organised oil palm

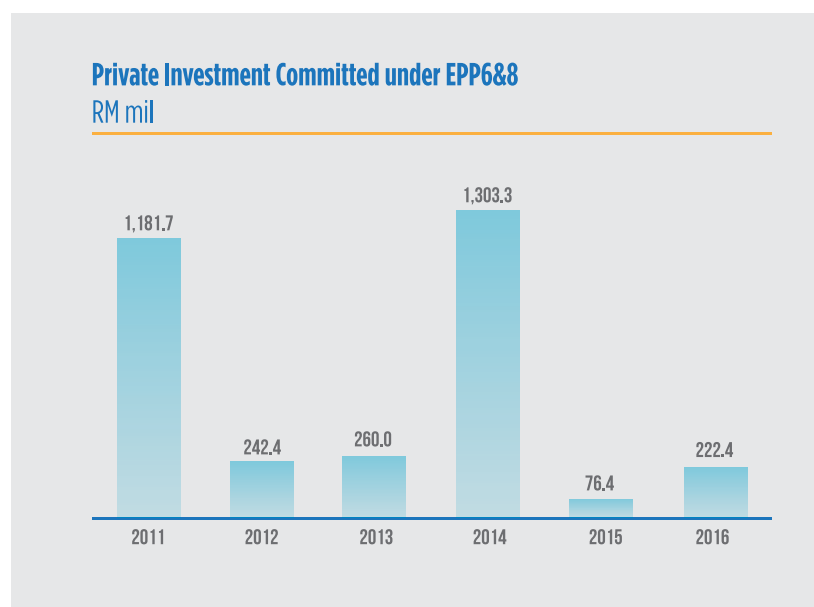
smallholders in Sarawak. This will be implemented by the Sarawak Land Consolidation and Rehabilitation Authority (SALCRA).

Since 2011, MPOB has relentlessly worked with smallholders in selected areas nationwide in forming cooperatives. By joining cooperatives and removing middlemen between smallholders and palm oil mills, smallholders will be able to gain bulk discounts on agricultural inputs and better pricing for their produce.

In 2016, 33 cooperatives with a combined membership of 2,800 have been established. Twenty-five cooperatives have started operations nationwide, up from 15 in 2015. In 2016, the cooperatives have already well-surpassed the annual target of Fresh Fruit Bunch (FFB) of 40,000 tonnes with a delivery of 47,766 tonnes and estimated value of RM21 million.

Production during the year was however impacted by climatic phenomena of dry seasons and heavy rains which took place between 2014 and 2015. This affected FFB production in 2016, resulting in a decline of 12% to 86.33 million tonnes. Subsequently, FFB yield per hectare also dropped by 14% to 15.91 tonnes per hectare as of December 2016 from 18.49 tonnes per hectare in December last year. This led to less spending for mechanisation in upstream production, affecting the take-up rate of the Oil Palm Industry Mechanisation Scheme (OPIMIS), a newly-launched scheme by MPOB.

OPIMIS provides subsidies of up to 20% for selected machinery. This was introduced to encourage mechanisation, which in turn increases productivity and reduces reliance on foreign labour. Plantations can participate via MPOB-appointed suppliers. In 2016 about 85% of the allocated RM750,000 was taken up by the industry. Going into 2017, the industry is expecting yield to recover



with palm oil production to improve by 5.6% from better yield and increased matured area. It is hoped this positive trend will spur more investments in mechanisation.

Innovation and Moving Downstream

Major companies exercised caution in investing in the downstream segment in 2016. Nonetheless, EPP6: Developing Oleo-derivatives and Bio-based Chemicals recorded some activities with a major plantation company successfully securing a substantial grant from the EPP6 fund. The project is a joint venture with a major household brand from Japan to produce essential chemical products for household use.

Meanwhile, EPP8: Expediting Growth in Foods and Health Segments, witnessed a variety of vibrant projects. On the commercialisation front, a local company partnered with a foreign firm to produce high quality export-grade food ingredients in a Less

Developed Area (LDA) in Perak. The decision to choose an LDA allows the project to earn further fiscal incentives from MIDA, as the project helps bring development and jobs to a non-traditional industrial area. For clinical trials, RM6.7 million has been granted for a multi-country lipid nutrition study and another RM6.2 million has been granted for a red palm oil study among school-goers in India and Malaysia.

With these projects, 2016 concluded with RM222.4 million in private investments, bringing total private investments to RM3.29 billion since the NKEA was initiated.

PALM OIL AND RUBBER

FIRST RECIPIENT OF ITE SCHEME GRATEFUL FOR 22 GOATS

Puan Meriah bt Abdul Hadi, who lives with her daughter and son-in-law in Tangkak, Johor makes a modest living from her five-acre land and palm plantation. On 27 October 2016, she also became the first recipient of the ITE Scheme (Skim Intensif Integrasi Ternakan Dengan Sawit).

The MPOB (Malaysian Palm Oil Board)-led scheme was introduced specifically for independent smallholders in the palm oil industry as a way to generate extra income and improve their livelihoods. "Through the ITE Scheme, we received 22 goats; two males and twenty females. We also received grass-cutting machines, animal medication and some animal feed," says Puan Meriah, adding the aid was valued at RM50,000.

MPOB's Advisory Role

Puan Meriah's application process included consultations with MPOB representatives to ensure she met the scheme's eligibility requirements. This ensures the right beneficiaries benefit from the scheme. As a smallholder who works full-time on an independent palm plantation, Puan Meriah was eligible to apply for the scheme. However, she was also asked to ensure the availability of goat pens and clean water supply for the goats.

"During the first few visits from MPOB, we did not have goat pens yet. We didn't have the money to build a proper goat pen," says Puan Meriah. "The advisors said, build some fences, they keep the goats safe. They gave suggestions on what we can do with our limited money; they were very helpful. After we built basic but working fences, our application was approved and we received the goats."

Livestock Suitable for Palm Plantations

All livestock provided by the ITE Scheme undergo medical checks to ensure they are in optimal health. The goats were also of prime reproducing age. Puan Meriah estimates that her goats give birth to 'about one new kid a week'. In addition to her own goats, Puan Meriah and her family take care of about 60 goats.

Goats and cows are suitable livestock for integration on palm oil plantations. In addition to animal feed, they can eat young palm leaves as well as grass – all available in abundance in plantations. In turn, there are many ways ITE Scheme participants can generate income from the livestock: the animals can be milked, butchered or sold for additional income, thus directly improving the livelihoods of low-income independent smallholders.

Puan Meriah's current strategy is to

accumulate as many goats as possible. Acting as animal mid-wife, she personally delivers new kids and takes care of new additions to the herd, especially during the critical first few months. Puan Meriah admits that she is so thankful for the Government's help, she is not considering selling them yet. "I will take care (of the goats) for as long as I can. I am very grateful for them."



Datuk Seri Mah on a site visit to an established glove manufacturing plant.

The rubber industry in Malaysia enjoyed a good year in 2016 and is well on its target with 62% world market share for rubber gloves and raw rubber prices on a bullish trend.

In tandem with the steady increase in petroleum prices and continued demand, the price of Standard Malaysian Rubber grade 20 (SMR 20) rose by 78% to RM8.86 per kilogram in the third week of December 2016, compared to only RM4.98 per kilogram during the same period in 2015.

Healthy growth was also observed in both the volume and value of rubber glove exports, with the fluctuations in the ringgit's value making exports more competitive. In fact, the export value of gloves has seen an increase of 1.4% at RM13.28 billion in 2016 from RM13.10 billion in 2015. Similarly, the export volume of gloves in 2016 stood at 672,952 tonnes, signifying an increase of 2.3% as compared to 657,987 tonnes in 2015.

The export value of gloves has seen an increase of 1.4% at RM13.28 billion in 2016 from RM13.10 billion in 2015

PALM OIL AND RUBBER



In 2016, MSPO awarded certification to a combined 122,521 hectares of palm oil plantations.

Championing Environmental Sustainability

The palm oil industry has been accused of being one of the contributors to environmental damage. Exaggerated claims have been received from environmental groups as well as from concerned members of the public. Taking this into consideration, steps are taken to ensure palm oil plantations in Malaysia follow best practices in protecting the environment, without compromising yield quantity and quality.

To address this, MPOB has successfully developed the Malaysian Sustainable Palm Oil (MSPO) certification, which was

launched in 2015 and has since been implemented nationwide. The MSPO certification is critical to for the export industry, and is targeted to spur environmental awareness and consumer demand for sustainably produced palm oil products, from toothpaste to margarine and lubricants. In 2016, MSPO awarded certification to a combined 122,521 hectares of palm oil plantations.

From 2017 onwards, the MSPO development and certification will be carried out by the Malaysian Palm Oil Certification Council (MPOCC), though MPOB will remain involved in the development of smallholder certification. This will ensure streamlined certification processes and demonstrate Malaysia's commitment to achieving environmental sustainability in palm oil plantations.



MOVING FORWARD ►

The Palm Oil and Rubber NKEA will continue implementing new and existing initiatives to increase productivity and improve the livelihoods of stakeholders in the upstream industry, as well as further add value in the downstream.

Looking abroad for new opportunities, the industry is aiming for greater integration with export destinations such as India, China, and the EU. The Ministry, together with MPOB will work hand-in-hand with the private sector to explore market integration opportunities. This is to help the industry secure more investments abroad and continue driving exports.

However, labour scarcity in the upstream industry remains the biggest challenge, hampering the progress in achieving higher FFB per hectare of production. This will be addressed by facilitating greater investment in higher yielding palms and mechanisation as well as finding cost-effective ways to reduce dependence on labourers.

The depreciation of the ringgit against the US dollar has hindered the private sector from investing in downstream production domestically. Incentives, including tax breaks and grants will catalyse new investments and expansion.

TOURISM



**DATO' SERI MOHAMED
NAZRI BIN ABDUL AZIZ**

Minister of Tourism and Culture

The year 2016 reveals a huge recovery in Malaysia's tourist arrivals and receipts which demonstrate both the Ministry of Tourism and Culture (MOTAC) and private sector's commitments towards achieving Tourism and Culture NKEA targets. Malaysia also continues to receive international accolades such as Asia's Leading Destination by World Travel Awards 2016 and No. 1 Muslim-friendly Destination by MasterCard-Crescent Rating 2016 which serve as testaments of our relentless endeavour.

From there onwards, we have identified new areas of opportunities through the Tourism Lab 2.0 such as culture, arts, heritage and craft sector and niche sector that consists of birding, diving and homestay. This effort has stimulated the industry to diversify its offering and capitalise on its numerous local products and experiences. The ecotourism cluster and cruise industry have also risen to become strong venues in receiving visitors at Malaysia's various nature sites and ports.

Additionally, Malaysia has also advanced itself as one of the region's top business destination through numerous highly accredited Meetings, Incentives, Conferences and Exhibition (MICE) events which facilitate business to business negotiations and attract many international delegates. Expansion of facilities such as the Kuala Lumpur Convention Centre and Kota Kinabalu Convention Centre will also enable more opportunities of hosting large-scale events in the future.

This year's strategy to facilitate eVisa for Chinese tourists has resulted in an increase of tourist arrivals from China. Malaysia sees this as a strategic opportunity and has since planned on giving out similar allowance for tourists from other countries with rising purchasing power as well. In addition to that, our collaboration with top international digital media as a marketing platform will continue to be vital in promoting our country at the global stage.

Growth upon current success remains critical in the effort of achieving our goals within the National Transformation Programme (NTP) and Malaysia Tourism Transformation Plan (MTTP). With relentless effort and consolidated improvement, I am sure that Malaysia's tourism industry will continue to flourish as one of the nation's vital supporting economic pillar.

OVERVIEW

The tourism sector saw a strong recovery in 2016, with 26.7 million arrivals recorded versus 25.7 million in 2015, moving closer towards achieving the 2020 target of 36 million tourist arrivals. Receipts also registered an increase of RM13 billion, reaching RM82.1 billion in total, 49% of the RM168 billion revenue targeted by 2020. The NKEA remains on course towards its target of achieving 36 million arrivals

from China, including a visa-free option (eNTRI) saw immediate results. This also helped to boost the sector's performance during the year, with a 26.7% increase in Chinese visitors in 2016. Upon its successful pilot, the eVisa facility was subsequently extended to India, Bangladesh, Nepal and Myanmar.

As testament that the success of this NKEA is built upon the combined efforts of both the Government and



Tan Sri Dr Ong Hong Peng, Secretary-General of MOTAC at the groundbreaking ceremony of phase 2 of Mitsui Outlet Park KLIA

and RM168 billion tourism receipts by 2020, due in no small part due to the continuous efforts by MOTAC and its agencies including Tourism Malaysia (TM) and various private sector stakeholders.

MOTAC's efforts in facilitating the Tourism NKEA have borne strong results with the Ministry achieving 112% of its KPIs in 2016, and contributing to RM73.7 billion in GNI, driven by the Shopping, Ecotourism, Cruise and Business Events focus areas which continued to grow during the year. The Government's decision in March 2016 to enable eVisa applications

the private sector, the NKEA's various EPP players also recorded major milestones during the year. This included Melaka Gateway's signing of a Memorandum of Agreement (MOA) with China's state-owned Powerchina International Group Ltd on 1 September 2016 for investments worth approximately RM30 billion, which will be released in phases over the next two years. Meanwhile, Mitsui Outlet Park (MOP) KLIA announced groundbreaking on its Phase 2 expansion on 14 November 2016. Phase 2, worth approximately RM60 million, will introduce more premium brands and host 60 more

TOURISM

shops, bringing the number of outlets in both phases of the factory outlet shopping mall to 190. The expanded mall is expected to open in January 2018.

Malaysia continued to earn global recognition during the year, with the country named Asia's Leading Destination in the prestigious World Travel Awards 2016. Malaysia was also ranked the No. 1 Muslim-friendly destination in the world in the MasterCard-CrescentRating Global Muslim Travel Index 2016.

Malaysia's other accolades in 2016 include Best Asian City Destination and Best Asian Culinary Destination by the Travvy Awards (travAlliancemedial). Additionally, Kuala Lumpur was listed among the Top 5 destinations in Expedia UK's list of the world's 25 best shopping cities, while Ipoh was named in Lonely Planet's Top 10 Best in Asia for 2016 list.

Tourism industry stakeholders also earned their share of accolades at the World Tourism Awards 2016, with One World Hotel named Asia's Leading Meetings & Conference Hotel while Resorts World Genting was recognised as Asia's Leading Themed Resort. Zouk KL was also named Hospitality Asia Platinum Award's (HAPA) Nightspot of the Year.

Charting the Course for the Next Five Years

With a view of evaluating the progress of this NKEA towards its targets for 2020, MOTAC held a Tourism & Culture Lab 2.0 (Lab 2.0) from 6 January to 16 February 2016. The lab aimed not only to review existing tourism initiatives under the NTP but also to expand the areas of focus, if necessary.



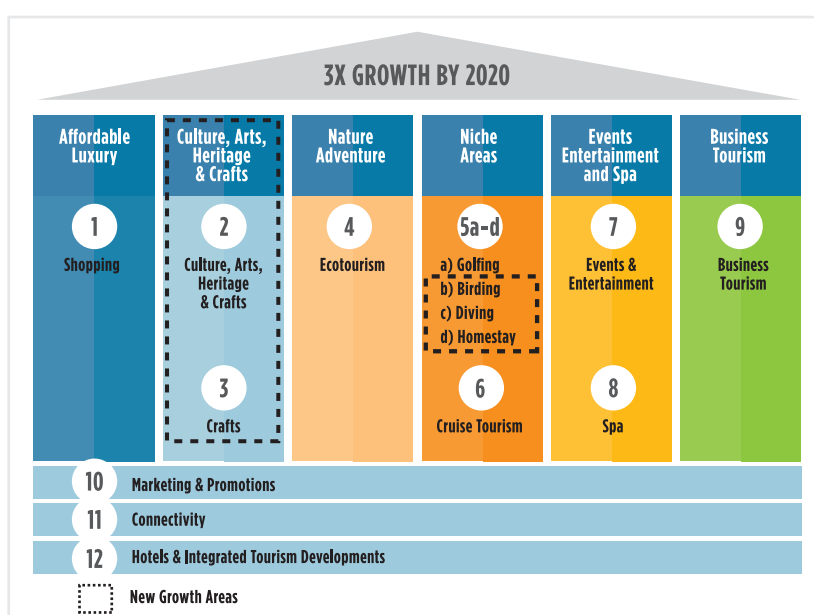
Irresistible Malaysian hand-woven crafts

194 public and private sector representatives participated in Lab 2.0, with private sector participants accounting for 69% of the lab members. The strong private sector participation reflects the industry's continued commitment to the Tourism NKEA.

Following the assessment of existing and new focus areas under the Tourism NKEA, 71 initiatives across

12 Focus Areas were proposed, with most initiatives either private sector-led or to be undertaken via Public-Private Partnerships.

The new focus areas included in Lab 2.0 comprise culture, arts & heritage, crafts, birding, diving and homestay. The inclusion of culture, arts & heritage and crafts represents an opportunity for Malaysia to tap into the inherent strengths of



Tourism & Culture Lab 2.0 Focus Areas



International Federation of Freight Forwarders Associations (FIATA)
World Congress in Berlin, Ireland

its cultural diversity and is aimed at supplementing efforts already undertaken by MOTAC. These efforts will include identifying new platforms to support Malaysian craft entrepreneurs and improving standards to encourage consistency in the products developed. This will also benefit the various stakeholders in the supply chain of craft products, which go beyond the crafts entrepreneurs, including both the logistics and retail service providers.

The new niche areas proposed also aim to further diversify

tourism offerings and capitalise on opportunities for Malaysia to offer products and experiences catering to various special interest groups, particularly in the high-yield birding and diving sectors. Efforts to develop the birding segment will be placed on training more birding guides while improving facilities at several top birding sites in Malaysia. In terms of diving, the National Recreational Scuba Diving Council (NDC) has been established, through which the industry will work collaboratively on safety, regulation and related environmental issues.

Existing focus areas such as affordable luxury, nature/adventure and business tourism were also revisited to take into consideration the efforts and lessons from the past five years along with their outlook in the near-to-medium-term.

Efforts on promoting Malaysia as a duty-free shopping destination will continue, along with further improvements to the Tourism Refund Scheme (TRS). Shopping Secretariat Malaysia (SSM) will also continue to identify new partnerships with key shopping malls and precincts to actively promote shopping destinations around the country.

Malaysia Major Events (MME) will work with the Arts, Live Festivals & Events Association of Malaysia (ALIFE) to improve coordination between event organisers and Government authorities. MME's efforts to facilitate both homegrown events and major live events will also continue via its Events Support Programme.

The construction of any new 4- and 5-star hotels and major integrated resorts will be facilitated on an ad-hoc basis by MOTAC following due assessment.



Launching of Alitrip Malaysia Tourism Pavilion in Kuala Lumpur

TOURISM

CRUISE TOURISM MAKING WAVES

“The country’s cruise numbers have been encouraging, with the number of cruise calls growing by 36% since 2013.”



The growth of cruise tourism in Malaysia has been a welcome additional economic growth driver for the country. While cruise passengers may not spend on hotel accommodations, unless Malaysia develops its cruise destinations into turnaround ports, they tend to splash on excursions to tourist attractions, and on shopping and food.

Yap Sook Ling, Managing Director at Asian Overland Services which organises shore excursions for cruise passengers, says that cruise tourists tend to want to make the most of their time given that they had been sequestered on a ship for long periods and have only limited time to explore each destination.

“Cruise passengers will want to go out and discover the destination,” Sook Ling says. “They will go on an intense session of buying, eating and visiting places of interest.”

She notes that this spending benefits the local economy. Tourism industry players such as food vendors, coach drivers and tour guides all benefit from the cruise tourism action. “The impact is quite huge,” Sook Ling remarks.

With the cruise markets in North America and Europe now matured, the focus has shifted to Asia and Malaysia

by 36% since 2013. Royal Caribbean’s 4,905-passenger Ovation of the Seas also made its maiden call to Penang and Port Klang in 2016. Melaka’s cruise tourism is also poised to grow even further with the Melaka International Cruise Terminal at Melaka Gateway expected to be fully operational by 2018 and will have the capacity to cater for 250 cruise ships per annum catering to an estimated one million cruise passengers.

Sook Ling says, however, some measures could help further develop Malaysia’s appeal to cruise passengers. One is to refresh the country’s branding and products. Another is to raise the levels of professionalism among vendors, especially in the rental of water sports equipment and boats. “It is important that the vendors are licensed and adequately insured,” she says, adding that tourists do not mind paying more for the additional peace of mind.



has an opportunity to grab a bigger share of the cruise market. The country’s cruise numbers have been encouraging, with the number of cruise calls growing



SETTING NEW STANDARDS IN MALAYSIAN HOSPITALITY



Since opening its doors in 2016, the St Regis Kuala Lumpur has set new benchmarks for the capital city's hospitality scene. From its oversized rooms to the world's first large seamless ballroom projection system, the elite property has raised the bar in terms of what a top hotel in Malaysia should be, and makes up one of the projects under the Tourism NKEA.

The hotel was designed and conceptualised by rising property developers Carmen and Carmey Chua with an eye on to exceed the needs of ordinary travellers.

"This hotel is about raising the standards in Malaysia," says Carmen Chua, recounting how she and her sister spent countless hours picking out custom furnishings and artworks as well as pushing the boundaries of what was possible to make a statement with this property.

One of those boundaries pushed was in terms of technology. The hotel boasts a ground-breaking 188.16 metre-long Seamless LED Projection System which runs around the ballroom walls and turns the space into a stunning immersive digital canvas. The scale of the 47 massive LED panels enable guests to enjoy virtual experiences such as trips through the galaxy in a way never before in a hotel ballroom. "The LED Projection System allows you to realise any creative concept you want," says Chua.

Food is another area in which the property has raised standards in Kuala Lumpur, playing host to Taka, the only restaurant outside of Tokyo helmed by Saito-san, a three-Michelin starred sushi chef.

An important benefit of all the high standards introduced by the hotel was the promotion of local talents which were involved in making the sophisticated

digital content for the seamless LED Projection Systems. Local artisans were also involved in making the exquisite Japanese style lacquer doors in Taka.

"We want the hotel to go beyond the norms," says Chua. "We set standards that go beyond expectations."

"The elite property has raised the bar in terms of what a top hotel in Malaysia should be, and makes up one of the projects under the Tourism NKEA."

TOURISM

Eco and Cruise Tourism Showcase Malaysia's Natural Splendours

Following restoration and repair efforts, key nature sites in Malaysia have completely recovered from the natural disasters in 2014 which affected visitor arrivals in 2015. A total of 859,409 visitors visited Malaysia as a Mega Biodiversity Hub (MMBH) sites in 2016, far surpassing the target of 650,000 for the year. Significant increases were seen in Kinabalu Park following the opening of the new Ranau Trail, which takes climbers up to Mount Kinabalu, in November 2016. Sabah Parks has also since added the new Kota Belud trail. Similarly, Taman Negara saw an increase of 156% to 93,620 visitors in 2016 since its reopening following repairs due to flood damage.

**A total of 859,409
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Adrenalin pumping water rafting, Padas River, Sabah

In line with the recommendations from MOTAC's National Ecotourism Plan 2016-2025, ecotourism efforts will be focused on developing ecotourism clusters. A pilot cluster has been set up for the Taiping-Batu Kurau area led by the State Executive Committee on Tourism in Perak. In addition to this, two other pilot clusters have been identified in Sabah and Sarawak.

The Cruise Tourism segment continued to perform well, with the number of cruise calls growing by 36% since 2013. The Melaka International Cruise Terminal at Melaka Gateway is expected to be fully operational by 1Q2018 and will have the capacity to cater for 250 cruise ships per annum with an estimated 1 million cruise passengers.



MyCEB inked a strategic partnership deal with Malaysia Airlines Berhad in April 2016



Sarawak Cultural Show

In 2016, a total of 341 business events, comprising corporate meetings, incentive travel, conventions & exhibitions were held in Malaysia, attracting more than 127,849 international delegates and delivering an estimated RM1.5 billion in economic impact to the country.

In June 2016, the 4,905-passenger Royal Caribbean vessel Ovation of the Seas made its maiden calls to Penang and Port Klang. The Royal Caribbean fleet is estimated to bring to shore more than 190,000 cruise passengers to Penang, Port Klang and Langkawi for the cruise season between October 2016 and May 2017.

This achievement is further testament to the growing cruise market that has seen a 32% increase in cruise passengers from 523,272 in 2015 to 692,063 in 2016. The growth in visitors during the cruise



season will naturally benefit the destinations due to the economic activity it generates to transport providers, key tourism attractions and also local food and beverage vendors operating in the vicinity of the port.

Positioning Malaysia as the Region's Business Destination

For Business Tourism, Malaysia Convention & Exhibition Bureau (MyCEB) continues to build on Malaysia's prominence as one of the region's leading business destinations. In 2016, a total of 341 business events, comprising corporate meetings, incentive travel, conventions & exhibitions were held in Malaysia, attracting more than 127,849 international delegates

TOURISM



Tourists taking photos in front of Perdana Putra, Putrajaya

and delivering an estimated RM1.5 billion in economic impact to the country. In addition to the direct contribution to local businesses and hotels, business events also brought in knowledge transfer, B2B opportunities, innovation to the Malaysian community; elevating the profile of Malaysia.

MyCEB continues to collaborate with the different Ministries for the attraction, development and creation of strategically important business events that will support the objective of the respective Ministries and NKEAs. Among key events highlights in 2016 included the hosting of the World Congress of the International Society of Physical and Rehabilitation Medicine - ISPRM 2016 (1,600 delegates) and the first ever Institute of Electrical and Electronic Engineers' International Conference on Communications 2016 (IEEE ICC) organised in Southeast Asia (1,800 delegates).

Malaysia recorded a further milestone with Kuching hosting the largest number of Malaysian and Asian delegates at the 55th International Congress and Convention Association (ICCA) Congress. The ICCA Congress was a significant achievement for Malaysia, with the Association responsible for ranking cities and countries globally

in the meetings industry. The event saw 835 delegates from 61 countries converge in Kuching and clearly put Malaysia on the Business Events map.

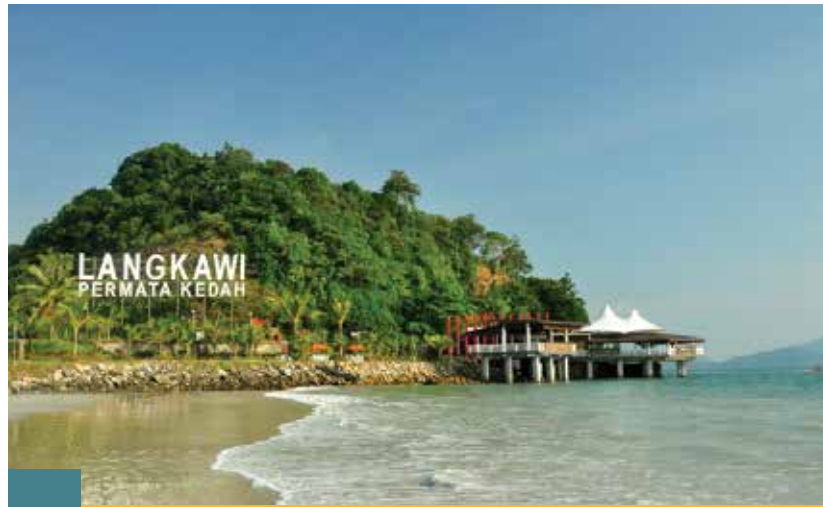
The first edition of the World Travel Mart (WTM) Connect Asia was also held in Penang during the year, which saw buyers and suppliers from over 30 countries converge for



55th International Congress and Convention Association (ICCA) Congress.

Business-to-Business negotiations. The return of Chinese tourists via the Perfect China International Incentive Trip marked another notable achievement, accounting for the largest incentive event held in Malaysia in 2016 as it attracted over 12,000 international tourists for seven days.

Malaysia looks set to build on these achievements in business tourism with new facilities currently under construction. These include the expansion of Kuala Lumpur Convention Centre (KLCC), which is scheduled for completion in 2018. When operational, this extension will provide an additional 10,000 square meters of flexible and multipurpose floor space to its existing 22,659 square meters, allowing it to accommodate not only larger international meetings but also concurrent events. Sabah is also expected to see the completion of the Kota Kinabalu Convention



The legendary Langkawi Island

Centre which will be able to accommodate 5,000 delegates by mid-2018. These additional facilities will enable better scale and diversity of events to be held in these key MICE destinations in Malaysia.

Easing Entry of Tourists

The Government introduced Visa-free entry and eVisa in March 2016 to encourage travel by Chinese



Sunset over Kuala Lumpur

TOURISM



The introduction of Visa-free entry and eVisa has resulted in a 26.7% increase in Chinese tourist arrivals to Malaysia.

tourists. The Visa-free entry, also known as eNTRI, enables Chinese tourists to visit Malaysia for a period not exceeding 15 days, while eVisa allows a length of stay of up to 30 days. The application for visas can be performed online at tourists' convenience and does not require the physical handover of passports. This new process has resulted in a 26.7% increase in Chinese tourist arrivals to Malaysia.

The eVisa has also been extended to nationals from India, Bangladesh, Nepal and Myanmar who are residing in their respective countries.

Leveraging on Digital Media Platforms

TM has continued to recognise the importance of digital media as a key marketing and promotions

platform for today's travellers. In 2016, TM signed a Memorandum of Understanding (MoU) with Alitrip, an e-commerce platform owned by the Alibaba Group, to strengthen promotion in China. The implementation of the Malaysia Tourism Pavilion (MTP) using this platform will take place in 2017.

Aside from this, SSM also further embraced digital media with the launch of a new digital icon, Miss SHOPhia. This new icon will be positioned in all promotions to provide guidance to shoppers on fashion trends, latest news of where to shop and what to look out for to get the best out of shopping in Malaysia, marking a departure from conventional static advertising. In this same vein, her persona and appearance will also be modified throughout the year to accommodate the different festivities and also target markets globally.



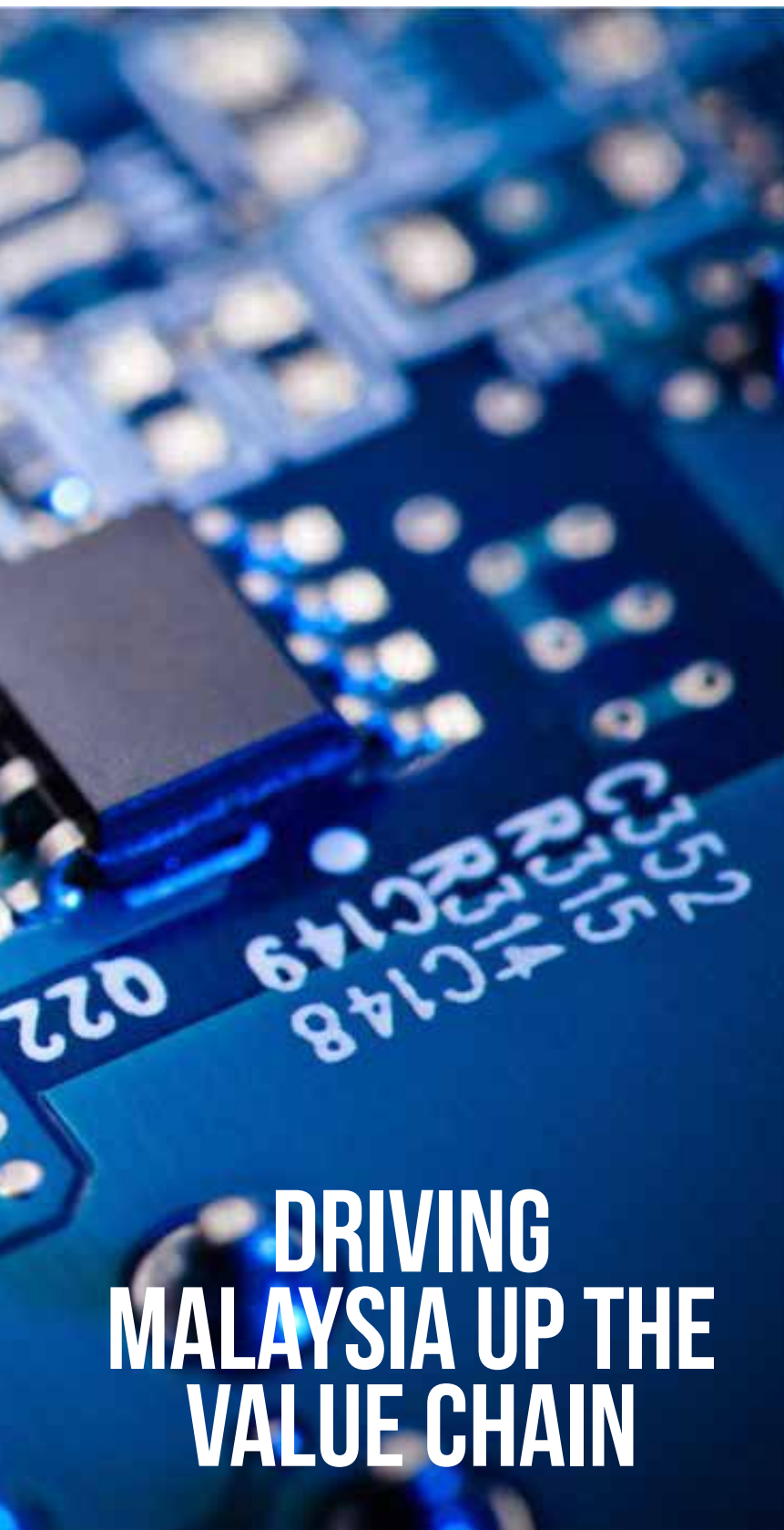
MOVING FORWARD ►

As part of the NTP, MOTAC will look to build on its success in 2016 via the initiatives identified in Lab 2.0, that seek to promote local SMEs within the industry.

Emphasis will be placed on the newly identified focus areas, such as crafts, by working with corridor agencies NCER, ECER, IRDA, SCORE and SEDIA to identify local craftsmen and develop craft entrepreneurs. Aside from these collaborations, efforts will be taken to identify means to improve available distribution channels for these local products. Efforts will also focus on initiatives identified in both the niche areas of birding and diving.

The outlook of the sector in 2017 will be challenging, particularly with marketing and promotional budgets shrinking. Nevertheless, MOTAC is confident that its ongoing collaborations and smart partnerships with the industry will enable the sector to continue to build positive momentum, striving to achieve more with less, towards achieving its 2020 targets of 36 million tourists and RM168 billion tourism receipts.

ELECTRICAL & ELECTRONICS

**DATO' SRI MUSTAPA MOHAMED**

Minister of International Trade and Industry

Despite the global slowdown in trade and challenges brought by new technology, the Electrical and Electronics (E&E) sector remains a key driver in Malaysia's industrial development. The E&E sector continues to be a significant contributor to its gross domestic product (GDP) growth, export earnings, value-added investments and employment opportunities.

The Malaysia Investment Development Authority (MIDA) approved a total of 107 E&E projects with investments of RM9.2 billion, surpassing the year's target of RM6 billion. Of these, 17 projects were new with investments totalling RM1.5 billion, while 90 were expansion or diversification projects with investments amounting to RM7.7 billion.

The major share of E&E investments was made up of foreign investments amounting to RM7.9 billion (86%), while domestic investments amounted to RM1.3 billion (14%). Most of these investments involved expansion and diversification activities in the manufacturing of LED products, household appliances, solar wafers and cells.

Since 2011, 455 projects valued at RM54 billion were approved, out of which 356 projects worth RM40.6 billion were implemented.

These projects have further enhanced our exports of E&E products, which rose by 3.5% to RM287.7 billion in 2016. Malaysia's E&E exports account for 44.6% of the country's total exports last year.

Demand continued to be driven by new applications of Internet of Things (IoT) in the sphere of wireless communications and wearable devices, reflecting the success of our efforts through the NTP to produce high-value and innovative products. The NKEA E&E has achieved 89% of its targets as at the end of 2016 and is on track to meet its overall targets by 2020.

We are confident that the existing measures under the NKEA together with continued emphasis on innovation will propel Malaysia towards reaching our goals for 2020 and beyond.



**DATUK SERI PANGLIMA
WILFRED MADIUS TANGAU**

Minister of Science, Technology
and Innovation

The E&E industry contributes significantly towards Malaysia's industrial development and its GDP growth, export earnings, investments and employment opportunities. In 2016, the Ministry of Science, Technology and Innovation (MOSTI) continued to provide technical support services to sustain the E&E industry through our agencies, namely, MIMOS, NanoMalaysia and SIRIM.

MIMOS had actively engaged the industry players and institutions of higher learning to implement human resource development programs in the E&E services sector, with emphasis in Advanced Failure Analysis, Material Analysis and Wafer Testing. As the national wafer testing service provider, MIMOS continued to leverage on the shared infrastructure services approach to provide value-added services and as an enabler to the semiconductor industry's ecosystem.

MOSTI is optimistic that the integration of graphene and other nanotechnology-based materials would boost the value and performance of E&E applications. In 2016, NanoMalaysia facilitated the adoption of graphene-based conductive ink and Copper-Carbon Nanotubes (Cu-CNT) into HANS LED Systems' LED products. NanoMalaysia also promoted photovoltaic solar panels and nanosensors to the swiftlet farming industry by funding their product development activities and providing independent valuation of Intellectual Property (IP).

SIRIM has set up an Eco-Industrial Design Centre (EIDC) as a cross-cutting enabler to drive the manufacturing and service sectors for sustainability and global competitiveness. There are currently four 3D printing machines that can produce prototypes for small batch manufacturing. SIRIM also encourages industrial and product designers to work closely with the EIDC to create a pool of local designers and engineers who can design for the environment.

OVERVIEW

The performance of the E&E industry since the inception of the NTP is a clear success story of Malaysia's effort to engage in higher-value-added activities that will drive the country's transformation into a high-income economy by 2020. While Malaysia remains an attractive market for activities on the lower end of the value chain such as electronic components manufacturing, the country has also raised its global competitiveness in high-value operations such as industrial design, test & measurement and electrical appliances.

This has been achieved through investments in four major avenues, i.e. the National Instruments Academy & Innovation Nucleus (NI-AIN), SIRIM Bhd's Eco Industrial Design Centre (EIDC), SME Corp Local LED Companies Capacity Building Programme, and the MIMOS Advanced Analytical Labs. In addition to moving Malaysia up the value chain, this has catalysed immense benefits for the country and its people, creating 117,609 employment opportunities as at the end of 2016, well on track to achieve the target of 157,000 jobs by 2020.

Developments in the LED sector point to the progress that has been achieved by the E&E industry since the start of the NTP, with Malaysian companies shifting away from downstream activities like assembling, packaging and testing to higher volume and more profitable markets and distribution. During the year, initiatives under this NKEA enabled 11 Malaysian companies to penetrate global markets, with combined sales of RM125.2 million.

However, progress in some areas was hamstrung by market conditions. For example, initiatives to increase the number of solar module producers have been impacted by narrowing profit margins and the implementation of anti-circumvention duties and anti-subsidy duties on Chinese solar PV panels and cells shipped from Taiwan and Malaysia to the EU. An initiative to develop the E&E industry for rail maintenance, repair and overhaul (MRO) has also been slow to take off; hence a two-day workshop on the rail sector was held at the end of the year to chart the way forward for this initiative and identify new areas of growth.

The growth potential of some areas, such as SME Corp's LED Consortium Programme, has also been limited by budget constraints prevalent across industries and the economy. Another initiative, CREST, which was set up under this NKEA to act as a platform for E&E industry players and academia to collaborate on research, design and development, has catalysed R&D projects worth RM28 million to date. A new mechanism has been proposed to enhance the fund disbursement process.

In spite of these challenges, Malaysia remains firmly on the right track in diversifying its E&E capabilities as it strengthens its competitiveness and use of innovation to unlock higher levels of GDP, GNI and FDI.

ELECTRICAL & ELECTRONICS



YB Datuk Chua Tee Yong and Dr. Roland Mueller at the launch of Osram Opto Semiconductors' new LED production plant in December 2016.

Sustaining Competitiveness in the Semiconductor Sector

Malaysia has long built its expertise in semiconductor fabrication. As the technology in some fabrication plants approaches maturity, measures were taken to leverage the country's competitive advantage in semiconductor fabrication by executing a "smart follower" strategy. This strategy entails the establishment of wafer fabrication plants that use mature technology in niche applications (e.g. analogue and power), and accounts for approximately 65% of global semiconductor revenue.

Besides reducing innovation risks and offering more sustainable and attractive returns in the long run, this strategy will build a critical mass of semiconductor wafer fabrication capacity and strengthen the sector's human capital to drive the entire semiconductor value chain that encompasses design, fabrication, production, assembly, testing, sales and distribution under a capacity-building programme developed by MIDA and MIMOS.

In 2016, a total of 135 engineers, lecturers and students were trained in failure analysis (FA), material analysis (MA), and wafer level testing under the programme. Of these, 32 engineers were trained on FA & MA under the 1MGrip Programme and 1Malaysia Outplacement Centre (1MOC), while 26 engineers were trained on Product Reliability Testing under the 1MGrip Programme and Public Training. A further 77 lecturers and students trained on Wafer Level Testing under the WISE Programme, ensuring good training and exposure for both industry practitioners and academia.

MIMOS has also provided the industry with 708 advanced analytical services, exceeding the target of 700 for 2016, which was revised upwards from 300 during a mid-year review in July 2016.

Over 70 institutions utilising MIMOS' services benefited from reduced costs (MIMOS' services are more cost-effective than those of foreign testing labs), shorter turnaround times (samples are tested locally, negating the need for offshore deliveries), and knowledge transfer from MIMOS. These institutions include companies from diverse fields such as audio-visual technologies, rubber-glove manufacturing, gaming,

education, and semiconductor manufacturing. During the year, MIMOS also provided four wafer-testing services to local E&E companies, while MIMOS' metrology lab was also utilised by 19 institutions for 31 projects, exceeding the year's target of 30.

MIMOS has also supported companies involved in integrated circuit design and in 2014 completed engineering samples of the Green Motion Controller (GMC) for commercial adoption. In 2016, two local companies used the GMC in their products, which enables more energy-efficient applications such as hybrid electric vehicles and home appliances.

LED Shining the Way Forward

Malaysia's growing stature as a production hub for LED manufacturers is a point of pride for the nation in its journey to high-income status. LED production clusters have been developed in the country to manufacture sophisticated semiconductor devices for wafer fabrication as well as lighting products and solutions like vehicle lighting, backlights and displays. Against this backdrop, 11 Malaysian companies strengthened their foothold in the global market in 2016, with combined sales of RM125.2 million in 2016.

The LED ecosystem in Malaysia is further set to be enhanced with the construction of the largest and latest six-inch LED chip production site in the world in Kulim, Kedah, by Osram, a multinational lighting manufacturer specialising in innovative and sustainable lighting solutions. Osram is investing RM4.7 billion to build the plant, which is expected to spur future deployments of high-technology projects in Malaysia.

Osram has already begun to realise its investment with its construction of an epitaxy-manufacturing plant at the site, making it the first time Osram has undertaken LED epitaxy manufacturing outside its home country of Germany.

Game-Changers Leap Forward

This NKEA has identified a host of new, high-growth areas and initiatives to extend the country's E&E capabilities. These include positioning the country as a test and measurement hub offering design and development as well as certification facilities for LED and solar products. The local test

and measurement landscape has continued to thrive, and during the year saw 48 products from seven companies undergo testing at QAV Technologies Sdn Bhd's test centres in Penang and Selangor.

The country's venture into new technologies has also paid off: Penchem Technologies Sdn Bhd developed a commercially ready printable graphene-based conductive ink for electronic applications such as flexible circuit and sensors, inkjet conductive ink, RFID tags, antenna and electrostatic detection devices.

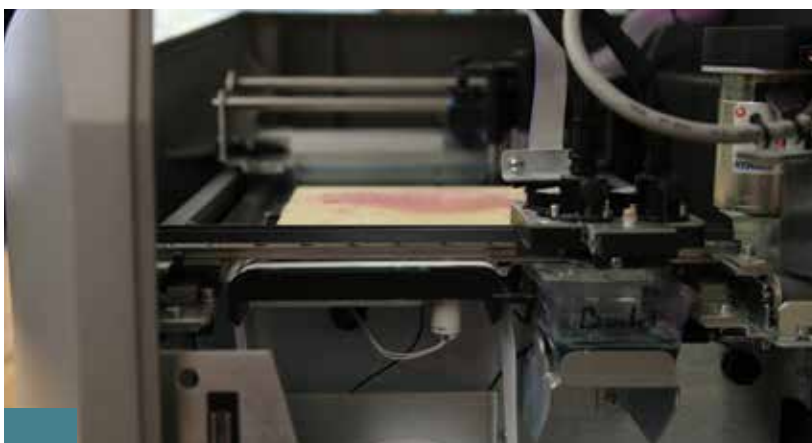
Further deepening Malaysia's expertise in E&E were efforts to grow automation equipment manufacturing, which saw 13 automation projects undertaken in 2016 by local companies, agencies and institutes in system design,

prototyping, proof-of-concept and system customisation at the National Instruments Academy & Innovation Nucleus set up through this NKEA. The projects include Seagate International (Johor) Sdn Bhd's flash monitoring system, Universiti Pertahanan Nasional Malaysia's blast test system, Infineon Technologies (M) Sdn Bhd's development on RF semiconductor testing, Asian Geos Sdn Bhd's testing and troubleshooting for payout tension meters and Universiti Putra Malaysia's gearshift durability test, rotational gear durability test upgrade and oil palm grading system.

The country has also sustained the development of its embedded-systems sector, capitalising on its established electronics ecosystems and skilled local embedded-systems enterprises. During the year, three new embedded-systems projects were approved under the MDEC's Digital Malaysia Embedded Systems Funding Programme. This initiative encompasses an embedded IoT pilot for 3D printing, testing and measurement systems, as well as electrical safety devices.

SIRIM's EIDC, which was established under this NKEA, has also continued to support local industries in producing environmentally friendly products through eco-innovation. In 2016, 20 eco-design applications were undertaken by companies utilising the shared facilities at EIDC. These applications include Edotco Group Sdn Bhd's CFP profiling for telecommunication towers, Khind-Mistral Industries Sdn Bhd's airflow simulation of a 56-inch ceiling fan, EcoOils Sdn Bhd's life cycle inventory analysis for greenhouse gases profile of eco-processed pozzolan, Wilron Product Sdn Bhd's simulation of adhesive mixing using computational fluid dynamics analysis and SIRIM's design and development of dental implant procedures.

This NKEA has identified a host of new, high-growth areas and initiatives to extend the country's E&E capabilities.



Additive manufacturing transformed the manufacturing industry by allowing greater freedom to design and innovate, increasing supply chain efficiency and supporting green manufacturing initiatives.

ELECTRICAL & ELECTRONICS

ECLIMO – MALAYSIAN-MADE ELECTRIC SCOOTER MAKING WAVES AT HOME AND ABROAD

The Eclimo electric scooter was the brainchild of Dato' Dennis Chuah, the founder and executive director of Eclimo Sdn Bhd, after he successfully developed a battery suitable for electric automobiles. In 2008, after weighing all the factors, costs and infrastructure of venturing into electric automobiles, Dato' Dennis found that electric scooters were the most feasible, meeting market demands and cost effective to manufacture in Malaysia. In 2008, Dato' Dennis sold his electrical engineering company to invest his money and passion into his Penang-based company.

"The Eclimo scooters are lithium battery operated; it is easy to operate with minimal requirements. The similar type of Lithium Batteries are used in cars and buses," describes Dato' Dennis, who designed the scooter himself. "The scooter is capable of running up to a speed of 80km per hour. The Eclimo has been approved by JPJ as roadworthy and is being assembled in its compact assembly plant in Perai Industrial Estate, Penang with a team of 20 employees only. The scooter only requires service after the battery has run for 800 hours."

Before launching Eclimo into the market, Dato' Dennis conducted a market survey looking for industries and users who require green technology that is cost-effective for their business. They met their first customer, Kentucky Fried Chicken Malaysia (KFC). "KFC Malaysia was facing multiple handling and logistic issues with their motorbikes for their delivery business in the major cities. We approached them to offer the scooter rental program where Eclimo takes care of the maintenance of all the scooters.



"The built-in GPS helps KFC store managers to monitor the movement of the bikers; and unlike conventional bikes, no petty cash handling is required for bikers to pump petrol. A rental programme resolved all of KFC's issues on asset maintenance, petty cash handling and employees' delivery efficiency." Currently, KFC stores in Kuala Lumpur, Penang, and Sungai Petani use the Eclimo for their delivery services. There are plans to expand this service to Perak and many other states in Malaysia.

While the Malaysian market is still developing its exposure and knowledge about battery-operated vehicles, Eclimo has already made its appearance at international scooter trade shows. "Investors from Japan and Germany had approached Eclimo to acquire the design and the brand," says Dato' Dennis, who however insists on keeping Eclimo a truly Malaysian electric scooter.

Eclimo is leveraging its knowledge and expertise in battery-manufacturing to keep the cost of the

battery low for their scooters. In the meantime, Eclimo is also diversifying into recycling the batteries from the scooters into durable portable batteries for household and general consumer markets domestically.

"Eclimo looks forward to tapping into opportunities from the NKEA Electrical and Electronics to further establish the Eclimo brand in Malaysia and into the overseas market as a fully and truly Malaysian-made electric scooter."

Currently, KFC stores in Kuala Lumpur, Penang, and Sungai Petani use the Eclimo for their delivery services.



MOVING FORWARD ►

The establishment of the Electrical and Electronics Strategic Council (EESC) in 2015 is seen as an important development for the industry, with both the private sector and the Government working together to lead the direction of the industry in Malaysia. Co-chaired by Malaysian American Electronics Industry Chairman Dato' Wong Siew Hai and Malaysian Investment Development Authority Chief Executive Officer Dato' Azman Mahmud, its main members consist of representatives from MITI, MATRADE, MDEC, the EPU, MIDA and Bank Negara Malaysia from the public sector; and industry representatives from the semiconductor, industrial system electronics, electronics manufacturing services, LED, solar, IoT and automation sub-sectors.

The EESC is aligned with the Malaysian Government's aim to increase high-value activities and

exports from the E&E industry, and has thus far identified seven sub-sectors for future strategic development.

In terms of market landscape, the industry must continue to focus on innovation, especially in light of the current trend of automation and data exchange in manufacturing technologies. This has been dubbed "Industry 4.0" and is characterised by the increasing digitisation and interconnection of products, value chains and business models. Efforts must also take into account prevailing economic and business conditions, growing competition from neighbouring Vietnam and India, as well as the need for local SMEs to keep pace with MNCs.

BUSINESS SERVICES



CARVING MALAYSIA'S NICHE IN THE GLOBAL BUSINESS SERVICES INDUSTRY



DATO' SRI MUSTAPA BIN MOHAMED

Minister of International Trade and Industry

I am pleased to note the continuous growth of the Business Services industry in Malaysia, particularly in strategic sectors such as the aerospace industry, MRO services, as well as shared services and outsourcing services. Malaysia must keep moving up the services value chain by focusing on higher value investments that can enhance the knowledge economy, provide a global outreach and create skilled jobs. The NKEA Business Services assumes a critical role in this transformation journey.

For instance, the Shared Services and Outsourcing industry has attracted over RM700 million in investments, and the industry outlook is bolstered through various Entry Point Projects (EPP) initiatives. Indeed, it is gratifying to see the quality investments secured under the various EPP initiatives in Business Services, such as EPP7 which aims to make Malaysia the hub for aerospace Original Equipment Manufacturers (OEMs).

The NKEA Business Services aligns very well with the national agenda to develop the services industry. I am confident that through close collaboration between various government ministries and agencies, the industry will achieve its 2020 target and contribute towards the new 30-year transformation plan, Transformasi Nasional (TN50), which will set an exciting new 'vision' for the nation.



Local university graduates from the Graduate Employability Management Scheme - Shared Services and Outsourcing Programme.

OVERVIEW

The Business Services sector remained a valuable contributor to the national economy in 2016 despite the challenging external economic environment. Business Services contributed RM58.6 billion in GNI in 2016, a 6.7% growth from the previous year. However, the soft business climate globally has posed a challenge for the industries in this NKEA, while shifting global trends have also put added pressure on the sector to reinvent itself in order to remain competitive. Nevertheless, all parties are responding appropriately to ensure that this NKEA is on track to achieve RM78.7 billion in GNI by 2020.

In 2016, the Government invested RM16.65 million in projects under this NKEA, in three main areas: building a globally competitive outsourcing industry, developing

Malaysia as a data centre hub and developing SMEs in the global aerospace manufacturing industry. Overall, the NKEA achieved 112% of its KPIs in 2016.

Initiatives under Business Services also continued to drive job creation. Most importantly, many of the created jobs were in the higher end services and knowledge-intensive industries which will help move Malaysia up the value chain. A total of 3,734 jobs were created in the shared services and outsourcing industry this year, with programmes such as the Graduate Employability Management Scheme (GEMS) creating opportunities for students to be trained as future leaders and high-skilled professionals as well as ensuring a well-qualified workforce for the sector.

Business Services contributed RM58.6 billion in GNI in 2016, a 6.7% growth from the previous year.

BUSINESS SERVICES

SME CORP HELPS LOCAL SMES BREAK INTO THE AEROSPACE INDUSTRY



The EPP8 pilot group at the Cranfield Management Development Centre.

SME Corporation Malaysia's (SME Corp) special programme to help Malaysian SMEs get a foot in the door of the aerospace industry has blown away all expectations - many SMEs have almost doubled their revenue targets for 2016, while some are already close to meeting 2017's forecasted revenue targets as early as February.

The 10 pilot SMEs in the programme - Aerospace Partners Engineering Sdn Bhd, Elemac Precision Engineering Sdn Bhd, Innopeak Sdn Bhd, JWR Technology (M) Sdn Bhd, Selia-Tek Industries Sdn Bhd, AllStar Manufacturing Sdn Bhd, Coraza Systems Malaysia Sdn Bhd, Jecmetal Industries Sdn Bhd, Nagoya Plastics Industry Sdn Bhd and Venture Diecasting Sdn Bhd - grossed RM9.84 million in revenue in 2016, exceeding the target of RM5.4 million. As of February 2017, total forecast revenue from the pilot group hit RM20.01 million, against the total 2017 target of RM24.6 million.

SME Corp's CEO Datuk Dr. Hafsa Hashim says the stellar results were the result of a carefully designed programme to groom and nurture SMEs to become globally competitive in the aerospace manufacturing industry. "We have been

able to surpass the targets set for SMEs and show a structured approach to produce outstanding outcomes," she says.

The pilot group of 10 SMEs were selected from 23 SMEs that were found to have suitable aerospace manufacturing capabilities. Among them were medical and automotive parts & equipment manufacturers that wanted to build a presence in aerospace. The pilot group was then put into an intensive process that pushed them to get the relevant certifications as well as upgrade their manufacturing equipment and adopt lean production - all important elements for aerospace component suppliers.

The group was also brought to the UK for 10 days for what Datuk Dr. Hafsa describes as "total immersion" in the aerospace industry. Activities included visits to the Cranfield Management Development Centre at Cranfield University where they learnt the key requirements to becoming a player in the aerospace industry.

The SMEs also met some established aerospace companies in Malaysia such as Spirit Aerosystems Malaysia, UMW Aerospace and CTRM.

"We have been able to surpass the targets set for SMEs and show a structured approach to produce outstanding outcomes."

Datuk Dr. Hafsa says that the focus on building up the SMEs was in three core areas: marketing strategy, organisational transformation and technological planning. Their progress was closely monitored by SME Corp's consulting partner BDEC Resources Malaysia Sdn Bhd, which ensured that the SMEs stayed on the right track. The SMEs were provided a maximum of RM500,000 in matching grants.

"We have to make sure that the SMEs themselves want to drive this process," says Datuk Dr. Hafsa. Now that the pilot group has recorded success, SME Corp is ready to enrol the next batch of SMEs into the same process to help them break into the aerospace supply chain, while also continuing to monitor and evaluate the performance of the SMEs involved in the pilot.

To prepare for the future, Datuk Dr. Hafsa stresses that the SMEs have to be ready to adopt upcoming trends including the use of robotics and automation as well as e-procurement. Voicing her confidence in the abilities of Malaysian SMEs, she says, "They are agile and adaptable."



A330 CAE 7000XR Series full-flight simulator.

In the shipbuilding and ship repair (SBSR) sector, the Ministry of Finance introduced new tax incentives to boost investments in the industry. SBSR companies can now either qualify for Pioneer Status, which provides a 70% income tax exemption on statutory income for five years, or Investment Tax Allowance of 60% on the first qualifying capital expenditure incurred within five years. The scheme will be managed and evaluated by the Malaysian Investment Development Authority (MIDA).

Becoming a Global Contender in Aerospace

Malaysia has laid the foundation for a thriving aerospace industry since the launch of its first National Aerospace Blueprint nearly 20 years ago. The NKEA Business Services further acts as an engine to drive the growth of this industry, latching upon the globalisation of the industry's supply chain, with initiatives aimed at making Malaysia among the "3Ms" of the aerospace world, alongside Mexico and Morocco which have flourished as major hubs for aerospace services for America and Europe respectively.

One of the key initiatives is to provide opportunities for SMEs to thrive in this specialised market by encouraging upskilling in the local industry. These initiatives include building the original equipment manufacturer (OEM) ecosystem with the development of human capital and R&D capabilities in structures and component manufacturing. In an effort to attract large OEMs, efforts have also been made to develop the supply chain in Malaysia to allow for better quality control and more technology integration at lower costs.

To date, aerospace SMEs in Malaysia have a cumulative revenue of approximately RM20 million. The lead agency SME Corp has identified

BUSINESS SERVICES



Minister of International Trade and Industry, Dato' Sri Mustapa bin Mohamad, at the launching of the Malaysia Aerospace Industry Association on 28 March 2016.

Activity in the sector is also expected to be spurred by the development of Asia Aerospace City (AAC), which will serve as a hub for aerospace OEMs in Southeast Asia when it is completed in 2018.

10 additional SMEs to nurture into global players and link with major names in the aerospace industry. To this end, SME Corp, together with MITI and MATRADE, led a delegation of these SMEs to the United Kingdom to showcase their capabilities at the Farnborough International Airshow from 16 – 20 July 2016. In addition, the recently established National Aerospace Industry Coordinating Office (NAICO) under MITI has assisted companies in other sectors like oil and gas and automotive make a successful transition into aerospace.

Despite a challenging year for the aerospace industry, investment activity continued to be robust. Among the highlights was a joint venture between Malaysia Airlines and US company Aircraft Propeller Service to set up Asia's first ATR aircraft turboprop MRO facility in

KLIA, and the inauguration of a new USD10 million A330 full-flight simulator at the Asian Aviation Centre of Excellence (AACE), a joint venture between AirAsia and aviation training provider CAE. Other major investments included Japan's Asahi Aero Malaysia Sdn Bhd opening a RM18 million aircraft parts surface treatment facility, its first in Southeast Asia, and Swiss company RUAG Aviation opening its new 24,000-square-foot component repair centre, the first of its kind in Asia.

Activity in the sector is also expected to be spurred by the development of Asia Aerospace City (AAC), which will serve as a hub for aerospace OEMs in Southeast Asia when it is completed in 2018. The AAC aims to be a catalyst for the advancement of the aerospace

industry by providing a one-stop destination for a range of relevant services to the industry, such as research and development, training and business consulting. In addition, industry promotion activities were further enhanced by the successful organisation of the second Kuala Lumpur International Aerospace Business Convention (KLIABC) by MATRADE. The event, held from 7 to 9 December, hosted aerospace players from over 30 countries and featured exhibitions from 250 companies, with over 3,000 business meetings established.

As the sector grows, the various industry players will need a common platform with which to voice their concerns and aspirations. In March 2016, the Malaysia Aerospace Industry Association (MAIA) was formally launched. The association will function as an NGO to support and

represent the voice of all Malaysian companies in the aerospace sector, and together with NAICO, establish an integrated national front that will propel Malaysia's aerospace industry further into global prominence.

Malaysia, the Gateway to Asia's Outsourcing Industry

Malaysia's shared services and outsourcing (SSO) industry has continued to grow from strength to strength. In 2016, the industry, of which the Malaysia Digital Economy Corporation (MDEC) coordinates as the lead agency, recorded RM766 million in investments and saw the creation of 3,734 jobs, with the total number of jobs created

to date through this NKEA already surpassing the original 2020 target of 43,330. Since 2004, Malaysia has also been consistently ranked the third most attractive SSO location in the world by AT Kearney's Global Services Location Index.

During the year, Malaysia's position as the regional gateway for SSO was strengthened with the launch of the Global Business Services (GBS) initiative in Iskandar Puteri, Johor. A specialised programme, GBS Iskandar, has been initiated by i2M Ventures Sdn Bhd (a subsidiary of Khazanah Nasional Berhad) to facilitate local and foreign businesses in setting up their GBS operations in Iskandar Puteri.

In line with this, the Business Services sector has also been recognised as a new promoted sector in Iskandar Malaysia alongside



Launching of the inaugural Global Business Services Forum (2016) in Iskandar Puteri, Johor.

BUSINESS SERVICES



Exhibit of Electric Vehicle at IGEM 2016, promoted by GreenTech Malaysia.

eight other sectors such as creative content, tourism and education. As a promoted sector, qualified Business Services investors are entitled to a host of incentives and benefits offered by Iskandar Malaysia including tax exemptions and flexibility on recruitment of foreign knowledge workers.

As part of the initiatives to develop and upskill talents in the industry, Outsourcing Malaysia in collaboration with MDEC and TalentCorp is running the Graduate Employability Management Scheme – Shared Services and Outsourcing (GEMS SSO). The programme aims to enhance the employability of fresh graduates to meet the talent needs of the GBS sector through industry-oriented training to final year students from local universities. Participants will participate in a 10- to 12-day intensive training course, internationally

certified and delivered by trainers from the International Association of Outsourcing Professionals. Since 2014, 267 undergraduates have been trained, with 199 students placed in internship programmes at 150 SSO companies.

Accelerating the Green Economy

Malaysia's green technology sector showed healthy growth in 2016. Industry revenue reached RM5 billion, while RM3.5 billion worth of green technology investments flowed into the sector. The International GreenTech and Eco Products Exhibition & Conference Malaysia (IGEM), which was organised by the Ministry of Energy, Green Technology and

Water (KeTTHA) and held from 5 to 8 October, saw 33,903 visitors attending, with 350 exhibitors from 33 countries participating in the event. Furthermore, a record RM2.2 billion in business leads were generated as a result of various business networking opportunities held throughout the four days.

Establishing Malaysia as a Global Data Centre Hub

Malaysia continues to ride the wave of demand for data centres fuelled by companies' need to store and use digital information. In August 2016, VADS Bhd commenced construction of a new 100,000-square-foot Tier III data centre in Nusajaya, Johor, which will be connected to a similar facility to be built in Cyberjaya, Selangor through a 100Gbps high-speed fiber optic link. VADS also announced its establishment of the VADS Marketplace, Malaysia's first cloud exchange, which will be anchored by its dual data centre plan. The cloud exchange platform will allow the company to provide hybrid or multi-cloud solutions to customers and that will be augmented by its twin-core strategy.

On the policy front, various initiatives are being put in place to help the industry improve its competitiveness. Challenges in rising power costs are being progressively addressed through the introduction of efficiency-based schemes like Enhanced Time of Use (ETOU) and Incentive-Based Regulation (IBR) pricing, which provide greater visibility for end-users to manage consumption and realise greater savings. Meanwhile, MDEC will champion the development of the world's first Digital Free Zone, which will provide a secure and integrated framework for products and services to be stored, transferred, exchanged and utilised. This will further position Malaysia as a leader in global data centre services.

In August 2016, VADS Bhd commenced construction of a new 100,000-square-foot Tier III data centre in Nusajaya, Johor, which will be connected to a similar facility to be built in Cyberjaya, Selangor through a 100Gbps high-speed fiber optic link.



Artist impression of VADS data centre in Nusajaya Tech Park.

BUSINESS SERVICES



Offshore support vessel under construction by an EPP6 stakeholder.

Shipbuilding and Ship Repair Get a Boost

Malaysia's shipbuilding and ship repair (SBSR) industry received a timely boost in 2016 with the introduction of new tax incentives. With these new incentives, SBSR companies can now either qualify for Pioneer Status, which provides a 70% income tax exemption on statutory income for five years, or Investment Tax Allowance of 60% on the first qualifying capital expenditure incurred within five years. Existing SBSR companies can also enjoy Investment Tax Allowance of 60% on the additional qualifying capital expenditure incurred within a period of five years. Incentive applications and monitoring will be managed by MIDA, and they provide further assistance for industry players to invest in the midst of a challenging business environment.

Amidst the bearish outlook for the oil and gas sector, which makes up the majority of Malaysia's SBSR industry demand, initiatives are being put in place to stimulate growth in other niches, led by the Malaysian Industry-Government Group for High Technology (MIGHT). Among the growth areas is the fishing vessels industry, which should see the introduction of new vessel construction standards and guidelines in 2017. These standards, developed by the Department of Fisheries in collaboration with MIGHT as well as other industry players and certification bodies, will lift safety and hygiene conditions for locally built vessels to internationally recognised levels, which will contribute to enhancing exportability, facilitating commercial financing and promoting sustainable fishing practices.



Maintenance and repair work onboard vessel.

MOVING FORWARD ►

The NKEA Business Services will continue efforts to develop Malaysia as the premier destination for diversified, high-value industries such as aerospace, SSO services and data centres. However, Malaysia will need to improve and develop its competitive advantage against other markets offering lower costs and attractive government incentives, and the NKEA will focus on enhancing policies, facilitating incentives and strengthening critical enablers such as connectivity, energy and data governance. Additionally,

prevailing uncertainty in the global economy has hindered spending on business services. Nonetheless, opportunities remain within the industry, and initiatives under this NKEA will seek to capitalise on this by encouraging cross-border partnerships involving local SMEs. The placement of this NKEA under the oversight of MITI will also ensure a more focused approach to growing the Business Services industry in line with Malaysia's trade and investment policies.

COMMUNICATIONS CONTENT AND INFRASTRUCTURE



**DATUK SERI PANGLIMA
DR. MOHD SALLEH
TUN SAID KERUAK**

Minister of Communications
and Multimedia

Last year saw this NKEA record steady progress towards achieving its 2020 goals, creating not only a financial impact but also sizeable social benefits. This is in line with the Government's plan to uplift the rakyat, especially the bottom 40% of income earners (B40) which make up the low-income group, by leveraging digital platforms to create additional income.

This Digital Economy agenda will enable Malaysians, especially the B40 and new entrepreneurs to tap into new economic opportunities, allowing equitable distribution of wealth. To this end, we have worked closely with the industry to ensure availability of connectivity in rural areas to narrow the urban-rural digital divide. This has been anchored by our Broadband-for-All initiative which creates a healthy ecosystem to easy access for digital platforms, supported by roll out plan of high speed broadband (HSBB) coverage and the completion of the Bay of Bengal network to strengthen our regional connections.

Our e-Government initiative represents another way we are making the lives of Malaysians better, promoting efficiency and effectiveness of public service delivery in healthcare services, government online services and document management. We also remain mindful of further improvements that can be made to the e-Government initiative to ensure the rakyat can interact easily with the Government, lower our impact on the environment and reduce possible leakages.

As we seek to accelerate our exports of creative content in films, animations and games, our foreign investments via the Film in Malaysia Incentive (FIMI) will be enhanced, strengthened and able to provide incentives to attract high-quality investments.

In the coming year, focus will be placed more on the connected economy to create value by linking people, machines and organisations through technology to crystallise the vision of this NKEA.

Animonsta



- 2016 Record breaking box-office with RM16.7M
- Ranked #1 animation in Indonesia
- Ventured into merchandising with TOMY Japan

GIGGLE GARAGE

ORIGANIMALS



- Multiple **International award winners** (Malaysia, S.Korea & Japan)
- Broadcasting now to over 140 million subscribers worldwide** including all countries in Latin America, Mexico, USA, Ireland, Portugal and Asia (ASEAN/ Oceania/ ANZ/ Korea).

ANIMASIA

CHUCK CHICKEN



- Top Performing Animated Series in China's Top IPTV Platform "iQiyi" with **over 800M views**
- L&M Partnership with a US company

DIGITAL DURIAN

DIDI & FRIENDS



- 213M views on YouTube** since its launch on May 2014
- #1 Preschool programme on Astro



Creative Content from Malaysia has reached a Global Audience

OVERVIEW

This year saw several of the initiatives in Communications Content and Infrastructure (CCI) NKEA flourish, particularly in the areas of communications and creative content. In the area of communications, the focus shifted from infrastructure and access to applications and content. The shift has been led by the private sector, with an emphasis on realising the connected economy by building collaborative relationships and linkages through technology. Overall, CCI NKEA achieved 131% of its KPIs in 2016.

The telecommunications industry made significant progress in terms of fixed and mobile broadband coverage, with fixed broadband expanding on high speed broadband phase 2 (HSBB2) and sub-urban broadband (SUBB) projects while mobile broadband

coverage improved markedly through the rapid expansion of LTE coverage. The nation's broadband connectivity was further enhanced by the completion of the Bay of Bengal submarine cable in the first half of 2016. To ensure more Malaysians enjoy fast mobile broadband, the target for LTE coverage nationwide was raised from 58% to 65% during the 2016 mid-year KPI review.

Creative content recorded strong export growth of 182% to reach RM1.217 billion. As the industry matures, industry players have also grown increasingly organised. The Creative Content Association of Malaysia (CCAM) improved its visibility and presence by adopting new marketing approaches in selling content abroad, which has helped expand the global market for Malaysian-made content. Local

Creative content recorded strong export growth of 182% to reach RM1.217 billion.

production houses, particularly those which are smaller in size and do not have the funds or the network to market their content internationally, especially benefitted from CCAM's efforts.

COMMUNICATIONS CONTENT AND INFRASTRUCTURE

NEW BAY OF BENGAL GATEWAY SUBMARINE CABLE SYSTEM STRENGTHENS MALAYSIA'S IP HUB POSITION



Mohamad Izani Karim
General Manager for Carrier Network Development, TM



The Bay of Bengal Gateway (BBG) Submarine Cable System which was completed and commissioned in 2016 provided yet more diversity and robustness to Malaysia's international connectivity, strengthening its efforts to become a major regional IP hub.

The cable, which stretches over 8,000km from Penang to the UAE will serve as an important alternative conduit for IP traffic between Singapore and Europe via Malaysia. Currently, many cables from Asia to Europe are routed through Egypt but with the BBG as an alternative, the new cable system will be able to serve as a load sharing mechanism if one link fails, thus minimising disruptions to the user experience.

“The cable, which stretches over 8,000km from Penang to the UAE will serve as an important alternative conduit for IP traffic between Singapore and Europe via Malaysia.”

This as a result will help improve the broadband user experience in Malaysia, an important thrust of the Communications Content and Infrastructure (CCI) NKEA. It will also boost Telekom Malaysia Berhad (TM)'s broadband offerings to international clients and make the country more attractive to major content and data centre players, as the latter is another focus area of the CCI NKEA.

Mohamad Izani Karim, General Manager for Carrier Network Development, TM, noted that the BBG is the first ever cable which connects Singapore to Europe via terrestrial cables in Malaysia. He also said that the cable's design ensures the shortest possible latency and offers ample capacity to avoid congestion.

“Directly landing a cable in Singapore is expensive. We are providing additional options,” he says. “We can position Malaysia as a hub for IP traffic.”

Malaysia has several advantages over Singapore in terms of landing cable systems particularly due to the complexity and tougher requirement imposed by the Singaporean authorities. With the heavy shipping traffic off Singapore waters, the submarine cable systems are highly exposed to threats of being damaged by the ships' anchor and thus require the cables to be buried

deeper. This makes it more costly to land a cable in Singapore. There are also more cable landing options in Malaysia where space is vast and it is a broad corridor for landing sites.

“Malaysia has lot of land space, hence providing more opportunities for international content providers to house their contents here,” says Izani. He adds that TM has worked with many major content partners to host their content in Malaysia under the Content Localisation Initiative (CLI), which helps boost the country's standing as a data centre hub. Izani also noted that Malaysia's energy costs are comparatively low. “For data centres, it's all about space, power and connectivity,” he says.

The BBG is just one of the links that TM has been putting in place as part of its plan to build a mesh network, extending the country's connectivity and reachability. Izani says the country now has at least five (5) cable links to the US and three (3) major links to Europe. TM is also eyeing regional growth and extending its reach within ASEAN. Izani further adds that building the BBG did come with challenges, particularly pertaining to obtaining work visas and shifting regulations in one of the countries along the cable's route, which caused delays in the project.

In terms of spurring the development of the network industry in Malaysia, Izani suggests that there should be more financial incentives. He notes that the country's economy will become increasingly digitised and this will require even higher levels of digital infrastructure support.

“We need more capacity for the future,” he says. “The digitisation of the economy and automation, all this is riding on connectivity. Broadband is key and to prepare for the future, we need to beef up our networks both at the domestic and international front.”



Installation of Bay of Bengal cable system at the Kuala Muda landing station.

Enabling Inclusive Growth through Internet Connectivity

Ensuring seamless access to the Internet is a crucial enabler to achieve inclusive economic growth and global competitiveness by leveraging digital platforms. Initiatives under the CCI NKEA have thus continued to improve Internet connectivity infrastructure in the country to help close the digital divide between urban and rural areas as well as satisfy the growing overall demand for broadband.

During the year, the number of ports rolled out providing high-speed broadband in phase 2 with speeds up to 100Mbps in capital cities and major towns exceeded the overall target for the year of 240,000 total ports, reaching 281,262 ports in 2016. Some of the new towns and cities that received HSBB ports include Kangkar Pulai, Johor; Kemasek, Terengganu; Bukit Palah, Melaka; Kota Belud, Sabah; and Lundu, Sarawak.

Additionally, broadband coverage in the nation has increased with the addition of 127,546 ports providing high speed broadband in suburban areas. While the achievement

is only 96% of the KPI target of 133,000 new ports for 2016, the cumulative total number of ports has reached 219,390, which exceeds the cumulative target of 200,000 ports due to over-achievements from the previous years. The initiative is at 72% completion, as is targeted to be completed in 2019.

To further enhance Malaysia's connectivity, the 8,100 km long Bay of Bengal Gateway was successfully completed in 2016, creating a high-speed link between Malaysia, the Indian sub-continent, Middle East and Europe. Built by a consortium comprising Telekom Malaysia, Dialog Axiata, Vodafone, Omantel, Etisalat, Reliance Jio Infocomm, AT&T, China Telecom and Telstra, the gateway connects Malaysia, Oman, India, Sri Lanka and the UAE through a submarine cable and Singapore through a terrestrial cable, enabling bandwidth growth.

Another initiative to enhance connectivity is the System Kabel Rakyat Malaysia (SKRIM) which will link Peninsular Malaysia with Sabah and Sarawak. The project is also on track for completion with no foreseeable delays. The current cumulative progress stands at 70.7%, exceeding the cumulative target

The LTE coverage level achieved in 2016 was

63.94%



Workers during the installation of the cable installation

of 65% for 2016. When completed, SKRIM will enhance existing domestic submarine cable connectivity between the peninsula and Sabah and Sarawak, and cater for future bandwidth growth requirements.

As people increasingly access the Internet via mobile technologies, LTE has become more critical to the nation's overall broadband infrastructure. This initiative achieved significant progress in expanding

Broadband coverage in the nation has increased with the addition of 127,546 ports providing high speed broadband in suburban areas.

COMMUNICATIONS CONTENT AND INFRASTRUCTURE

The number of Ministries and Agencies using the Digital Document Management System 2.0 (DDMS 2.0) has risen to 33.



DDMS improves efficiency of Government document management.

coverage to more cities in 2016, driven by private sector participation. The coverage level achieved in 2016 was 63.94%, a significant improvement over the 53.5% coverage achieved in 2015. The target for LTE coverage was raised from 58% to 65% during the 2016 mid-year KPI review to push for even greater coverage and enhance the rakyat's experience.

Enhancing Public Service Delivery

Public health also received a boost as e-healthcare applications saw higher completion rates. Some 515 healthcare facilities have implemented e-healthcare applications, representing a 103% achievement of the target of 500 facilities. E-healthcare application boasts many benefits including improved waiting time, reduced errors in medication as well as better access and integration of patient records. With more facilities using e-healthcare application, patients can expect to experience better service improvement. By 2020, 1061 Klinik Kesihatan, dental clinics as well as 150 hospitals and

institutions will be equipped with e-healthcare. Currently the initiative is 84% completed against its 2020 target.

As part of the Government's continuous effort to improve its services to the public as well as embrace transparency and reduce the use of paper, the number of Ministries and agencies using the Digital Document Management System 2.0 (DDMS 2.0) has risen to 33, surpassing the target of 10. New agencies and ministries which have come on board include the Malaysia National Archives, the office of the Chief Government Security Officer and the Ministry of Education.

Realising the Global Potential of Malaysian Creative Content

The CCI NKEA initiatives launched in previous years have begun to bear fruit with Malaysia starting to carve a place for itself in the global filmmaking industry. Exports of creative content exceeded expectations in 2016, surpassing RM1.217 billion against

the RM670 million target for the year. Among notable examples of Malaysian movie productions that did well abroad in 2016 was BoBoiBoi The Movie by Animonsta, which became the highest grossing animated movie in Indonesia and reached a merchandising agreement with TOMY in Japan. Giggle Garage's Origanimals also made a mark internationally, winning awards in South Korea and Japan. It is now broadcasted to over 140 million subscribers worldwide including in countries like Mexico, the US and Ireland. Other locally-made animated hits included Chuck Chicken, which is one of the most watched animated series on China's top IPTV platform iQiyi, with 800 million views; and Didi and Friends, which has garnered some 213 million views on YouTube since its launch in May 2014.

On the gaming front, Malaysian talent worked on many popular games including Final Fantasy XV, Gears of War 4 and Uncharted 4. Appxplore also became the first Malaysian game company to launch an initial public offering and was listed on the Australian Securities Exchange in January 2016. The game developer has six games with

over 16 million downloads and has been featured as Editor's Choice on both the Google Play Store and the Apple App Store.

CCAM, representing the National Film Development Corporation Malaysia (FINAS), organised and spearheaded the screening of five Malaysian films to industry players. CCAM also assisted the directors and producers in their efforts to push their content onto the global scene, playing an important role in linking local producers with international investors and distributors for productions currently in progress.

The success of Malaysian content abroad was supported by marketing of films and TV series at foreign film fairs such as the European Film Market Berlin and the Hong Kong Filmart. An outstanding achievement in the film making industry is reflected in

the winnings of a local film, Redha (Beautiful Pains). The film won several international awards, among them the Merit Award at the Los Angeles Awareness Film Festival 2016. It was also submitted for nomination for the Golden Globe Awards, highlighting the growth of the film making industry in Malaysia over the years. A new initiative, Malaysia Goes to Cannes, at the Marche Du Film, was also successful in bringing international attention to Malaysia for quality films and work-in-progress projects for potential collaborations or programmes for future film festivals. Ten Malaysian films were showcased at Malaysia Goes to Cannes, including Tamil-language crime drama "Jagat" which was also selected for this year's New York Asian Film Festival; Mohd Khairul Azri's "Pekak" and Syamsul Yusof's "Munafik".

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Malaysia footprint on global blockbuster games

Game Art and Co-Development for global blockbuster game IP like Final Fantasy XV, Gears of War 4 and Uncharted 4



1st Malaysian Game company Going IPO

- Featured as **Editor's Choice** on Google Play Store and Apple App Store
- **6 Games** developed with over **16 million** downloads



COMMUNICATIONS CONTENT AND INFRASTRUCTURE



Telecommunications tower

MOVING FORWARD ►

In an effort to improve its efficiency and provide greater clarity on the initiative, FINAS has drafted new guidelines for the Film in Malaysia Incentive (FIMI). The new guidelines, which include a simplified application process, will come into effect January 2017. Given the strategic nature of FIMI and its encouraging early successes, in 2017, FINAS in collaboration with other related agencies plan to further improve FIMI's existing processes.

Another major industry-led association, the Creative Content Industry Guild Malaysia (CCIG), continued to raise standards in the industry. In 2016, CCIG worked on building a platform for creative

content practitioners - such as script writers and cameramen - to upgrade their skills, knowledge and creativity in order to gain industry recognition. The platform will take the form of the Creative Content Industry Recognition Framework (CCIRF). Certified practitioners would better be able to secure jobs from local and foreign production houses and earn higher incomes.

The Government's plan to uplift the *rakyat*, especially the bottom 40% income earners (B40) and new entrepreneurs to tap into new economic opportunities, allowing equitable distribution of wealth by leveraging digital platforms to create additional income, will remain the focus of this NKEA going forward.



Narrowing social economic disparity through Pusat Internet 1Malaysia programme.

To continue the progress of providing high speed internet connection nationwide, the complete rollout of ports for HSBB2 as per the contract with Telekom Malaysia is aimed to be completed by December 2017. The target for HSBB2 is for 390,000 cumulative number of ports with speeds of up to 100Mbps to be rolled out in major towns and cities. SUBB port rollout will now be in its third year. The target for SUBB is to roll out 317,000 cumulative number of ports in suburban areas. The telco industry will also be encouraged to pursue wider coverage of LTE nationwide.

In line with efforts to expand e-Government services, the Government will focus on shifting physical transactions online, targeting to increase online transactions by 12%. Next year, DDMS 2.0 will be rolled out to more agencies and it is targeted to be adopted by 30 new agencies by the end of 2017. To this end, the Ministry of Communications and Multimedia will work together with the various Ministries to establish strategies to encourage more people to perform their transactions online.

HEALTHCARE

**DATUK SERI DR. S. SUBRAMANIAM**

Minister of Health

The healthcare sector in Malaysia remained an important driver of economic growth in 2016, supported by the new growth areas catalysed by the Healthcare NKEA. This has been further anchored on the Government's steadfast efforts to enhance the delivery of care through capability and capacity building, together with policy improvements and active promotions in collaboration with relevant Ministries and agencies.

Certainly, the Ministry strives to achieve a mutually beneficial scenario for all relevant stakeholders in health as it recognises that quality healthcare is a crucial element of development into a high-income nation. The Government thus seeks to nurture and further enhance this ecosystem, which enables technology adoption and efficiency. This is to incentivise healthcare providers to provide quality and affordable healthcare for the benefit of the rakyat.

Throughout the years, Malaysia had benefited from the dichotomous health system whereby the public and private health system co-existed and leveraged upon one another to provide health service to the public. I am also pleased to witness initiatives under the Healthcare NKEA bearing fruit as reflected by our results in pharmaceutical exports and healthcare travel this year. This had allowed the expansion of the healthcare industry which in turn helped create job opportunities, expand the Gross National Income and at the same time ensure healthcare remains affordable to the public. Unsurprisingly, Malaysian Health System is lauded as one of the best in the world and we have managed to achieve the Universal Health Coverage despite having only achieved independence 60 years ago. This healthy ecosystem needs to be enhanced further whereby collaboration, cooperation, smart partnership and mutually beneficial health policies and initiatives can be crafted to pave way for a better symbiotic relationship between the two systems.

MOH plans to launch the Malaysian Health Transformation Initiative. I am pleased with the progress made and I am certain that this will help to converge the two systems together rather than diverge it apart. It is now in the developmental phase and consultations will be held to seek the input of all stakeholders to ensure its sustainability and long-term viability. In the end, the public and nation will be the real winner from this finely balanced ecosystem. The aim is to have a sustainable and resilient health system that provides equitable, affordable, and accessible high quality health service to the rakyat.

OVERVIEW

Initiatives under the Healthcare NKEA in 2016 focused on the clinical research, pharmaceuticals, medical devices and healthcare travel sectors, which continued to thrive following the efforts that have been put in place to catalyse growth since 2011. In 2016, the NKEA achieved 100% of its KPIs.

Clinical Research Malaysia (CRM), a non-profit company wholly owned by MOH, was established in June 2012 to position Malaysia as a preferred global destination for industry-sponsored research (ISR) and to function as an enabler and facilitator to the industry and medical fraternity for the conduct of clinical trials. During the year, CRM reached a crucial juncture with the introduction of Phase 1 clinical trials in Malaysia, marking the country's move higher up the clinical trial value chain.

The pharmaceuticals industry recorded exports of RM737.31 million in 2016, maintaining its momentum as the highest value EPP in the Healthcare NKEA. It has also enabled important technology transfer and provided a platform for local companies to penetrate new markets. This can be seen in the strategic partnership between Winthrop (M) Sdn Bhd, a subsidiary of Sanofi Aventis Group (Sanofi), and Xepa-Soul Pattinson (M) Sdn Bhd (Xepa) formed under a new EPP in 2016. This will see Xepa locally manufacturing a range of Sanofi's products to be manufactured locally by Xepa and leveraging Sanofi's extensive international distribution network for export in Southeast Asia.

The medical devices sector represents another area which has allowed Malaysia to spur growth, recording RM9.69 billion in exports in 2016. In addition to facilitating technology and knowledge transfer to catalyse the development of local capabilities, efforts have been focused on creating a holistic ecosystem to support the sector. This year saw a significant achievement with the establishment of two Good Laboratory Practice (GLP) labs, which will help local medical device-makers cut costs in testing the safety of their products.

In promoting Malaysia as a top healthcare travel destination, the Malaysia Healthcare Travel Council (MHTC) has facilitated a number of public-private partnerships as well as Government-to-Government agreements, contributing to a significant increase in healthcare travel revenue from RM527.3 million in 2011 to RM1.12 billion in 2016. The revenue is targeted to reach RM1.3 billion, with one million healthcare travelers, in 2017, following various collaborations and engagements with target markets like Indonesia, China, Vietnam and Myanmar.

This NKEA also implements initiatives for Seniors Living, taking into account opportunities and challenges faced by the elderly, particularly on their healthcare needs. In line with this, efforts have focused on providing aged care services including mobile healthcare services and aged care residential facilities. These are led by the Love On Wheels mobile healthcare services provider and Eden-on-the-



Infectious disease diagnostic kits developed and manufactured by MEDIVEN which can detect Malaria, Leptospirosis, Dengue, Zika and Chikungunya virus are on par with international guidelines and standards.

HEALTHCARE

NEW HOPE FOR CHRONIC KIDNEY DISEASE PATIENTS



Malaysia Minister of Health, YB Datuk Seri S. Subramaniam, launches INTELLIS

In January 2016, Lucenia Malaysia launched the Lucenia INTELLIS, an Intelligent Automated Peritoneal Dialysis (APD) cyclor designed for patients with chronic kidney disease (CKD) to be treated at home, while they are asleep. The machine provides new hope and enhances the quality of life of patients, helping ease the strain on resources catering to the rapidly growing number of CKD patients in Malaysia.

Peritoneal Dialysis (PD) is a lesser known dialysis treatment in Malaysia compared to the more widely used haemodialysis. More than 90% of patients who undergo dialysis in Malaysia receive haemodialysis treatment. The average CKD patient receives three treatments at haemodialysis centres every week, with each session lasting between three to five hours, while PD allows for patients to receive treatment at the comfort of their own homes.

Dialysis at home can greatly improve quality of life, which allows patients to regain control of their daily activities. Unlike in-centre haemodialysis, a more common blood-filtering procedure, PD utilises the patient's peritoneal membrane in the abdomen to remove excess fluid from the body. PD easily fits into a patient's daily life due to its versatility and safety. There are many benefits to a patient's physical and mental health associated with this type of treatment. A PD patient is able to be treated at home, at work, or even while travelling. They have flexible treatment times, and most are able to eat a more regular diet, allowing them to continue living a more normal life.

Lucenia with the INTELLIS APD cyclor seeks to improve accessibility, outcomes, affordability, operational ease, and environmental protection while providing peritoneal dialysis services to more CKD patients so

that they can have new hope and enjoy a better quality of life, including continuing to work independently, enjoying better mobility and be less bound by hemodialysis services. In addition, Lucenia INTELLIS comes with full telemedicine functions, including online daily monitoring instead of quarterly, early detection, enhanced safety, as well as automatic configuration through prescription that is administered online.

According to Lucenia's Managing Director, Low Chin Guan, "Lucenia INTELLIS is a Malaysian innovation that will greatly benefit Malaysians, and soon the rest of the world. We expect to see INTELLIS fulfilling the Government's vision of delivering better clinical outcomes for CKD patients. As Malaysia focuses more on research-driven healthcare, INTELLIS is one of our first and most impressive contributions to global healthcare."

Low adds that the company is committed to providing hope and affordable health care solutions that can improve quality of life.

"Lucenia is committed to creating and delivering technologies that can reduce barriers to treatment, enhance and extend the lives of patients, while improving quality of living around the world, besides reduce healthcare costs. In the case of haemodialysis, both the cost and lack of mobility of current systems have made broader access to dialysis treatment difficult and expensive. Our goal and success with the INTELLIS APD cyclor is to build a unique, internally developed system that will be portable, will lower costs, and will be more efficient in its use and other critical features than existing dialysis systems."

Park retirement village in Kuching, Sarawak.

The Healthcare NKEA will retain its focus on driving growth in key economic engines such as medical device exports and health travel, while also assist with the implementation of the blueprint for health transformation to ensure the sector's optimal utilisation of Government resources.

Clinical Research Driving the Way Forward

Malaysia has emerged as an ideal host for clinical research due to its well-developed healthcare system with a pool of highly qualified medical professionals, state-of-the-art medical centres and an excellent healthcare system. In addition, the country's consistent start-up timelines, prevalence of non-communicable diseases (NCDs) coupled with the population's diverse genetics, competitive trial costs and unwavering commitment from the Government provide a conducive environment for safer, more cost efficient and quality trials with shorter timelines.

The growing prominence of clinical trials in Malaysia is decidedly positive in its socioeconomic impact – industry-sponsored research (ISR) including interventional researches, i.e. studies that compare novel therapy versus standard care – opens up options for clinicians to expand their patients' treatment options. Patients who have exhausted their options under standard care like oncology could also pursue new avenues of treatment and potentially receive better care. Furthermore, medical institutions participating in ISR can expand treatment to more patients without having to permanently expand their capacity.



MoU Signing between CRM and Drugs for Neglected Disease Initiative (DNDI). This MoU will pave way for a possible treatment option for Hepatitis C which will bring down the cost of treatment from USD 100,000 to USD 300 per patient.

Overall, the strategies initiated by CRM from its inception in 2012 have been very encouraging. It achieved 105% of its key performance index 1 (KPI 1) determined by the number of ISRs conducted in Malaysia during the year 2016. This translates to 162 ISRs conducted against a target of 155, which was achieved despite a 10% global decline and 30% decline in Southeast Asia. Meanwhile, the number of clinical trials performed in Ministry of Health facilities during the same year achieved 102% (KPI 2: 101/99) of its KPIs.

The number of sponsors and contract research organisations (CROs) utilising CRM's services also rose in 2016. Up until December 2016, there was a 36% growth in the number of sponsors (2016: 114 vs. 2015: 84) while the number of CROs increased by 15% (2016: 39 vs. 2015: 34) during this time period. The GNI created by clinical trials in 2016 totalled over RM196 million, a substantial increase of RM71 million from 2015 despite the decline in the number of trials conducted.

CRM has also increased the number of feasibility studies by 122.5% in 2016 in comparison to 2015 and had recorded a 294% increase in the number of new companies (sponsors and CROs) since 2014 (53 in 2014 vs 153 in 2016). In addition to this, CRM has partnered with pharmaceutical

companies to give masterclass training in oncology clinical trials and many other capability building trainings.

The number of new principal investigators (PI) stood at 184 as of December 2016, a 167% increase from 69 recorded in 2015. This is the first time growth was recorded since 2008. This is directly related to the 11 State Research Days which CRM supported in 2016. Additionally, CRM has also participated in various National Scientific/Medical Society meetings and conferences to encourage young clinicians to participate in ISRs as investigators.

Further expanding Malaysia's clinical research ecosystem, in September 2016 the National Cancer Institute (NCI) opened its doors to conduct ISR in oncology, where most of the current and upcoming research projects are focused on. During the year, CRM provided training and development for NCI investigators and staff to their Clinical Research Centre. Since then, NCI has received 19 feasibility studies. As at the end of 2016, four site qualification visits (SQVs) were conducted and of these, two studies were awarded to NCI. SQVs are conducted by sponsors to select investigators and to determine the site's ability to conduct a clinical trial. Additionally, two investigators were given the opportunity to

HEALTHCARE

The growing prominence of clinical trials in Malaysia is decidedly positive in its socioeconomic impact - industry-sponsored research (ISR) including interventional researches, i.e. studies that compare novel therapy versus standard care - opens up options for clinicians to expand their patients' treatment options. Patients who have exhausted their options under standard care like oncology could also pursue new avenues of treatment and potentially receive better care.

by a healthy ecosystem for clinical research in Malaysia, which allows for speedy and reliable delivery of quality research due to efficient approval timelines and availability of high quality research centres. CRM has shortened the Clinical Trial Agreement (CTA) review and approval timeline from three months in the past to 14 working days. It also launched the e-submission, which will further reduce the future review timeline to five working days. Furthermore, CRM has seconded staff to the Medical Research and Ethics Committee (MREC) and to the Medical Device Authority (MDA) to improve approval timelines by ensuring that the quorum for meetings are met, sending notification to the members, preparing decision letters to the sponsors as well as assisting in queries from the industry.

Prior to seconding a staff to MREC, meetings were only held once a month, which resulted in a longer approval time. The current

leading global network that fosters an integrated and sustainable ethical review system towards quality culture in health research.

Clinical research activity has been further supported by CRM's provision of sites and investments into equipment to MOH to conduct ISR.

Going forward, CRM will ensure more active engagement with research sites and doctors through investigator dialogues as well as clear guidelines on the clinical trial landscape in Malaysia are finalised and disseminated quickly for the industry's sustainable and responsible growth.

ISR activity is now poised to venture into first-in-human trials with the launch of Phase 1 Realisation Project (P1RP) for clinical research. This will move the country higher up the clinical research value chain following capability-building in late stage clinical trials previously. The ability of Malaysia to conduct Phase I trials will give CROs and sponsors an option to conduct this type of trials as previously they had a limited choice of which country they can conduct Phase I trials in.

MOH via CRM is now developing guidelines for first-in-human trials in Malaysia as it prepares to introduce the ecosystem for such trials in 2017. Complementing this is the launch of the Pre-Clinical Research collaboration, which sees the Institute of Medical Research (IMR) working together with multinational companies in the field to conduct high value clinical trials in the country. The Preclinical Phase I project is also expected to spur the local industry towards discovery and eventually manufacturing of innovator drugs in Malaysia, as opposed to importing or sourcing for generic drugs.



Malaysian Phase I Clinical Trial Guidelines committee members. CRM via Phase I Realization Project (P1RP) is completing the Clinical Research ecosystem by making sure Malaysia is ready to conduct Phase I trials including First in Human trials. The guidelines will be ready in 2017.

showcase NCI's capability with the AstraZeneca Global Medical team during the European Society for Medical Oncology Conference in Copenhagen, Denmark in October 2016.

This success has been supported

two weekly meetings are fixed and announced in the website in order for the industry to plan their submissions. MREC has also been accredited by the Forum for Ethical Review Committees in the Asian and Western Pacific Region (FERCAP), a



Encouraging the Growth of the Pharmaceutical Industry

The pharmaceuticals-related EPPs have been instrumental in spurring the employment of technical staff and knowledge workers, and has helped various local companies penetrate foreign markets for pharmaceutical products in a short period of time. This has contributed to consistent growth in export earnings from 2011 to 2016. As at December 2016, the country's pharmaceuticals exports had risen 17.44% to RM737.31 million from RM627.80 million in 2015, with export targets rising since 2014 due to continued encouraging growth.

The sector has also seen growing interest from MNCs to invest in Malaysia and partner with local companies as reflected by the new project undertaken by Xepa, the manufacturing arm of Apex Healthcare Berhad and Winthrop, the generic arm of world-renowned healthcare company Sanofi. The project is targeted to contribute RM41.1 million in GNI, create 52 skilled jobs and generate RM69.6

million in investments.

This partnership will see Xepa manufacturing patented products for a series of Sanofi's products. The collaboration will also enable technology transfer including the know-how of using new technology involving the latest compliance of ATEX, the European directives for controlling explosive atmospheres, in a new facility with fluidisation granulation and OEB 3 containment system to be brought into Malaysia. The design of the new facility is currently ongoing.

Aside from the benefits accrued to all parties through improved access to cutting-edge technology and export markets, MOH will also benefit through the savings that can be made from the lower cost of locally-produced medicines while lowering foreign exchange risk by reducing the need for imports.

Project Champions

Biocon Limited

Following the operationalisation of its US\$300 million biopharmaceutical research and development and manufacturing facility in mid-2015, Biocon Limited has commenced the production of rh-insulin and insulin analogues



Biocon Limited has commenced production of rh-insulin and insulin analogues as well as the final drug product in vials and cartridges for sale to patients.

as well as the final drug product in vials and cartridges for sale to patients. The facility is the largest integrated insulin manufacturing plant in Asia, employing a team of over 450, including 425 Malaysians. The plant has received the cGMP certification from the National Pharmaceutical Regulatory Agency (NPRA).

Biocon has also built a dedicated state-of-the-art research and development facility which includes capabilities for pilot scale drug manufacturing in real-time conditions.

In addition to creating local employment opportunities, Biocon

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has trained over 240 of its Malaysian employees at its headquarters in India. Staff also continue to be trained through routine GMP and other training programmes on an ongoing basis, in various areas of biopharmaceutical manufacturing, quality control, supply chain and research & development. The company also utilises local vendors to source its input materials and services as well as in the construction and set-up of its manufacturing plant.

BioCare (M) Sdn Bhd

Since joining as an EPP in 2013, BioCare Manufacturing Sdn Bhd has invested RM26 million in its metered dose inhaler (MDI) manufacturing project. It has since completed construction of the facility and procurement of equipment and on 11 November 2016 obtained the Certificate of Fitness for the building. It is now preparing for its pre-licensing audit by the NPRA, which will be followed by its product validation batch.

BioCare's facility will help benefit the 6%-8% of Malaysia's adult population and 8%-10% of the child population who suffer from asthma who have been dependent on imported asthma medication. Its MDI plant is the first of its kind in Malaysia and will also cater for the Southeast Asia region. Additionally,

the project will spur employment opportunities in various skilled positions and to date has created 26 jobs.

The company is now working to expand its production to dry powder inhalers, nasal sprays, pre-filled syringes and ophthalmic products.

AJ Pharma Holding

AJ Pharma Holding has invested RM37.74 million to build its new plant and acquire equipment since joining as an EPP partner. It has since also submitted its dossier to the NPRA for the registration of an influenza vaccine and acquired a license to market Dukoral, a cholera vaccine, in Malaysia. Its plant will comply with GMP standards of International Regulatory Authorities of European Medicines

As at December 2016, the country's pharmaceutical exports had risen 17.44% to RM737.31 million from RM627.80 million in 2015, with export targets rising since 2014 due to continued encouraging growth.

Agency and Pharmaceutical Inspection Co-operation Scheme, in addition to conforming to all local regulatory requirements. The facility will also be operated in accordance with Biosafety Level 2.

Raising the Bar in Medical Device Production

Devices used in healthcare are highly sophisticated in construction, requiring an intricate process of assembly which places emphasis on the safety of patients. As such, the Medical Device Authority (MDA) was created under MOH as a regulatory body governed by the Medical Device Authority Act 2012 (Act 738) to control and regulate medical devices, its industry and activities and enforce medical device laws under the Medical Device Act 2012 (Act 737). All medical devices used in Malaysia must be registered to ensure compliance with global quality and safety standards.

As at the end of 2016, medical device exports totalled RM9.69 billion from RM9.46 billion in 2015 and RM5.05 billion in 2011. The



Biocon's US\$300 million biopharmaceutical R&D and largest integrated insulin manufacturing plant in Asia has commenced the production of insulin in mid-2015.



BioCare has invested RM 26 million in its metered dose inhaler (MDI) manufacturing plant in Perak. The construction of the facility and procurement of equipment has completed in 2016.



One of the GLP labs in Malaysia- Makmal Bioserasi, Universiti Kebangsaan Malaysia will help to lower the production costs of the local companies and bolster Malaysia's export capabilities by serving as pre-clinical testing service providers for ASEAN countries.

The Medical Device Authority (MDA) was created under MOH as a regulatory body governed by the Medical Device Authority Act 2012 (Act 738) to control and regulate medical devices.

exports have continued its upward trajectory as overseas demand was strong for products such as surgical and examination gloves; catheters, syringes, needles and sutures; electromedical equipment, ophthalmic lenses (including contact lenses); sheath contraceptives; orthopaedic appliances and medical and surgical X-ray apparatus. The US represents the top purchaser of Malaysian-made medical goods, followed by South Korea, Belgium, Germany, Singapore, Japan, China, the Netherlands, Australia and Indonesia.

In an effort to further boost exports by complying with export requirements in Australia, Europe and the US for Good Laboratory Practice (GLP) certification to attest the safety of medical devices in human bodies, the Government has given out RM31.8 million in grants for the establishment of two GLP labs in Malaysia; MyBioScienceLab Sdn Bhd's integrated OECD-GLP-certified test facility for pharmaceuticals, cosmetics, nutraceuticals, agrochemicals and medical devices and Universiti Kebangsaan Malaysia's biocompatibility lab. Currently, local medical device manufacturers must test the safety of their products in GLP labs overseas, as there are none in Malaysia. The two new GLP labs will enable local companies to lower their production costs and bolster Malaysia's export capabilities by serving as pre-clinical testing service providers for ASEAN countries.

Among others, MyBioScienceLab will test for cytotoxicity, sensitisation, haemocompatibility, irritation, genotoxicity, and systemic

toxicity, while Makmal Bioserasi, Universiti Kebangsaan Malaysia will test for cytotoxicity, interaction with blood, effects on skin, as well as genotoxicity, carcinogenicity and reproductive toxicity. The GLP certification process for MyBioScienceLab and Makmal Bioserasi has already commenced with approvals expected in 2017.

Project Champions

Lucenxia (M) Sdn Bhd

EPP company Lucenxia (M) Sdn Bhd, provider of a comprehensive care system for patients suffering from End Stage Renal Disease (ESRD) using the Peritoneal Dialysis modality, has invested RM35.18 million since 2014 to manufacture Automated Peritoneal Dialysis (APD) machines under the INTELLIS umbrella and for the development of new products.

Lucenxia is the first APD manufacturer in Malaysia and has seen its business catalysed by its



MyBioScienceLab Sdn Bhd's integrated OECD-GLP-certified testing facility will be able to test for cytotoxicity, genotoxicity, haemocompatibility, irritation, systemic toxicity and others.

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participation in this NKEA, which bore fruit with the launch of its INTELLIS product in 2016. The product will revolutionise dialysis treatments that are funded by the Government, helping reduce the direct cost of treatment and requiring zero or very little infrastructural expenditure and indirect out-of-pocket costs to the patient. It is also transparent and adopts the pay-as-you-use approach to ensure zero wastage. Being a home-based treatment performed during sleep at night, patient transportation to traditional dialysis centres is not required, reducing the burden on patients and caregivers.

In 2016, Lucenxia earned recognition from the Public Service Department, which approved it as one of the panel dialysis providers under the MOH.

ABio Orthopaedics Sdn Bhd

ABio Orthopaedics Sdn Bhd (ABio) is a leading bio-industry and known as an emerging Technology Company established in 2009. Since 2013, it has invested RM45 million in Malaysia to build its R&D capabilities and establish manufacturing capacity to take on contracts of the manufacturing of medical devices specialising in orthopaedic implants. In doing so, it has employed local science and engineering graduates, giving them valuable exposure to global manufacturing of medical devices.

On average, ABio has recorded a 30% compounded annual increase in its domestic production, some of which were transferred from the US and China. It also successfully collaborated with Singapore's Advent Access Pte Ltd for R&D and manufacturing of dialysis products for the global market. These outcomes are in line with its aim to be the largest subcontractor of



ABio Orthopaedics Sdn Bhd established in 2009 has invested RM 45 million to build its R&D and manufacturing capabilities to take on contract manufacturing of medical devices specialising in orthopaedic implants.

orthopaedic devices in Southeast Asia.

In an effort to address a talent shortage and constraints in its production capacity, the company has implemented a RM20 million investment plan while it is also recruiting more machinist engineers from India.

Medical Innovation Ventures Sdn Bhd

Medical Innovation Ventures Sdn Bhd (MEDIVEN) has invested RM10 million since the start of its EPP, undertaking R&D of new products, service delivery, establishing its core facilities and services and marketing its products at home and abroad. Its products include GenoAmp Real-Time PCR Leptospirosis, PCR Malaria and RT-PCR Dengue diagnostic kits which are on par with international guidelines and standards on infectious disease detection, providing a high quality, locally-made and affordable alternative.

During the year, it developed new diagnostic kits for infectious diseases, such as the Triplex Real-

Time RT-PCR which can detect Zika, Dengue and Chikungunya virus infections, simultaneously following guidelines by the US's Food and Drug Administration (FDA). It also continues to work with the MDA on product registration, while also seeking to strengthen linkages with the World Health Organisation to facilitate product evaluation.

Making a Mark in Healthcare Travel

Malaysia has successfully established its reputation as a global healthcare travel destination due to the availability of high-end treatments at competitive rates, which have attracted medical tourists from neighbouring countries as well as developed markets such as the US and UK. Last year at the International Medical Travel Journal (IMTJ) Medical Travel Awards 2016 hosted in Madrid, Malaysia was named Destination of the Year for the second time.

The number of healthcare travellers increased from 643,000 in 2011 to 921,500 in 2016, generating a revenue of RM1.12 billion as compared to RM527.3 million in 2011. An article in the Huffington Post ranked Malaysia as one of the top five destinations for travellers seeking affordable medical treatment.

For 2017, the Malaysia Healthcare Travel Council (MHTC), which is responsible for promoting and developing the country's health travel industry, is targeting for one million healthcare travellers and RM1.3 billion in healthcare traveller revenue.

In 2016, the highest number of healthcare travellers were recorded from Indonesia, India, China and Japan. While healthcare travellers



Showcasing the best of Malaysia Healthcare alongside nine Malaysian hospitals at the MYHealth Expo (MHX) Jakarta on 20 - 22 May 2016.

from Indonesia mostly seek basic health screening, resulting in lower average bill size per patient, travellers from China, Australia, Japan and the UK record higher average bill size per patient despite making up a lower number of healthcare travellers. Therefore, the MHTC must diversify its market strategy to attract more travellers seeking high-value treatments.

In the meantime, MHTC has established representative offices in its focus markets of Jakarta (Indonesia), Dhaka (Bangladesh), Ho Chi Minh City (Vietnam), Yangon (Myanmar) and will be setting up an office in Guangzhou (China) to cater to the fast-growing Chinese market. It also collaborates with affiliated health facilitators around the world to facilitate health travellers' access to information on their healthcare options in Malaysia, as well as assist them in their medical and travel arrangements for their medical visits.

Additionally, it organised Market Intelligent InsigHT 2016, a knowledge-sharing seminar aimed at providing industry stakeholders with a deeper understanding of the medical tourism industry; refreshed the commercial site for the Malaysia Healthcare brand,

www.medicaltourism.com.my; and organised the "Malaysia Loves You" social media campaign that focused on increasing world travellers' familiarity with the Malaysia Healthcare brand.

MHTC also conducts strategic marketing and promotional campaigns globally in partnership with hospitals, Tourism Malaysia, Malaysian embassies and selected industry partners to create greater awareness of Malaysia's healthcare services. Such marketing activities include participating in the World Trade Market in London and the Oman Health Exhibition and Conference. MHTC also worked with AirAsia, the Penang State Government and the Penang Health Association to establish direct routes between Penang and Ho Chi Minh City, Yangon and Hanoi as part of a two-pronged approach to grow both the tourism and healthcare travel market to Penang from Vietnam and Myanmar. The new routes were launched in March 2016.

MHTC also plays a vital role in policy advocacy and during the year it achieved a significant milestone with the approval of double tax deduction for accreditation expenses by Malaysia's Ministry of

The number of healthcare travellers increased from 643,000 in 2011 to 921,500 in 2016.

Finance and fast-track facilitation of visa processing for health travellers from Myanmar and Bangladesh.

Its Government-to-Government (G2G) initiatives and collaborations with foreign cooperations also enabled MHTC to enter into the following engagements in 2016:

- MoUs with Lions Club Magnolia Jakarta, Sudan's NEBRAS Travel & Tourism Agency and Dubai's Al-Naboodah Travel & Tourism Agency to collaborate on marketing initiatives;
- Collaboration agreement with Tai Orient and Myanmar Escapade Travel & Tours as strategic partners to promote medical tourism packages in China and Myanmar respectively;
- Partnerships with the governments of Bangladesh, the UAE, Kuwait, Bahrain, Sudan and Gambia for programmes such as bilateral patient referrals, medical consultancy collaborations, knowledge transfer and learning as well as medical specialty services exports;
- Special discounts for patients travelling with Oman Air to Malaysia.

In the near-term, MHTC aims to raise Malaysia healthcare's profile as a provider of world-class healthcare services by:

- Ensuring a seamless and end-to-end experience for healthcare travellers

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- Enhancing service offerings in the Malaysia healthcare travel sphere
- Encouraging more cohesive industry development
- Creating value-add partnerships domestically and abroad
- Launching initiatives aimed at encouraging sustainability within the industry

Going forward, MHTC will continue promoting world-class healthcare that is easily accessible and affordable. Niche treatments such as cardiology, in-vitro fertilisation, orthopaedics, oncology, neurology and aesthetics (dental and cosmetic surgery) will receive special focus due to their high value-added nature.

Caring for the Elderly

While most developed nations took longer time to achieve increased in life expectancy, Malaysia and most other Asian countries took shorter time to achieve it. In other words, it leaves us a shorter time to put everything in place for addressing the needs of an aging population. In addition to this, the proposed Private Aged Healthcare Facilities and Services Bill which is slated to be presented in Parliament soon, is meant to address the healthcare needs of the elderly.

The Love On Wheels programme is one such initiative, providing senior citizens with access to nursing and rehabilitation services in the comfort of their own home through mobile services. Its latest developments include introducing its mSIHAT mobile application to



A proud moment as Malaysia Healthcare takes home the "Medical Travel Destination of the Year Award 2016" for the second consecutive year by the International Medical Travel Journal (IMTJ).

digitise and widen access to its services. It has also introduced the Certificate Programme in Care-giving, approved by the Department of Skills Malaysia, aimed at encouraging higher employment in the aged care sector.

Meanwhile, Eden-on-the-Park which is the first Integrated Seniors Lifestyle and Care Residence Resort facility located in Kuching, Sarawak, has built a Care Residence of 142 beds offering care and support facilities including rehabilitation and daily amenities. In December 2016, it also completed 104 apartments and 14 villas for active retirement living.

The Eden-on-the-Park project has, for the first time in Malaysia, provided world-class facilities to care for the country's elderly. This supports families in ensuring their loved ones are adequately cared for in their golden years.

In addition to building the infrastructure for this retirement village, staffing needs at Eden-

on-the-Park are being fulfilled with the training of its first 50 students as qualified care-givers under a programme approved and endorsed by the Ministry of Human Resources. The first batch of 23 students completing the course will be prepared for full employment at the retirement village. Furthermore, students trained at Eden-On-the-Park can also contribute to the country's talent pool of qualified care-givers, creating job opportunities for aged care even outside this retirement village.

The Love On Wheels and Eden-on-the-Park projects have revolutionised the aged care services in Malaysia. It is therefore imperative for the Government to continue building on the momentum for Seniors Living created by these projects, including enhancing the aged care ecosystem, to ensure the needs of Malaysia's elderly population are addressed sustainably.



Eden-on-the-Park which is the first integrated Seniors Lifestyle and Care Residence Resort in Kuching has built a Care Residence of 142 beds offering care and support facilities, 104 apartments and 14 villas for active retirement living.

MOVING FORWARD ►

As Malaysia moves closer towards 2020, the emphasis will be placed on seeking game-changing projects that will change the landscape of Malaysia's healthcare industry, focusing on innovative solutions that will fuel a meaningful transition towards higher quality and affordable healthcare through private sector-led solutions.

Additionally, the demand for healthcare is surging in an era of rising chronic and lifestyle diseases, aging populations in both developed and developing nations and a growing middle class with improving disposable income in various developing regions. These will require innovative solutions which this NKEA aims to catalyse to spur a veritable shift in the delivery of healthcare in the country.

FINANCIAL SERVICES

FINANCIAL SERVICES PROVIDE BACKBONE FOR A THRIVING ECONOMY



**DATUK SERI
JOHARI ABDUL GHANI**

Minister of Finance II

Despite external headwinds from the fall of global oil prices and soft commodity market, Malaysia's financial system remained resilient as a result of our well-capitalised banking system. The capital, equity and debt markets were also strong, recording a value of RM2.8 trillion, RM1.7 trillion and RM1.1 trillion, respectively.

The conversion to single insurance and takaful business (conversion exercise), a requirement under the Financial Services Act 2013 and Islamic Financial Services Act 2013 has made significant progress during the year. The conversion exercise, which will require life and general businesses of insurers, and family and general businesses of takaful operators to be carried out under separate entities is expected to accord greater focus on core areas of expertise and during the year, we reached a major milestone with the conversion of composite insurance and takaful licenses under the Financial Services Act 2013 and Islamic Financial Services Act 2013. This move, which will require life and general businesses of insurers, and family and general business of takaful operators to be carried out under separate entities, is expected to strengthen the institutional structure of financial institutions and safeguard insurance policyholders and takaful participants against contagion risks and excessive leverage.

The year also saw an increasing mainstream adoption of new digital technologies incorporated into existing financial products and services. As we move towards embracing financial technology (fintech), the Malaysian financial sector will closely monitor and adapt to this trend. Malaysia is receptive to technologies that drive innovations and cost-effective solutions that are beneficial for the consumers.



Bank Negara Malaysia Headquarters

The Ministry fully believes that technology will help to broaden retail investor participation and stimulate more innovative, market-based financing options. This will help address funding challenges faced by the Malaysian business community, especially for the Micro, Small and Medium Enterprise (MSME) segment and in the long-term, further enrich our financial services industry in tandem with our transformation into a high-income nation by 2020.

OVERVIEW

The Financial Services National Key Economic Areas (NKEA) met most of its KPIs for the year due to the collective efforts across various agencies involved, demonstrating the resilience of the industry amid the challenges brought on by slowing global growth especially big economies such as China and Europe; impact on international relations due to Brexit and Trans Pacific Partnership Agreement (TPPA) the continued volatility in commodities prices and the mid-year rebalancing of the Morgan Stanley Composite Index (MSCI). Overall, the NKEA achieved 111% of its KPIs in 2016.

As one of the global leaders in Islamic finance, Malaysia continues to pave new ground towards innovating the Syariah-compliant financial ecosystem, introducing

Overall, the NKEA achieved 111% of its KPIs in 2016.

new standards for Islamic finance professionals and establishing the Islamic Fund and Wealth Management (IFWM) Blueprint. Meanwhile, developments in the insurance and takaful sector saw progress in the conversion of composite insurance and takaful licenses under the Financial Services Act 2013 and the Islamic Financial Services Act 2013. The conversion

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Since the operationalisation of the ECF market in mid-2016, 11 SMEs have raised a total of RM8 million through ECF operators (as of October 2016) P2P financing is expected to follow the same upward trajectory.

exercise is well underway with phased implementation and is expected to be completed by 30 June 2018.

One key trend that Malaysia seeks to capitalise on is the innovations stemming from financial technology (fintech), with the authorities laying the foundation through accommodative regulations to allow fintech to enter the mainstream financial services market rapidly. This technology has the potential to broaden the participation of retail

investors as well as provide more access to funding to the MSME business community.

For the year 2016, six Peer-to-Peer (P2P) financing platform operators in Malaysia were approved and registered with the aim to widen funding opportunities for small and medium enterprises (SMEs). This is expected to enhance access to financing; increase investor participation; augment the institutional market and ultimately develop a synergistic financial ecosystem in Malaysia.

Harnessing the Potential of Digital Finance

Digital finance has introduced innovative new business models and solutions within the financial services sector. Its applications have enhanced the financial market landscape, including promoting greater efficiency and better risk management. Technology-focused start-ups and market entrants have led the way in innovating products and services previously only offered from the traditional financial services providers, reshaping the value proposition of existing financial

products and services. From the consumers' perspective, fintech is expected to drive down costs and promote efficiency in the market.

The growth of fintech in Malaysia can be attributed to the public's familiarity with digital experiences and ready acceptance of technology-assisted products that better address their needs. With advantages such as enhanced accessibility, convenience and tailored products, the initial clientele will comprise of digital natives.

To better regulate this fast-developing landscape, a new P2P Financing framework came into effect on 2 May 2016, with the Securities Commission (SC) opening up applications for the registration of P2P financing platform operators until 1 July 2016. It received over 50 applications, of which six were granted operational licenses namely B2B FinPAL; Ethis Kapital; FundedByMe Malaysia; ManagePay Services; Modalku Ventures and Peoplender. The introduction of P2P financing follows the launch of equity crowdfunding (ECF) in 2015, making it the second market-based financing asset class in Malaysia.

Market-based financing, targeted at enhancing access to financing for SMEs, is a key objective within the SC's digital agenda. SMEs seeking early-stage financing are now served through ECFs while those seeking working capital or capital for growth will be able to utilise P2P financing.

Since the operationalisation of the ECF market in mid-2016, 11 SMEs have raised a total of RM8 million through ECF operators (as of October 2016.) P2P financing is expected to follow the same upward trajectory.

Meanwhile, Bank Negara Malaysia (BNM) is enhancing its regulatory approach with the introduction of Regulatory Sandbox (Sandbox) on 18 October 2016. Under the Sandbox, financial institutions regulated

by BNM and fintech companies looking to carry out businesses regulated by BNM may be granted certain regulatory flexibilities to experiment with innovative solutions in a production or live environment accompanied by appropriate safeguards. A Sandbox may be deployed for a period not exceeding 12 months.

Building a Sustainable Securities Capital Market

Despite the challenging market environment influenced by global and local economic developments, the equity capital market remained resilient, supported by collective

efforts from Securities Commission, Bursa Malaysia and industry players to build a vibrant, robust and competitive marketplace with continued focus on sustainability. In addition to expanding the market's range of tradable products, efforts are centered on facilitating greater market efficiency and accessibility, widening Malaysia's footprint in the regional marketplace.

The equity market has recorded significant gains since 2009, driven by Malaysia's stable economic growth. The FBMKLCI has risen 85% during the period, with market capitalisation increasing 148% and average daily trading value (ADV) recording robust growth of 63%. The market has also recorded net inflows from foreign institutions

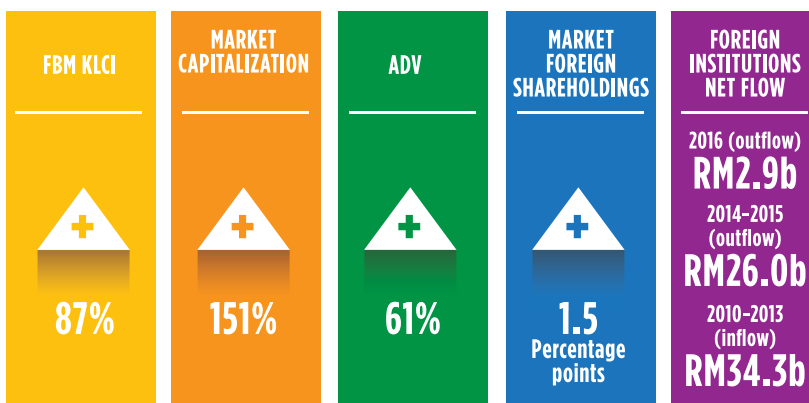
of RM5.3 billion during the period from January 2010 to December 2016.

One of the tenets of a vibrant and competitive marketplace is the expansion of diversity and range of products/services to cater to new and increasingly sophisticated investors. In this respect, the regulator working closely with the industry, continues to develop new and diverse exchange-traded products. During the year, Macquarie Securities Group launched call and put warrants over the S&P 500 on the exchange alongside a few other new products launched such as US Dollar denominated Tin Futures Contract and enhanced existing products with the launch of the enhanced 3-Year, 5-Year and 10-Year Malaysian Government Securities Futures.

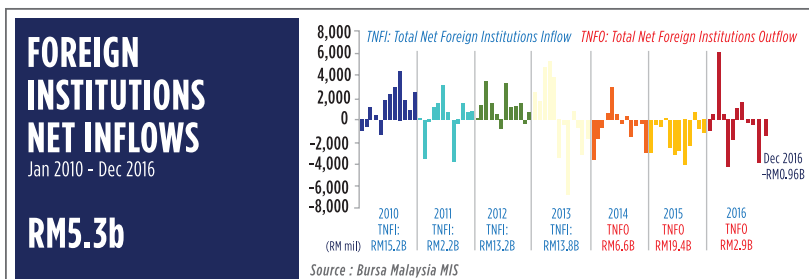
As part of a push towards the regionalisation of the Malaysian capital market and the expansion of its global reach, in 2015 the US Commodity Futures Trading Commission (CFTC) approved investments in Bursa Malaysia derivative products, by investors in the US. As at December 2016, trading volume from the US market tripled, from 0.5 million trades in 2015 to 2.2 million trades (as at December 2016). During the year, Bursa Malaysia signed two separate MoUs. The MoUs were with the Taiwan Stock Exchange and the Indonesia Stock Exchange, which aimed to jointly study potential cross-border collaborations for market development and promotion, and development.

In line with global trends and growing investor interest on corporate sustainability, in 2014 the FTSE4Good Bursa Malaysia Index (ESG Index) was launched with 24 constituent Private

MALAYSIA EQUITY MARKET GROWTH FROM JANUARY 2009 THROUGH DECEMBER 2016



Malaysian Equity Market



Net Inflows

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Equity Market

Amidst this challenging scenario, the Malaysian equity market remained well-supported by resilient economic fundamentals coupled with BNM's reduction of the statutory reserve requirements.

The FBMKLCI remained volatile through the year, falling to a year low of 1,600.92 points on 21 January 2016, before rebounding to a year high of 1,727.99 points on 15 April 2016. The FBMKLCI closed at 1,641.73 points on 31 December 2016.

In terms of trading activity, the average daily market transacted volume and average market transacted value decreased by 13.51% and 5.49% year-on-year,

respectively. In line with the performance of FBMKLCI, market capitalisation decreased slightly by 1.62% to RM1,667.37 billion as at 31 December 2016, from RM1,694.78 billion as at the end of 2015.

Given the market volatility, there was a decrease in total funds raised to RM12.83 billion (YTD December 2016), from RM21.24 billion in 2015. Meanwhile, fund raising activity in the secondary market remained strong with a total of RM12.18 billion raised by (YTD December 2016). The robust secondary market was driven by major corporate exercises including rights issues, special issues and private placement by PLCs.

Islamic Market

For the Islamic Capital Market, the average daily value of Bursa Suq Al-Sila' (BSAS) increased by 7.26% to RM16.25 billion (as at December 2016) compared to RM15.15 billion for (YTD 2015). The growth in BSAS trading can be attributed to increased acceptance and demand from the domestic and global commodity Murabahah platform providers particularly in the Middle East and North Africa (MENA) and Asia regions.

The updated list of Shariah-compliant securities approved by the Securities Commission's Shariah Advisory Council (SAC) was released on 27 May and 25 November 2016 respectively. The updated list as at 25 November 2016 featured a total of 672 Shariah-compliant securities. As at end December, these securities constituted 74.23% of the 904 listed securities. The market capitalisation of Shariah-compliant securities stood at RM1.03 trillion or 61.81% of the total market capitalisation, a decrease of 5.12% as compared to end 2015.

The sukuk market is an important component of the Islamic capital market. In the corporate

bond market, corporate sukuk made up 61.64% of the total corporate bonds issuances in 2016 compared to 66.67% in 2015, while corporate sukuk outstanding accounted for 73.55% of the total corporate bonds outstanding in 2016 compared to 71.65% in 2015. The total sukuk issuance for 2016 after taking into account issuances by both government and corporates, represented 53.81% of the total bond issuances compared to 43.57% in 2015, whereas total sukuk outstanding represented 56.36% of the total bonds outstanding in 2016 compared to 54.05% in 2015.

The assets under management (AUM) of Islamic fund comprising collective investment schemes (CIS) and private mandates stood at RM149.64 billion registering 13.04% growth from RM132.38 billion (as at end 2015). The number of Islamic CIS also grew to 328 as at end 2016 from 314 in 2015, making it the world's largest with AUM of RM116.08 billion. As at end 2016, there were 20 full-fledged Islamic fund management companies operating in Malaysia, with 31 fund management companies offering Islamic windows.

Limited Companies (PLCs) in 2014. This has since grown to 42 constituents as at December 2016, reflecting growing commitment among Malaysian companies to incorporate environmental, social and governance aspects into their strategies. Building on this success, the FTSE4Good ASEAN Index developed collaboratively among the ASEAN Exchanges was launched in April 2016, showcasing ASEAN companies to promote the region as an asset class.

In September 2016, Bursa Malaysia launched Bursa Malaysia-i, the world's first end-to-end integrated Islamic securities exchange platform. Bursa Malaysia-i offers global and domestic investors the choice to invest and trade Syariah-compliant products via a Syariah-compliant platform. This platform also serves to establish Bursa Malaysia's leadership and cement its reputation as the global marketplace for Syariah listings and investments. The Syariah products, also listed on the MAIN and ACE markets, includes i-ETF, i-Indices and i-Stocks. As of 31 December 2016, Bursa Malaysia-i's offering comprises 74.1% or 682 of securities listed on Bursa Malaysia.

Efforts by Securities Commission, Bursa Malaysia and all industry players to promote the vibrancy of the local stock

As of 31 December 2016, Bursa Malaysia-i's offering comprises 74.1% or 682 of securities listed on Bursa Malaysia.



Minister of Finance II at the Launch of Bursa Malaysia-i

Derivatives Market

The derivatives market continued to chart growth in volume traded. For YTD December 2016, total contracts traded registered a 1.2% growth year-on-year with an average daily contract traded of 57,829 contracts in 2016 compared to 57,157 in 2015. The growth in volume is attributed to Crude Palm Oil Futures Contracts (FCPO) due to higher volatility in crude palm oil (CPO) prices.

The Open interest for FCPO, a benchmark product, recorded a high of 285,000 contracts on 16 May 2016. This was also supported by the increase in foreign participation for all derivatives products, which grew to 41% as at December 2016, from 37% in December 2015.

exchange also included focusing on encouraging women participation in businesses and board positions, enabling market efficiency and accessibility through the Green Lane Policy, which has been extended to eligible futures brokers and general clearing participants in the derivatives market, and undertaking greater outreach and awareness through its multi-language websites.

Reinforcing Malaysia's Leadership in Islamic Finance

Following its establishment in 2015, the Chartered Institute of Islamic Finance Professionals (CIIF)

doubled its membership base to over 650 (by end December 2016), from 240 at its launch. The institute is also in the process of issuing successfully issued two more professional standards; the CIIF Code of Ethics and CIIF Standards of Professional Conduct, following the introduction of the CIIF Standards and Guidelines on Admission of Members and the CIIF Standards and Guidelines on Accreditation of Institutions.

BNM and the Islamic finance industry were key drivers that led to the establishment of CIIF to elevate the Islamic finance profession by setting standards on professional education and promoting professionalism and integrity among its members. CIIF has also been mandated to set global professional standards for Islamic financial practitioners around the world. Its

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EQUITY CROWDFUNDING

- WIN-WIN FOR MALAYSIAN SMES AND INVESTORS



Attendees at the PitchIN launch event

Traditionally, Malaysian SMEs seeking funding choose between three financing options: self-funding, loans from financial institutions, and Government-issued grants.

Two new financing options have since been added to the mix: Equity crowdfunding (ECF) and Peer-to-Peer Lending (P2P lending). Officially regulated in 2015 and 2016 respectively, these two fintech-enabled options connect companies directly to investors and form part of financial services initiatives under the National Transformation Programme (NTP) to

stimulate and boost local economy by providing alternative sources of funding to small-and-medium-sized businesses and startups.

ECF is the more mature ecosystem of the two and offered via six licensed ECF operators in Malaysia. Retail investors, angel investors and companies have the opportunity to invest in early and growth-phase startups. Investing in such options however carries significant risk and suitable for medium-to-long-term investors with high risk appetite. Should the company fail, investors

may lose part or all of their investment. "Investors should only select companies which have a big growth potential," said Sam Shafie, co-founder of PitchIN and the only ECF operator affiliated with a tech accelerator (WatchTower & Friends).

Citing Kakitangan.com, a home-grown human resource management software which raised more than RM1 million in 2016, Sam disclosed that two-thirds of its investors are current users of the SaaS platform. "If the product or service is good, existing users can be converted into both investors and

voluntary word-of-mouth referrers, increasing the crowdfunding success rate. It's a true test in user satisfaction and investor confidence."

CrowdPlus.Asia COO Bryan Chung echoed this sentiment and explained the internal vetting process before companies are listed on ECF platforms. "Due diligence is practised by ECF operators - not all companies are suitable (for crowdfunding) and selected to be listed on ECF platforms. (The companies) must have a solid management team and a comprehensive corporate road map outlining its long-term business plan."

With years of VC funding experience under his belt, Bryan highlighted the important role of ECF operators in filling in the funding gap in Malaysia. "Access to funding is a real problem faced by many high-quality companies that are restrained by the rigidity and timeframe set by traditional financial institutions," he said, "Crowdfunding is much quicker in comparison and can result in win-win arrangement between the company and its investors."

Malaysian SMEs seeking funding via crowdfunding channels go through a series of steps before they are listed on ECF platforms and receive funds from the public. Companies need to first convince their business model and market potential to ECF operators. Upon completion of this step, companies will then undergo months of consultation and

networking activities with their chosen EPF platforms to ensure the highest chance of equity crowdfunding success.

ECF operators in Malaysia have overseen successful equity crowdfunding in a myriad of industries, from Tech and SaaS, to Food & Beverage and Real Estate, to Green Technology and Agriculture. Daniel Geottfert, Managing Director of FundedbyMe said that the pressure for companies to deliver upon successful crowdfunding is very high. "Because (crowdfunding is) public, companies must ensure they are able to deliver their promises or risk negative feedback on social media and online platforms."

FundedByMe Malaysia, which is a joint venture between Penang-based digital marketing firm Alix Global and Sweden-originated FundedByMe also specialises in online exposure. "We provide Malaysia companies the chance to market their products and services to the global audience and attract investors beyond Malaysia. FundedByMe has access to 70,000 investors across 180 countries," Daniel explained, adding that the platform was also granted a license to operate as a P2P lending platform in 2016.

Despite the potential, ECF operators in Malaysia believe that more education and exposure is needed to attract Malaysian investors and companies onboard this investment and funding channel.

Retail investors may contribute up to RM5000 per company and up to RM50,000 per year, while angel investors taking advantage of the Angel Tax Programme are eligible to enjoy up to RM500,000 in tax benefit. To qualify for the tax incentive, angel investors must submit an application and register as an accredited angel investor in the Malaysian Business Angel Network (MBAN).

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aim is to enhance the quality and depth of the Islamic finance talent pool to support the industry's growth.

As the CIIF was only recently established in November 2015, its focus for 2016 was geared towards the continuing development and foundational strengthening of its mandate as well as to accelerate its capacity-building initiatives and strengthen linkages between the industry and academia. In 2017, it will commence development of the Islamic finance professionalisation blueprint as part of its mandate under the Islamic Finance Profession Charter.

Recently established in November 2015, the CIIF's focus in 2016 was geared towards the continuing development and foundational strengthening of its mandate. Moving forward, it will seek additional funding to accelerate its capacity-building initiatives and strengthen linkages between the industry and academia. In 2017, it will also commence development of the Islamic finance professionalisation blueprint as part of its mandate under the Islamic Finance Profession Charter.

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Developments in Islamic finance during the year also include the formulation of the Islamic Fund and Wealth Management (IFWM) Blueprint to drive further development and growth of Malaysia's Islamic capital market. The blueprint will establish the medium-to-long-term strategic direction for the industry and identify strategies and recommendations to strengthen Malaysia's competitiveness in the domestic industry, which commands 31% of the US\$58 billion in global Islamic assets under management as at the end of 2015. The Islamic Assets Under Management (AUM) in Malaysia for 2016 is RM149.64 billion, which is 21.49% of total AUM, representing a significant contributor to the growth of the Islamic capital market.

Providing Peace-of-Mind to Policy-Holders

BNM is overseeing the ongoing conversion of composite insurance and takaful licences business under the Financial Services Act and Islamic Financial Services Act 2013. Now in its second phase, the exercise is expected to be completed by 30 June 2018.

The policy objectives behind this requirement for the conversion are:

- (a) To accord greater focus on core areas of expertise;
- (b) To minimise risks emanating from areas of business where expertise and skills are limited; and
- (c) To ensure continuous stability in the insurance and takaful sectors with a pool of sound and efficient players.

During the year, the following milestones were met with respect to the initiative:

- Notification to the industry of the Gazette Orders for exemption from stamp duty and real property gains tax
- Issuance of a policy document on the regulatory requirements for the conversion exercise
- Submission of conversion plan and relevant applications by the insurers and takaful operators.

While plans are in place to keep to established timelines, the conversion exercise may take more time to complete. In an effort to manage this, BNM continuously engages with the industry and has set specific milestones to be observed in the policy document, including submission of final applications by 31 December 2016. This will allow BNM sufficient time to assess and obtain the necessary approvals to effect the new licences as well as for the affected institutions to be ready operationally come 1 July 2018.

Furthermore, to ensure continuous and uninterrupted protection of interests of insurance policyholders and takaful participants, BNM has also required the affected insurers and takaful operators to have adequate communication plan in place to assist policyholders transition to the new licensed institutions, BNM has also required affected institutions to adequately inform the policyholders of any changes.



MOVING FORWARD ►

The year 2016 has been a challenging year for most economies around the globe with uncertainties and shocks such as TPPA, Brexit, volatility in commodities prices and slowdowns in big economies such as China and Europe. The Malaysian economy has proven its resilience, nonetheless the effects of these challenges are expected to linger through 2017.

Despite this, the Government remains optimistic for the nation's continued growth. Significant progress and groundwork in the financial services industry have been made, particularly in the areas of Islamic finance and financial technology. These areas are expected to lift the country to greater heights and towards our Vision 2020 goal.

UNLEASHING THE VALUE OF AGRI-BUSINESS



**DATO' SRI AHMAD
SHABERY CHEEK**

Minister of Agriculture
& Agro-based Industry

As a vital part of the backbone of Malaysia's economy, the agriculture sector has received crucial impetus for change since the start of the NTP. Initiatives under this NKEA have driven the expansion of products for numerous anchor companies into the export market; while other major players enjoyed an increase in their market shares both in domestic and export markets.

This NKEA has been instrumental in boosting Malaysia's agricultural exports, moving local companies up the value chain through the adoption of higher standards, technology transfer and participation in higher-value activities. This, in turn, has enabled these companies to demand better pricing and improve their income.

During the year, the NKEA recorded several milestones including the protocol signed during the YAB Prime Minister's visit to People's Republic of China (PRC) allowing raw uncleaned bird's nests export from Malaysia to PRC. This is expected to increase the price of bird's nests for export to RM3,000-RM5,000 per kg from RM1,000 per kg currently, which will benefit 10,000 bird's nest farmers.

We have also seen the average income for farmers involved in our mini estate paddy farming initiative increase to RM42,000 in 2016 from RM33,500 in 2012. This was achieved through the amalgamation of over 25,000 Hectare of land in Kedah's Muda Area, leading to higher productivity.

The industry, however, encountered some turbulence in the implementation of several initiatives. While some of these challenges comprised external factors, such as adverse weather conditions and currency volatility, we will continue to closely monitor shortcomings within our control, such as the speed of approval processes for some projects, to ensure the achievement of our goals



Paddy Farming Operation in Muda Area, Kedah

going forward.

Our agriculture strategies must also address the need for Malaysia's food security. This will depend upon the development and delivery of technologies that lead to increased food production so that we can enjoy affordable, safe and high quality food for the years to come. I am proud with the initiatives and efforts undertaken by the Government throughout the years to make our farmers competitive in the domestic and global food market, our agriculture industry continues to prosper and ensure food security.

OVERVIEW

Government has invested approximately RM2.4 billion in Agriculture NKEA since the beginning of the NTP. The investments have been channelled to various initiatives that work in tandem to develop a sustainable agriculture economy. Additionally, the partnerships between anchor companies and small vendors fostered through this NKEA have formed the backbone of its success.

Overall, this has resulted in higher productivity and exports, entrance into new markets, adoption of higher standards and development of new growth areas; all of which contribute to the creation of higher income for Malaysian farmers. This is evident from the export production record under the paddy farming scaling up and strengthening initiative. For example, productivity of paddy production for EPP 11 is recorded at 4.8 metric tonnes per hectare per cycle as compared to 4.0 metric tonnes per hectare per cycle in 2011. As for the export of edible bird's nest, the target set for 2016 was 200 metric tonnes, while the actual export volume recorded

for 2016 hit 381 metric tonnes, which is an outstanding and encouraging performance that spurred farmers and operators in the edible bird's nest industry. In 2016, the Agriculture NKEA achieved 101% of its KPIs.

The industry is not without its challenges. Certain projects, in particular production-based EPPs, were impacted by environmental factors such as the El Nino and diseases, which leads to a 20% reduction in agriculture production for aquaculture, livestock and agriculture EPPs. Meanwhile, shrimp production was hampered by *Enterocytozoon Hepatopenaei* (EHP) and Early Mortality Syndrome (EMS), which caused either mortality in production, stunted growth or non-conformity in shrimp size.

The foreign exchange rate fluctuation also affected cow imports and increasing operating costs. Additionally, security concerns in the Lahad Datu and Semporna areas, coupled with low seaweed prices adversely impacted seaweed farming hampered cultivation activities. Other areas which did not perform well include

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Paddy Farm Operation under EPP 10 in Muda Area, Kedah

Initiatives to upgrade infrastructure to better mitigate the risk of adverse weather have been and will continue to be prioritised in order to aid farmers to reduce the loss caused.

cattle integration, which fell short of its target for the year as most of the anchor companies focused on oil palm replanting, which led to reduction of cattle on their plantations.

Nonetheless, the challenges faced during the year have not detracted the continuous efforts and initiatives under this NKEA to transform the agriculture industry. Initiatives to upgrade infrastructure to better mitigate the risk of adverse weather have been and will continue to be prioritised in order to aid farmers to reduce loss caused. To help farmers whom faced shrimp diseases that have compromised their yields over the years, the Department of Fisheries have initiated a knowledge-sharing platform to combat shrimp diseases among anchor companies and experts from the department. Similarly, to assist seaweed farmers that have suffered due to extreme low prices, the Ministry of Agriculture and Agro-Based Industry Malaysia has intervened in



Monitoring of participants farm record under EPP 10

2016 by conducting a value chain analysis on methods and means to increase the price of seaweed. More collaboration between technical agencies such as the Department of Fisheries and the industry will be launched to bring forth more initiatives and innovations to improve the productivity and quality of the country's agricultural products.



Harvesting of high value shrimps under EPP 6

Empowering Companies through Agri-Business

The partnership between anchor companies and supporting entrepreneurs has become a driving force in transforming the country's agriculture industry. This has been led by the Ministry of Agriculture and Agro-based Industry's policy for anchor companies to develop a network of supporting entrepreneurs with constant monitoring through engagement between EPP owners and anchor companies to develop plans and programmes to increase the number of Small Medium Enterprise (SME).

The success of this effort has been demonstrated in the EPP 8 initiative which focuses on strengthening the export capabilities of the processed food industry. To date, this initiative has seen the development of 96 SMEs by anchor companies, with the SMEs acting as, among others, raw material suppliers, retailers or distribution centres to support the anchor business ecosystem. Meanwhile, in EPP 4 a project that focus on farming through integrated cage aquaculture system has seen an anchor company that is Trapia Sdn Bhd, contributed to 90% of total production with the successful implementation of cluster programmes for smallholders.

Seaweed farming makes up another project under this NKEA.

Although the productivity of six anchor companies was hampered by a delay in land approval from local authorities, the project has attracted 300 seaweed cluster farmers under its seaweed cluster programme. The programme which is conducted by the Sabah Department of Fisheries, has seen the number of seaweed cluster farmers increase from 30 when the programme first commenced in 2014.

Efforts under this NKEA have also helped to raise the standards of agriculture companies to ensure the competitiveness of Malaysia's agriculture exports. This follows the requirement for all anchor companies to be certified by Malaysian Good Agricultural Practices (MyGAP). The MyGAP certification is similar to an ISO standard, but for farm practices. It is beneficial for companies that want to export, as certain countries, particularly developed countries, impose these kinds of standards on products entering their markets.

Nine out of 14 shrimp farming anchor companies have since obtained MyGAP certification, reflecting the commitment from anchor companies to produce quality shrimp for premium market. The certification has standardised the quality and safety of products for local and export market consumption. Alongside this remarkable outcome, MyGAP managed to get 829 fruits and vegetable farms certified, and 210 livestock farmers and 159 aquaculture farms attained their MyGAP certification in 2016. Evidently, MyGAP has achieved its objective in enhancing consumer awareness and demand for food product quality and safety. Indirectly MyGAP boosts the Malaysian agricultural produce competitiveness at the international level as we benchmarked with international GAP certification schemes such as the ASEAN GAP and Global GAP.



Shrimp Processing Facility of Anchor Company under EPP 6

AGRICULTURE

BIOTROPICS TAKES MALAYSIA'S BIO-RESOURCES TO GLOBAL STAGE

Biotropics Malaysia Berhad (Biotropics) was incorporated in February 2007 to develop and commercialise Malaysia's bio-resources into superior natural health products. It is a government-linked company established by Khazanah Nasional Bhd to develop the herbal industry, namely the famous *Tongkat Ali* for the international market. Foreign and local academic research conducted over the years have also served as evidence of the proven benefits of this glorious Malaysian herb for vitality.

"Biotropics takes care of the full spectrum of the business development for this natural herb, from lab research to branding, marketing, distributing and logistics. *Tongkat Ali* has been long recognised and certified as a vitality herb by the Oxford Institute of Medicine. The distributorship of Biotropics' herbal products is well established in the United States, United Kingdom, Japan, China, Russia and Hong Kong," says Tengku Shahrir Tengku Adnan, CEO and founder of Biotropics.

The Agriculture NKEA programme has been a crucial catalyst for the growth of Biotropics in the international market, allowing it to access a larger market share and distribution channels. "The NKEA value chain contributed to

"Biotropics takes care of the full spectrum of the business development for this natural herb, from lab research to branding, marketing, distributing and logistics."

the development of our market share and distribution channels. Concerted efforts were involved, from value chains of the Ministry of Health for medicinal value certification, Forestry Department for our access to the wild herb in the jungle, *Orang Asli* office for coordinating manpower resources in reaching the herb in the natural forest, and MATRADE for bridging the connections with trading counterparts in the international markets, and connecting to US Food And Drug Administration for the approval of the products marketed by Biotropics," says Tengku Shahrir.

Being one of the most successful NKEA projects, Biotropics was invited to share its *Tongkat Ali* research and development at the 2016 Vitamin & Food Europe Expo. Subsequently, Biotropics was also invited to conduct a seminar on combating aging with traditional herbs at similar herbal trade shows in Europe in 2016. These appearances allowed for the penetration of new European markets for Biotropics' herbal products.

On the flip side of becoming a globally recognised herbal product, Biotropics' founder, Tengku Shahrir shared that copyright infringements are becoming more rampant. In many cases, several food supplement companies have damaged the image of *Tongkat Ali* in Vietnam by misrepresenting *Tongkat Ali* as an ingredient of their products when in fact, these products did not contain the herb. To address the concern, Biotropics has had to fork out extra damage control resources to re-educate Vietnamese consumers and distributors. As the company develops for the international market, it is also equipping its team to protect the copyright, royalty and patents of its products in the international market.

DATO' AHMAD RIZAL BIN ABDUL RAHMAN, CHAIRMAN, SBH PERAK AGRO AQUACULTURE SDN BHD

SBH Perak Agro Sdn. Bhd. was established seven years ago as an agricultural joint venture with Trapia Sdn. Bhd. focusing on aquaculture and vegetable farming. For aqua-farming, the focus is on shrimp and fish farming for both the domestic and export markets while for vegetable farming, we carry out organic farming mostly for the export market.

SBH Perak Agro has capitalised on the farming land bank we have in Perak and boldly proposed to the Ministry of Agriculture, with the endorsement of the Perak state government, to participate in the Agriculture NKEA programme when we saw that some of its projects shared the same agricultural development direction as SBH Perak Agro.

SBH Perak Agro was initiated to be a self-funding business and a farming project that would benefit local farmers. After we participated in the NKEA, we were able to obtain a soft loan to enhance our investment in quality vegetable and fish products.

The NKEA set a standard KPI for us, requiring SBH Perak Agro to demonstrate a 34% growth in our production, to engage and to share our profits with the local farmers. We are proud to say that SBH Perak Agro was able to exceed the KPI set by NKEA. With the investment of

technology into farming and seedlings, local farmers were more than happy to participate in our farming programme. They learnt the latest technology in quality organic farming and were proud to participate. Our vegetables, shrimp and fish are of international export quality and in high demand by our neighbouring countries. Additionally, the sustainable profit sharing scheme with the farmers is definitely a crucial success factor that ensures the continuous growth of the company.

The NKEA programme also required us to manage our risks and minimise losses in our farming activities. It was quite challenging managing risk when unpredictable weather was an uncontrollable factor that brought damage to our farms. However, we were able to utilise technologies that help us prevent diseases and pests in our farming activities.

We look forward to continued efforts through the NKEA in the long-term for us to invest in instilling an interest in farming among the younger generation; and also to invest in the upstream and downstream of our production. Our production will certainly continue to increase as we expand our farming lands and facilities to produce vegetables and fish.

“The NKEA set a standard KPI for us, requiring SBH Perak Agro to demonstrate a 34% growth in our production, to engage and to share our profits with the local farmers.”

Thanks to the support of the NKEA which has helped build our channels of distribution. Now a majority of our produce is currently for the export market.

AGRICULTURE



Paddy Farming Operation, an initiative under EPP 9, EPP 10, and EPP 11

From the total of 24 herbal products under the programme, 11 products have entered clinical trial in local and overseas locations.

Venturing into High-Value Products

The herbal products sector has emerged as one of the success stories under this NKEA, extracting value from Malaysia's expertise in traditional medicines which leverages the country's rich biodiversity. The project is on track to meet the 2020 target of completing clinical trials for 10 nutraceutical and cosmeceutical products. From the total of 24 herbal products under the programme, 11 products have entered clinical trial in local and overseas locations i.e Europe, Japan, the US, Egypt and Korea. Other products are expected to further progress into clinical trial phase by 2017 after the completion of their respective pre-clinical studies.

Edible bird's nest production marks another area in high-value products where Malaysia has made a name for itself. With the signing of the bird's nest protocol with PRC



Edible bird's nest packaged for sale

during the year, Malaysia will now be allowed to export raw uncleaned edible bird's nest to the country. Previously, only raw and cleaned edible bird's nest were allowed for export to PRC. This new protocol has opened a new market for Malaysian farmers and is expected to benefit 10,000 bird's nest farmers through an increase in prices from RM3,000 to RM5,000 per kg versus RM1,000 per kg previously.

Meanwhile, the market for raw and cleaned edible bird's nest has seen a steady increase in the total number of companies allowed to export their products to PRC. To date, a total of 19 local processing plants have been approved by the Chinese Government for export, from 15 in 2015 and just eight in 2014. These plants exported around 324 metric tonnes of edible bird's nest in 2016.



Irrigation system of paddy farming, initiative under EPP 9, EPP 10, EPP 11



Commercial scale shrimp harvesting operation under EPP 6

MOVING FORWARD ►

With the agriculture industry experiencing steady growth, it is imperative that all stakeholders, both from the public and private sectors to maintain their momentum in the implementation of the initiatives under this NKEA. Stakeholders must also remain responsive to prevailing economic conditions, build resilience and reduce their dependence on the Government while maintaining if not increasing their productivity.

The industry requires long-term solution and better planning to mitigate impacts of bad weather, outbreaks of diseases and fluctuations in agriculture prices. Furthermore, as the first construction phase of projects have been completed, the time

has come for companies to double their efforts and focus on delivering the production of their respective agriculture products. This is to ensure companies achieve the targeted output during the initial planning of projects to enable the NKEA to realise its targets for GNI and job creations.

The encouraging impact of efforts and initiatives led by the NKEA Agriculture are clearly evident in many agricultural products and businesses in 2016 mentioned above. The full maturity of the industry is anticipated when a new programme will be demanded to take the growth of agriculture industry to a new level for Malaysia.

HUMAN CAPITAL DEVELOPMENT

**DATO' SRI RICHARD
RIOT ANAK JAEM**

Minister of Human
Resource

The Human Capital Development (HCD) SRI is crucial in raising the quality of Malaysian talent to adequately fulfil the country's labour demands as it journeys towards high-income status.

This SRI came into being after the National Economic Advisory Council (NEAC) recommended nine HCD policy areas of focus in the New Economic Model (NEM). These recommendations were predicated on the NEAC's research, which revealed that the quality of Malaysia's workforce, both that of existing workers and new entrants, were insufficient to meet the skill requirements of local industries. This then necessitated a comprehensive reform programme that encompassed the creation of the overarching HCD policy area and the two key themes of Workplace Transformation and Workforce Transformation.

Since then, the SRI has enabled the introduction of important initiatives to address the nine policy areas recommended in the NEM, namely Modernise Labour Legislation, Strengthen Strategic Human Resources Programmes, Enhance the Labour Safety Net, Undertake Labour Market Analysis and Leveraging Women's Talent.

As a result, in 2013 we witnessed the enforcement of the Minimum Wages Order 2012, gazetted on 16 July 2012 to provide protection to vulnerable workers by setting a legal floor wage, to meet the workers' basic needs, and the Minimum Retirement Age Act 2012, which sets the retirement age for private sector employees to 60 years to take into account the longer lifespan of Malaysians and a need to increase their retirement savings. The first minimum wage review was carried out in 2016 and the new Minimum Wages Order 2016 which took effect on 1 July 2016



raised the floor wage to RM1,000 from RM900 per month in Peninsular Malaysia, and RM920 from RM800 in Sabah, Sarawak and Labuan.

The SRI has also paved the way for small- and medium-sized enterprises (SMEs), which form the backbone of Malaysia's economy, to enhance their business performance through the establishment of the National Human Resource Centre (NHRC). Furthermore, the Institute of Labour Market Information and Analysis was established to ensure the Government is equipped with sufficient data to aid in manpower planning.

We have also seen the MyProCert Upskilling Programme and National Talent Enhancement Programme play important roles in upskilling our talent pool to support the development of the NKEA. This is particularly crucial as the need to upskill our current workforce and become globally relevant is imperative. The Government remains positive that the foundations laid through this SRI will foster a conducive landscape for our talents to thrive.

OVERVIEW

The Human Capital Development SRI represents a component of the NTP, cutting across all NKEAs under the Economic Transformation Programme. A direct offshoot of the NEM, the goal of this SRI is to enhance human capital capabilities and address human capital needs to support the execution of all 12 NKEAs and thus, contribute towards Malaysia's aspiration of achieving high-income nation status by 2020.

Efforts have focused on enhancing the capabilities of the local workforce, advocating diversity of workers and implementing policy measures which will uplift the earning potential of lower-income workers. Among the SRI's highlights during the year include an increase in the minimum wage, marking the first review since the policy was gazetted in 2012.

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HUMAN CAPITAL DEVELOPMENT

Building Talent Capabilities

This SRI has put in place efforts designed to enhance the capabilities of Malaysia's workers in line with the talent needs of a high-income nation. This, in turn, enables the workforce to avail themselves of the opportunities in high-value jobs created by the initiatives under the NTP.

Among these efforts has been the establishment of an overarching strategy for the continual upgrading of the domestic workforce. This is undertaken by developing and strengthening links between industry players and educational institutions to improve the relevance of tertiary and vocational training in the real world. One highlight of this initiative is the partnership between the Department of Skills Development, the German-Malaysian Institute (GMI) and Malaysian German Chamber of Commerce and Industry for the establishment of the Dual Vocational Training Programme (DVT).

Facilitated by PEMANDU, the partnership commenced in June 2014 with 22 trainees undergoing training in industrial management (11 trainees) and logistics management (11 trainees). The scheme involves 17 companies which are mainly German-based (e.g. Infineon, Schenker, a.hartrodt, Bosch, SGL, TÜV Rheinland and Panalpina).

Due to its success, MoHR will fund the expansion of the programme. Aside from industrial and logistics management, students will also be able to enrol in mechatronic courses. Additionally, the Penang State Government sponsored RM2 million to expand the programme in the state through an agreement between the Penang Skills Development Centre (PSDC) and the Malaysian-German Chamber of Commerce and Industry.



HRDF Conference & Exhibition 2016.

The SRI has also spearheaded the establishment of the National Human Resources Centre (NHRC) to support the growth momentum of SMEs, which typically lack human resource management capabilities. Established in 2012 under the purview of MoHR's Human Resources Development Fund Corporation (HRDF), the NHRC provides strategic HR solutions for SMEs including walk-in advisory sessions and larger-scale HR Club & Peer Mentoring sessions.

The Centre also launched its

Portal and Call Centre in 2012, with its tailored HR solutions adopted by over 4,000 SMEs. The NHRC Portal provides solutions for a range of issues pertaining to recruitment through to retirement via toolkits, templates and process flows that have been simplified for SME use but can easily be scaled up to suit more sophisticated contexts. The NHRC also serves as a helpdesk for queries on HR matters, such as employee and industrial relations. In 2016, an additional 11,605 employers

One highlight of this initiative is the partnership between the Department of Skills Development, the German-Malaysian Institute (GMI) and Malaysian German Chamber of Commerce and Industry for the establishment of the Dual Vocational Training Programme (DVT).

registered with and benefited from the NHRC Portal.

In addition, the NHRC produced two customised publications; *Quick Reference on HRM for SMEs* and *How to Write an Employee Handbook*, both of which have been distributed to SMEs and employer associations across the country to equip entrepreneurs and HR practitioners with the appropriate knowledge, competencies and skills to build competitive and sustainable SMEs that can compete on the international stage.

This policy area also witnessed the launch of HR capability-building programmes in 2012, which were open to HRDF and non-HRDF registered employers. A total of 33,735 employers participated in these programmes in 2016, enabling their employees to earn qualifications like certificates and diplomas in Human Resources. Since 2013, a total of 96,616 employers have participated in these programmes.

Uplifting Earning Potential of Low-Wage Groups

Enacted in 2012, the Minimum Wage Order institutionalised minimum wages for the domestic labour market in an effort to uplift the living standards particularly of the lower-income groups. Under this Order, the minimum wage for workers in Peninsular Malaysia as well as Sabah, Sarawak and Labuan was initially set at RM900 and RM800, respectively, with a view of reviewing the minimum wage periodically to ensure it reflected prevailing economic conditions. In July 2016, the minimum wage was raised to RM1,000 for Peninsular Malaysia and RM920 for Sabah, Sarawak and Labuan. The revision took into account the cost of living as well as the need to balance employers' operational costs.

The minimum wage has succeeded in contributing to a reduction in income inequality in Malaysia, benefiting the country's lowest paid workers.



My PLIC 2nd Malaysia Productivity-Linked Wage Conference With Dato' Sri Richard Riot Anak Jaem Minister of Human Resource, Malaysia.

HUMAN CAPITAL DEVELOPMENT



HRDF Conference & Exhibition 2016.

As reflected by statistics from the Department of Statistics' Household Income and Basic Amenities Survey 2014, median monthly income for the bottom 40% of Malaysia's income earners recorded a compounded annual growth rate (CAGR) of 13% between 2009 and 2014, rising from RM1,440 to RM2,629.

The minimum wage has succeeded in contributing to a reduction in income inequality in Malaysia, benefiting the country's lowest paid workers. As reflected by statistics from the Department of Statistics' Household Income and Basic Amenities Survey 2014, median monthly income for the bottom 40% of Malaysia's income earners recorded a compounded annual growth rate (CAGR) of 13% between 2009 and 2014, rising from RM1,440 to RM2,629. Mean monthly income registered a CAGR of 12% during the same period, from RM1,440 to RM2,537. The CAGR for B40 median and mean income also rose more than that of the middle 40% (M40) and top 20% (T20) of income earners, with M40 earners seeing a 9% CAGR in both median and mean income, and T20 earners recording CAGR of 8% and 7% in median monthly income and mean monthly income, respectively.

Championing Workforce Diversity

In addition to helping to enhance Malaysian talent capabilities and introducing the appropriate policies to improve working conditions, this SRI has focused on leveraging

women talents to raise national productivity standards.

All Ministries and government agencies have been mandated to incorporate gender issues into their policy design. Likewise, through a memorandum from the Ministry of Women, Family and Community Development in 2004, public companies, both listed and unlisted,

are encouraged to have at least 30% of their key decision-making positions filled by women executives, though such appointments must be made based on meritocracy.

In this light, the Prime Minister had in 2015 announced two new measures to increase the percentage of women on company boards:

1. Through policy requirements, government-linked companies will allow their executives to serve on the boards of other listed companies, as long as there is no conflict of interest; and
2. Moving forward, listed companies will be required to disclose in their Annual Reports the composition and diversity of their boards and top management in terms of gender, ethnicity and age.

Furthermore, directives had also been issued for corporations to implement policies that allow greater flexibility in work arrangements and provide for childcare support, as research has shown that the existence of such support systems result in higher female labour participation rates (e.g. Denmark and Sweden each spend 1.7-2.7% of their GDP on childcare and have over 70% of their women in the workforce).

A study from United Nation Development Programme Asia-Pacific Human Development Report 2010 suggested that an increase of female participation in workforce up to 70% can boost Malaysia's GDP up by an additional annual growth of 2.9%, dramatically catalysing the country's aspiration to be a high-income nation. The 11MP has set a target to achieve at least 59% female participation in the workforce by 2020.

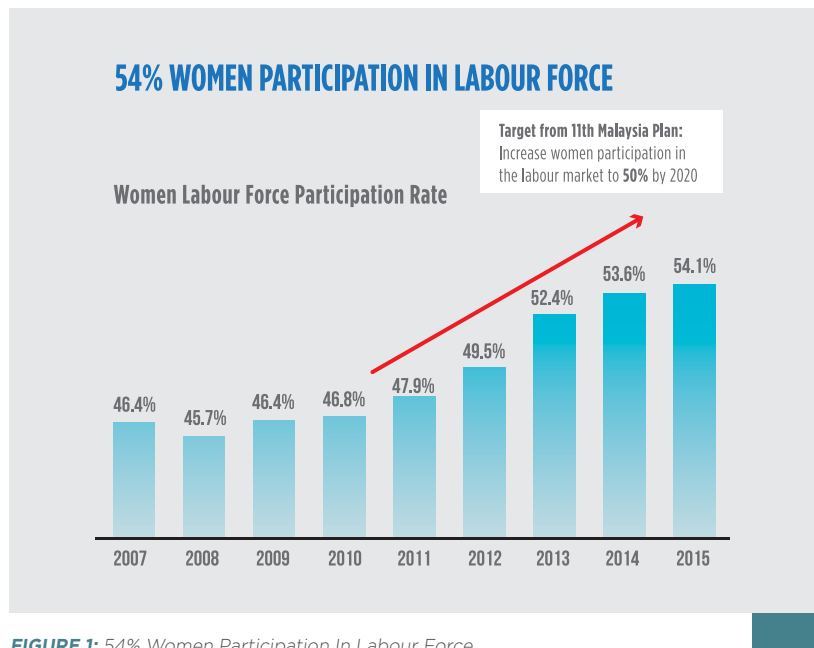


FIGURE 1: 54% Women Participation In Labour Force



HUMAN CAPITAL DEVELOPMENT

Other key measures taken by the Government to increase female worker participation include encouraging employers to implement Flexible Work Arrangements (FWA) and the Career Comeback Programme launched in March 2015 for women to return and be retained in the workforce.

Under this initiative, the Ministry of Women, Family and Community Development has encouraged employers to set up childcare centres in the workplace. This push has seen 41 out of 483 new centres established in 2016. A total of 1,637 childcare minders were trained with the 'Kursus Asuhan PERMATA' module during the year.

While training child minders is aimed at improving the delivery of childcare services, additional efforts were put in to encourage parents to enroll their children into registered childcare centres by driving the establishment of new childcare centres as well as registering unregistered centres. This saw the establishment and registration of a total of 1,256 childcare centres in 2016, allowing for better governance from relevant authorities in ensuring quality childcare services. However, enrolment declined from 8% in 2015 to 6.8% in 2016 as data was verified to ensure its accuracy, following double counting found in data from previous years. It is the goal of the Government to improve childcare services delivery and quality in an attempt to lessen the burdens of working mothers as well as attract women to return to work.

Other key measures taken by the Government to increase female worker participation include encouraging employers to implement Flexible Work Arrangements (FWA) and the Career Comeback Programme launched in March 2015 for women to return and be retained

in the workforce. TalentCorp Malaysia in 2016 supported 32 companies' offering of FWA and facilitated the return of 168 women to the workforce after a career break under the Career Comeback Programme.

The participation of women in public-sector decision-making positions has risen tremendously, and this has been reflected in the private sector for listed companies as well. In 2011, the Prime Minister announced the target of 30% women in decision making positions by the end of 2016. As at end of 2016 (1) the percentage of women on boards of Bursa Malaysia's Top 100 Public Listed Companies by market capitalisation was at 16.6%, a marginal improvement from the 14% in 2015, (2) 26% women in top management (including CEOs) and (3) 29% women in top management (excluding CEOs). The commendable result was due to the effort of the Ministry of Women, Family and Community Development in collaboration with Securities Commission, Bursa Malaysia, Talent Corp and the 30% Club.

Founded in the UK, the 30% Club aims to develop a diverse pool of talent for all businesses to improve the gender balance at all levels of their organisations. Initially targeting to triple the percentage of women on boards of companies to 30% by 2016, the timeframe was extended to 2020 as the Olympic target deadline was not met.

However, we are close to achieving the 30% target for women

MINIMUM WAGES ORDER CONTRIBUTES TO INCOME GROWTH



Malaysia reached a historic milestone in January 2013 with the introduction of the Minimum Wages Order, a new policy designed to raise the income scale in the country in tandem with its high-income aspirations.

Implementing the policy however, was no easy feat, as the Government needed to secure consensus from both employer and employee groups; with the Government playing the role of mediator to ensure a win-win solution for all stakeholders.

T Shanmugam, the Secretary of the Ministry of Human Resources' National Wages Consultative Council (NWCC) tasked with implementing the policy who has been involved in this initiative since it was initiated under the Human Capital Development SRI, notes, "So far, Malaysia's journey in implementing minimum wages policy has been rather 'interesting'.

"I say 'interesting' because employers on one hand, raised

"In order for Malaysia to become a high-income economy which is inclusive, wages at the bottom of the wage scale had to be lifted up."

anxieties that the minimum wages have increased their cost of doing business. On the other hand, the workers are arguing that the present minimum wages are too low and need to be increased due to the rising cost of living. This scenario is rather baffling for the policy makers, especially for the Ministry of Human Resources!"

He explains, however, that in order for Malaysia to become a

high-income economy which is inclusive, wages at the bottom of the wage scale had to be lifted up. Additionally, the minimum wages policy is expected to benefit the economy in the long-run with the improvement in the purchasing power of the working class due to the higher wages.

Minimum wages in Malaysia is implemented through the National Wages Consultative Council 2011 (Act 732). Act 732 provides a mechanism where the NWCC, which comprises employer, employee, Government and NGO representatives, deliberate and recommend minimum wages rate for consideration and decision of the Cabinet.

Two Minimum Wages Orders have been made so far, starting with the Minimum Wages Order 2012 which has since been replaced with the Minimum Wages Order 2016.

"The International Labour Organisation (ILO) refers to minimum wages as a form of 'safety net' meant to secure employees a reasonable basic standard of living. For Malaysia, the minimum wages policy is intended to ensure employees can meet their basic needs and create the necessary environment for industries to move up their value-chain by increasing productivity of their employees through the use of technology, automation and other innovations," Shanmugam explains.

He adds that Malaysia's minimum wages policy is unique as the NWCC is assisted by an independent and impartial technical committee known as

HUMAN CAPITAL DEVELOPMENT

the National Wages Consultative Technical Committee (NWCTC). The primary role of this committee, comprising representatives from the Department of Statistics, Malaysia, Malaysia Productivity Corporation and academicians in socioeconomic and macroeconomic fields is to advise NWCC on all technical aspects of minimum wages.

Furthermore, while various statistical indicators such as the median wage, poverty line income, productivity growth, unemployment rate, consumer price index and other indices form a reference point to determine the minimum wages rate, NWCC also places emphasis on 'spirit of tripartism' among the employers' and employees' representatives. This is to ensure the final recommendation made to the Government on the minimum wages rate takes into account the best interest of all parties.

With this need to consider the concerns of various stakeholders, Shanmugam notes that other challenges which have arisen from this initiative include the continued disparity between the minimum wages in Peninsular Malaysia and Sabah, Sarawak and Labuan. This is due to the varying levels of economic development and socioeconomic indicators such as the median wage, unemployment rate and productivity growth.

Nonetheless, with the minimum wages raised to RM1,000 a month in Peninsular Malaysia, from RM900 at its introduction; and to RM920 a month in Sabah, Sarawak and Labuan from RM800 previously, the gap in minimum wages has been reduced from RM100 previously to RM80 now.

Shanmugam also notes that there have been calls for a lower minimum wages rate for foreign workers to offset benefits received by foreign workers, such as free accommodation.

"However, the Government does not support the idea of having a separate (lower) minimum wages for foreign workers as we should not discount their immense contribution to the Malaysian economy. Besides, implementing a separate minimum wages package for foreign workers would be against the existing provisions in labour legislations as well as not conform with international labour standards.

"In addition, beginning June 2016, Malaysia has also ratified the ILO Minimum Wages Fixing Convention No 131, which is an international instrument for smooth implementation of minimum wages," Shanmugam says.

He also notes that there remains a lack of officers to carry out inspections and enforcement activities on minimum wages, with only 503 enforcement officers for the whole country. This is against the 965,998 places of employment registered with the Labour Market Database.

"This has cast doubt on the efficacy of the enforcement of among others, the minimum wages law. However, continuous effort to implement a more strategic and focussed inspections at places of employment are being done and discussions with the Public Service Department for additional labour officers are constantly been held," he says.

In spite of these impediments and the NWCC's daunting task,

the Minimum Wages Order has transformed the lives of Malaysia's low-income earners in the three years of its implementation.

"Directly, about 1.9 million floor level workers have benefited from the introduction of minimum wages through the Minimum Wages Order 2012. Indirectly, due to the 'ripple effect' of the minimum wages for the upper level workers, the 'supervisory and middle management' workers have also benefitted from this policy," says Shanmugam.

The Government also remains committed to reviewing the minimum wages rate at least once every two years in accordance with Act 732. Shanmugam explains that adjustments are based on components including Poverty Line Income, productivity growth, the inflation rate, median wage and the unemployment rate.

"However, based on several discussions with various parties including the ILO and the World Bank, since Malaysia was reviewing the minimum wages order for the first time ever, it was their view and advice that a 'balanced approach' should be taken to avoid sending 'shocks' into the labour market which could be detrimental to the overall economy.

"As such, a smaller increase, which was RM100 for Peninsular Malaysia and RM120 for Sabah, Sarawak and Labuan was implemented. In a nutshell, a 'slow and steady' increase, appeared to be more palatable to industries to absorb the increase in the labour cost," says Shanmugam.



MOVING FORWARD ►

Technical Vocational Education and Training (TVET) and upskilling efforts continue to provide a significant platform for new opportunities and transformation of the country's human capital development initiatives. By 2020, this SRI is targeting for skilled workers to make up 35% of the workforce, from the current 28%, to ensure that companies can be confident of having the pipeline of workers needed for operations. In view of this, the Government continuously seeks opportunities to engage and encourage employers to increase their involvements in dual vocational training to enable industry training to make up 70% of TVET and upskilling syllabus, with the remainder to be made up of classroom/theory lessons. This will ensure employees trained are fit for industry. At the same time, there remains a need to raise the awareness of students and parents on the opportunities

afforded by vocational education to ensure more take-up of TVET.

In the area of leveraging women talent in the workforce, the SRI will continue to implement initiatives focused on enabling women to return and be retained to work, such as through the Flexible Work Arrangement (FWA), and organising career come-back events. However, as improving childcare services has proven to be challenging, in 2017, the SRI will see the implementation of the childcare action plan developed during a workshop held in 2016 to increase childcare enrolment and improve the quality of childcare. Meanwhile, in relation to increasing the number of women in key decision-making positions, continuous engagement sessions will be organised by the 30% Club Malaysia, the NAM Institute for the Empowerment of Women (NIEW) and TalentCorp.

It is also heartening to note that HRDF is presently leading the way in encouraging companies to fully utilise the mandatory training levies they have paid to the Fund to upskill their staff on a more regular basis. In addition, significant headway has been made to increase women's participation in the workforce and tighten the bonds between industry and educational institutions, while the Human Capital Development Council is envisioned to continue working closely with the relevant authorities and institutions to ensure meaningful progress is made to upgrade the domestic workforce to international standards and meet domestic talent requirements.

However, it is imperative for all relevant agencies to collaborate with the private sector to ensure Malaysia meets its talent development needs as it transforms into a high-income nation in 2020.

PUBLIC SERVICE DELIVERY TRANSFORMATION



DELIVERING
EXCELLENCE
THROUGH OUR
PUBLIC SERVICES



TAN SRI DR. ALI HAMSA

Chief Secretary to the Government

The Public Service Delivery Transformation Strategic Reform Initiative (PSDT SRI) aims to improve the efficiency and effectiveness of services delivered by the Government to the *rakyat*.

The core of all PSDT SRI initiatives is to focus on 'doing more with less'. In other words, PSDT aims to enhance the efficiency and effectiveness of public services, such that the Government can continue to meet the *rakyat's* expectations even as it becomes more prudent in its spending.

PSDT SRI projects are typically *rakyat*-focused, process-driven improvements that yield big, fast results. Since its inception in 2013, we have initiated 130 projects across 15 Ministries, of which we have successfully closed 114. Currently, 16 projects remain in the active phase.

We've seen many successful projects resulting from the PSDT SRI. These include the improvement of road signage in Kuantan; working with Muda Agricultural Development Authority (MADA) to increase paddy production in the Muda area by an expected 100% come 2020; the pre-hospital care pilot, which sought to respond to 90% of all top-priority ambulance calls within 15 minutes in key locations throughout the GKL/KV region.

Indeed, some of the SRI flagship projects have become successful beyond their original intent. Such is the case with LEAN Healthcare, which started out with merely two LEAN pilot projects in Hospital Sultan Ismail and Hospital Tengku Ampuan Rahimah, respectively. Since then, it has been elevated to become an initiative that will be rolled out to all 134 Ministry of Health (MOH) hospitals over the coming years. So, too with the Kuala Lumpur City Hall (DBKL)'s Lift Transformation initiative, which has grown from 1 Projek Perumahan Rakyat (PPR) – PPR Batu Muda – to five PPR/Perumahan Awam (PA) in 2016, and to 40 PPRs/PAs in 2017.

The PSDT SRI needs to rise up to answer the three key challenges that will be faced by the government as we move towards becoming a high-

income developed nation; namely, an increasingly aging population, the *rakyat's* rising expectations and potential budget shortfalls. As a result, we need to improve the efficiency and effectiveness of public services that are and will be delivered to the *rakyat*.

Often times, though, PSDT is not seen as a priority by those not directly involved. By showcasing the successes of past and current PSDT SRI projects in increasing public satisfaction while streamlining budgets, we hope to create the desire within other Ministries and government agencies to embark on projects of their own.

Moving forward, I would like to encourage other Ministries and government agencies to strive for public service delivery transformation. As we move towards becoming a high-income nation by 2020, it is important that we continuously strengthen the delivery of our services to the *rakyat*.

OVERVIEW

PSDT SRI projects focus on process improvements and the enhancement of service quality. The projects are piloted to demonstrate measurable and meaningful outcomes in a short time frame. At the same time, the projects are highly scalable, leveraging the capabilities of the civil service to ensure that these projects and their learnings can become the new nationwide standard of delivery.

Two major PSDT SRI stakeholders, Ministry of Health (MOH) and the Ministry of Federal Territories (KWP), have demonstrated the effectiveness of this approach. LEAN Healthcare, under MOH, is aimed at improving the quality of care provided by public hospitals with existing resources, thereby enhancing the patient's experience and adding value to public health service. In 2016, 88 PSDT projects were successfully completed and closed. MOH and KWP have continued to build on the successes of their pilot projects, while the Ministry of Higher Education has decided to rollout the LEAN Healthcare programme to its university hospitals, starting with UMMC.

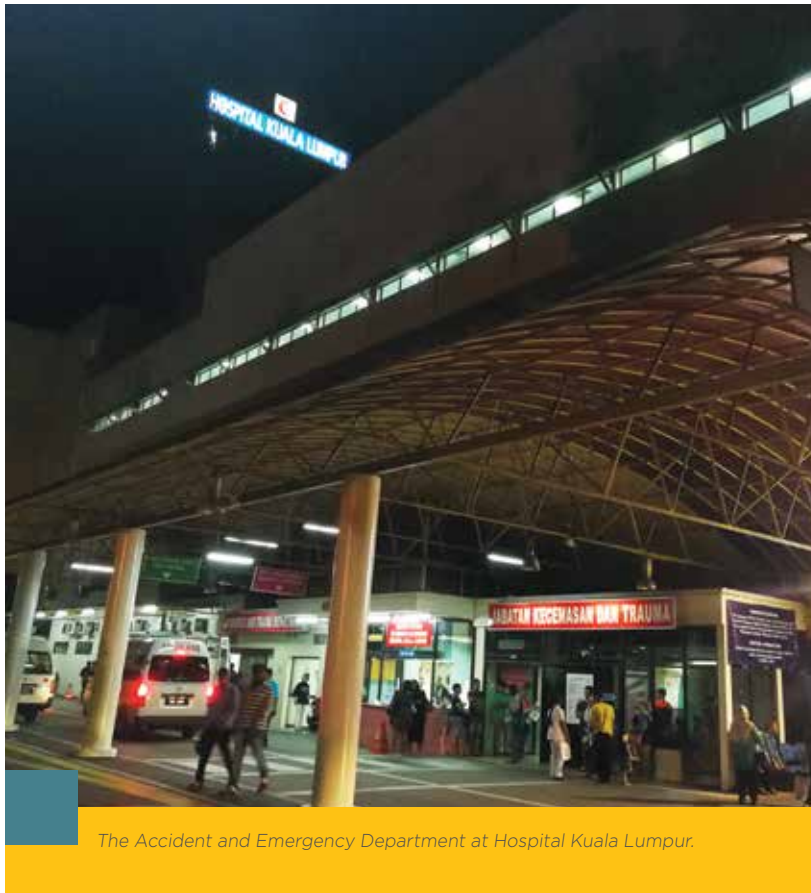
Meanwhile, both PPR/PA Lift Transformation and Road Maintenance Transformation initiatives under KWP are community-focused, aiming to improve the daily experiences of public housing owners and tenants, as well as road users within the Kuala Lumpur city centre.

PSDT SRI projects are benchmarked against the performance of their international counterparts to ensure that the results of the projects are at par – or exceed – world-class standards. The LEAN Healthcare initiative, for instance, sees MOH adopt the four-hour emergency access target set

out in the Emergency Department (ED) model of care as developed by the New South Wales' Ministry of Health. The model requires ED patients to be assessed and treated by ED personnel within two hours. If additional specialised consultation or care is required, the patients need to be reviewed by the specialty team and transferred to an inpatient bed or discharged home within the next two hours.

Similarly, DBKL's Lift Transformation initiative benchmarked itself against the Singapore Housing & Development Board (HDB), which institutionalised a complete performance-based asset management solution involving 16 town councils and 10,000+ apartment blocks, covering over 81% of Singapore's residents. Using this solution, HDB has been able to record significant reductions in residents' complaints; technician overtime claims; contractors' response and job completion times; inventory annual purchases and delay of completion of work orders. Overall, the PSDT SRI achieved 140% of its KPIs in 2016.

PUBLIC SERVICE DELIVERY TRANSFORMATION



The Accident and Emergency Department at Hospital Kuala Lumpur.

PSDT SRI projects are benchmarked against the performance of their international counterparts to ensure that the results of the projects are at par – or exceed – world-class standards.

Enhancing the Patient Experience at Public Hospitals

MOH started the LEAN Healthcare project in late 2013 in Hospital Sultan Ismail in Johor Bahru, followed by Hospital Tengku Ampuan Rahimah in Klang. Due to its rapid success, in 2014, the Ministry decided that LEAN Healthcare would be rolled out to all 134 Government hospitals in several batches of about 20 hospitals each. To date, LEAN Healthcare has been implemented in 36 MOH hospitals nationwide and has since proven its worth in enhancing the delivery of healthcare services in Government hospitals, exceeding the 2016 target of 15 hospitals.

In 2016, a total of 80 LEAN projects were implemented at these 36 hospitals. The first batch of 16 hospitals progressed to the second phase of LEAN improvements involving the hospitals' EDs and Medical Wards (MWs). The second batch of 20 hospitals saw 40 LEAN projects initiated at their EDs and MWs. Another eight LEAN Healthcare projects were initiated in the Ophthalmology & Orthopaedics Specialist Clinics at four hospitals in the Klang Valley (Hospital Kuala Lumpur, Hospital Tengku Ampuan Rahimah, Hospital Sungai Buloh, and Hospital Selayang). This followed the successful implementation of LEAN projects at their EDs and MWs.

The majority of the projects implemented during the year yielded, on average, between 20% and 50% improvement in patients' waiting time. This was largely due to strong buy-in from all stakeholders at MOH; from the senior management at the Ministry, right down to the hospital staff. As a result, the Ministry of Higher Education (MOHE) decided to join MOH by rolling out the LEAN Healthcare programme to its teaching hospitals, implementing its first LEAN project at the Accident & Emergency Department in Universiti Malaya Medical Centre (UMMC). This has since reduced the average length of stay of non-critical patients by 53%. UMMC is now in the midst of implementing its second LEAN project at its MWs.

The reduction in patient waiting time has increased hospitals' capacity to treat more patients and lead to shorter waiting time for patients and cost saving for the Government. In 2017, a customised training programme will be developed and rolled out to the quality departments within hospitals, so that they are better positioned to initiate and oversee the expansion of LEAN to other departments within their hospitals.

PAVING THE WAY TO BETTER ROADS

According to Sabudin Mohd. Salleh, Senior Deputy Director of DBKL's Civil Engineering & Urban Transportation Department, Road Maintenance Transformation deals with one of the most critical needs of the rakyat. "It is our objective to do what we can as fast as we can to reduce the burden on motorists," he states.

All 43 protocol roads (roads used for diplomatic processions and travel) as well as other main roads that see heavy usage within the city centre are under the PSDT SRI's Road Maintenance Transformation project, which mandates an initial response within 12 hours of the Department receiving a complaint. "There are multiple avenues of contacting DBKL about road complaints. All of the communications received are recorded and documented in accordance with our ISO-certified standard operating procedures. It may take some time for those complaints to reach the department's PSDT team but once it does, we aim to send a crew out within 12 hours," Sabudin clarifies.

Not all complaints can be resolved immediately, as Sabudin points out. "If it's just a simple pothole we can patch there and then, we do so. There are more complex jobs, such as sinkholes, which may take several days and the organisation of a lot more material and equipment. But it is important to us that we take quick action."

It has not been without its challenges. "DBKL deals with 11 public utility companies – water, sewage, telcos and so on – who are responsible for most of the city's manholes, so when potholes occur as a result



of manhole deterioration, we are dependent on their responsiveness. 70 % of the complaints we get concerning this issue involves their manholes," Sabudin explains. In the case of these companies not responding fast enough, DBKL will pre-emptively seal these manhole covers and bill the companies – charging them out of the RM5 million deposit (RM10 million in the case of TNB) they each have placed with DBKL. "The public doesn't care whose responsibility it is, and these roads are under our jurisdiction, so we have to discharge our duty regardless."

One of the innovations the Road Maintenance Transformation team brought in to reduce the number of road complaints has been to eliminate the occurrence of 'repeating potholes', where poorly-patched potholes tend to collapse and require patching again within a short time. "There is a specific process to follow in order to avoid this issue, and we have been sending our road repair crews to training courses on how to get it done," Sabudin states.

Road maintenance is extraordinarily expensive. A single 'pothole patcher' alone costs several hundred thousand ringgit. It has been estimated that RM200 million is required to resurface 1,800km of road lanes, while DBKL has jurisdiction over 5,000km of roads, many of

which are multi-lane. Yet despite a budget that has been gradually reduced year after year (in 2016, DBKL had received federal funding of around RM33 million), this PSDT project has been able to deliver nearly 100% of its aim, which is to have all complaints attended to within 12 hours. Only in one instance was there a delay: the response team, who had arrived onsite at night, couldn't find the pothole in question, and had to wait until the next day.

"Our plan in moving forward is to work with the utility companies to prevent manhole-related pothole issues; this will be done by introducing manholes fixed in the centre of a concrete slab, which essentially makes them zero-defect," Sabudin explains. "These new manholes are not cheap, and there are thousands of manholes to be replaced, but in the long run, they will cut down the number of complaints and potholes we need to attend to."

"It is our objective to do what we can as fast as we can to reduce the burden on motorists."

PUBLIC SERVICE DELIVERY TRANSFORMATION



Projek Perumahan Rakyat allow the low-income group to dwell in comfort.

Caring for the City Community

KWP has developed two initiatives under the PSDT umbrella, the PPR/PA Lift Transformation and Road Maintenance Transformation projects, both of which are under the purview of DBKL. Since its inception in 2015, beginning with lift transformation at PPR Batu Muda and road maintenance transformation at the Middle Ring Road 1, the PPR/PA Lift Transformation programme has expanded to five PPRs/PAs, while the Road Maintenance Transformation programme was undertaken on 136km of 43 main and protocol roads around the KL Central Business District (CBD) in 2016, achieving KPI targets of 119% and 100% respectively.

The PPR/PA Lift Transformation project is an initiative to improve the

The PPR/PA Lift Transformation project is an initiative to improve the condition of lifts and ensure their optimum availability for residents' convenience, through prompt maintenance within the various PPRs and PAs under DBKL's jurisdiction.

condition of lifts and ensure their optimum availability for residents' convenience, through prompt maintenance within the various PPRs and PAs under DBKL's jurisdiction. Formerly, the maintenance approach was very much ad hoc and reactive in nature, and the jobs were not

actively monitored. Additionally, approximately half of the lift maintenance budget was attributable to lift breakdowns primarily caused by misuse, abuse and vandalism.

In an effort to educate PPR/PA communities on best practices for lift usage, a comprehensive

communications programme was carried out. There were also the issues of aging lifts, the availability of spare parts for these lifts and the unusually bad condition of several lifts, for which the most cost-effective solution was the wholesale upgrade/replacement of these lifts. In total, the average uptime of lifts at the five PPRs/PAs, comprising 33 apartment blocks with 96 lifts, under the purview of DBKL has been improved.

Meanwhile, the Road Maintenance Transformation project faced challenges in manpower and logistics, which DBKL overcame by re-rostering shifts and ordering/deploying additional equipment. To mitigate supply costs, just-in-time inventory methods were employed while DBKL also improved its ordering processes. DBKL also opted for the use of cold mix asphalt as an alternative to speed up minor repairs, although this was used sparingly to manage costs.

In total, the average uptime of lifts at the five PPRs/PAs, comprising 33 apartment blocks with 96 lifts, under the purview of DBKL has been improved.



The "Skuad PSDT" on duty in Kuala Lumpur.

PUBLIC SERVICE DELIVERY TRANSFORMATION

DBKL UPLIFTS AFFORDABLE HOUSING RESIDENTS

The PPR/PA Lift Transformation project is one of two PSDT SRI projects initiated by Kuala Lumpur City Hall (DBKL). Mechanical engineer Noor Suhailan Abdul Wahab, who has been with DBKL's Housing Management and Community Development Department for over 16 years, is one of the project leads for the PPR/PA Lift Transformation.

"This project was chosen as part of the PSDT SRI because there are 523 residential lifts to maintain under DBKL's jurisdiction, which affects many residents' lives. Not only did we receive many complaints about lift breakdowns, but we have recorded at least one fatality involving a young boy," Noor Suhailan explains.

As a result, DBKL started focusing its attention on improving response times to lift breakdown complaints. One of the major complaints about the lifts is the frequent occurrence of the 'man-trap' issue, where the lift stops halfway and those inside are unable to get out. Noor Suhailan notes that much of the problem was due not to mechanical failures per se, but rather the result of lift vandalism and misuse.

"Lift overloads; opening the lift doors when the lift hasn't reached the floor yet; jamming the door open, which results in the lift motors burning out; relieving themselves in the lifts; these are just some of the factors that cause man-traps and other lift failures to happen." He emphasises that the priority in those circumstances is to first rescue the people trapped within the lifts before repairing the faults.

From a pilot on one public housing development (PPR Batu Muda) in 2014 to five of the top 10 in



2015, DBKL has focused on reducing response times and the number of lift breakdown complaints as its KPIs.

"Contractors had been requested to deploy special teams dedicated to serving these particular PPRs/PAs. CCTV systems had been installed to try and cut down the amount of vandalism, although occasionally they're subject to vandalism themselves. We have also brought in lift watchmen at night to check up on the lifts," Noor Suhailan details.

Not only have these measures been cost neutral, but the actual costs of lift maintenance and repair have been dropping, and Noor Suhailan believes that the PSDT SRI project is one of the main reasons for this. "The budget we use on preventing vandalism and having quick response times to lift complaints is more than offset by the amount we save on not having to do costly lift repairs or parts replacements," he reckons, pointing out that regular lift maintenance on the other public housing developments were being carried out as usual.

Thus far, results have been far above expectations. "We focus on lift uptime within the month; we had planned on achieving 85% uptime from the estimated 70%-80% in the past, but we had achieved -96% uptime on average. It came as a pleasant surprise," Noor Suhailan recounts.

Of course, replicating this spectacular result across its jurisdiction from 96 lifts to around 300, which is what DBKL plans to do for 2017, will be a challenge. "All lifts in all the public housing developments will either be replaced altogether, or be placed under the PPR/PA Lift Transformation project," Noor Suhailan says.

However, he is confident that it is possible. "We get a lot of complaints, but it's not uniformly distributed across all PPRs/PAs. We will need to focus on the complaint hotspots, probably add more dedicated teams and reduce the number of lifts under each team. We are now currently studying how we can scale up the implementation."



MOVING FORWARD ►

As per its schedule, MOH intends to expand the rollout of LEAN Healthcare to another batch of 15 MOH hospitals, as well as pilot a block appointment system at Hospital Sungai Buloh involving all the specialist clinics.

The block appointment system will involve scheduling patient appointments using pre-determined time blocks (e.g. two hours), and matching the number of appointments within each time block to the capacity of the service provider. This is to mitigate the current practice of many patients who arrive at the hospital between 7am and 9am, resulting in congestion in the parking area, overcrowding in the specialist clinics, and long waiting time for patients and caregivers alike.

With the best practices learned and acquired, KWP's PSDT teams have been inspired to continue with both transformation projects in 2017. The PPR/PA Lift Transformation project

will be extended to 40 PPR/PAs under DBKL, involving a maintenance schedule for over 500 lifts. The Road Maintenance Transformation project is also expected to cover the whole Central Business District (CBD) of KL, which comprises five zones in total. During this time, the teams will have to be up to face various challenges, including the possible changes of their leadership and their members, taking into consideration cuts to their operational expenditure budget, and ensuring that these process and quality improvements continue to be applied and practiced, rather than falling back to the previous, more familiar (but also more inefficient) routines.

COMPETITION, STANDARDS AND LIBERALISATION



RAISING MALAYSIA'S GLOBAL COMPETITIVENESS

DATO' SERI HAMZAH ZAINUDIN

Minister of Domestic
Trade, Co-operatives and
Consumerism

The implementation of the Competition Act 2010 is one of the Strategic Reform Initiatives (SRIs) identified under the NTP, intended to foster healthy and thriving competition in the Malaysian economy.

It is the Malaysia Competition Commission's (MyCC) intention that the enforcement of the Competition Act 2010 will create an economy in which efficiency and innovation can thrive by ensuring a level playing field for local enterprises that is free from anti-competitive activities.

This healthier and more competitive market will deliver a wider range of high-quality goods to the rakyat at competitive prices, while innovative Malaysian enterprises will bring their products and services to the international level.



DATUK SERI PANGLIMA WILFRED MADIUS TANGAU

Minister of Science,
Technology and Innovation

With the theme of "Standards Build Trust", for the 2016 World Standards Day celebration, Standards Malaysia continues to play an important role in advocating the value of standards to stakeholders. The adoption of standards by Malaysian companies not only help to improve the quality of products and services, but also to improve the efficiency of resources used, gain public confidence and increase customers' satisfaction. In addition, standards have undisputedly become the international language of commerce. The common acceptance of standards is fundamental to the success of robust, fair and free trade.



**DATO' SRI MUSTAPA
MOHAMED**

Minister of International
Trade and Industry

The current global economic scenario is challenging. To address these challenges, the Government has placed several platforms to deliberate strategies to accelerate the growth of the services sector, which has been identified as a major driver of the economy.

The Malaysia Services Development Council (MSDC) will continue to assume an active role in monitoring and evaluating the implementation of services related blueprints and masterplans to ensure a coherent and cohesive approach towards the development of the services sector.

National Export Council (NEC), another initiative by the Government to address issues related to the exports ecosystem, will work together with the private sector to propose high impact strategies to spur the growth of exports, including the export of services.

The National eCommerce Council (NeCC) was established in December 2015 under the auspices of MITI as part of our efforts to develop a high value, ambitious and lively e-commerce environment which is integrated within the global digital economy. The NeCC will oversee the implementation of the National eCommerce Strategic Roadmap launched by YAB Prime Minister of Malaysia on 13 October 2016.

OVERVIEW

The Competition, Standards and Liberalisation Strategic Reform Initiative (CSL SRI) aims to enhance Malaysia's attractiveness to global business, commerce and industry by enabling an environment that is conducive for business. Overall, CSL SRI achieved 103% of its KPIs in 2016.

The Malaysia Competition Commission (MyCC) marked its sixth year of operations and its fifth year of enforcing the Competition Act 2010 (CA 2010) in 2016. During the year, it achieved milestones in enforcement, advocacy, market review, capacity-building, and knowledge-sharing. As educational efforts are essential in communicating the importance of CA 2010 to stakeholders in both the private and public sectors, MyCC continued to conduct advocacy programmes targeting business chambers, consumers' associations, industry players, universities and government bodies.

MyCC also undertook constructive action in issuing two decisions against companies that had demonstrated anti-competitive practices with a potentially large impact on consumers. Additionally, as one of its mandated activities under the Competition Act 2010, MyCC conducted a study on the pharmaceutical sector. Market reviews such as these remain critical in identifying anti-competitive elements in specific markets.

Meanwhile, despite budget constraints, Standards Malaysia continued to champion adherence to standards and quality control nationwide. In 2016, Standards Malaysia organised two major awareness programmes involving the public in order to create demand for quality products. Jointly-organised seminars on relevant standards were also held to assist industries in complying with standards.

To date, Malaysia has liberalised 45 sub-services sectors. Since the liberalisation of the sub-sectors, the Malaysia Services Development Council (MSDC), which oversees the liberalisation process, has been improving the regulatory environment by reducing or eliminating cumbersome and unnecessary regulatory burdens that may impede domestic and foreign investment in Malaysia. The Ministry of International Trade and Industry (MITI) has also continuously been involved in developing the capability of domestic industries to be more competitive.

COMPETITION, STANDARDS AND LIBERALISATION

Forging a Path Towards Greater Competitiveness

Spearheaded by MyCC, the Special Committee on Competition was formed in 2011, comprising several sector regulators to discuss mutual issues on competition laws and policy and to ensure consistency in the application of the CA 2010 and other related laws. The Committee convened a meeting on 10 May 2016 to discuss various competition issues cutting across sector regulators.

On 10 October 2016, a forum on competition law in the pharmaceutical sector was held in Kuala Lumpur. The objective of the forum was to discuss on competition law issues in the pharmaceutical sector. The forum was attended by 85 participants from the public and private sectors globally, and included keynote speakers from MyCC, the Ministry of Health, the European Commission, Spain's National Authority for Markets and Competition, the Organisation for Economic Cooperation and Development and CUTS Centre

The Special Committee on Competition was formed to discuss mutual issues on competition laws and policy and to ensure consistency in the application of the CA 2010 and other related laws.

for Competition, Investment and Economic Regulation, India.

MyCC continued to focus on advocacy and education on the importance of the CA 2010 by engaging with stakeholders from both the public and private sectors.

A seminar on fighting bid-rigging and abuse of dominant position in public procurement was held on 26 September 2016 in Kuala Lumpur. The seminar forms part of MyCC's ongoing initiatives to create awareness among Government procurement officers about the role of MyCC and implementation of CA 2010. The seminar was attended by 160 participants from various Ministries and agencies throughout the country. The keynote speakers of the seminar included representatives from MyCC, the Ministry of Finance Malaysia, the National Audit Department and the Malaysia Anti-Corruption Commission.

The first Moot Court Competition on competition law was held on 17 October 2016 in Kuala Lumpur. The event was the first of its kind held by MyCC as part of its efforts to promote CA 2010 among university students, with the intention of creating a pool of competition experts in Malaysia. The Moot Court Competition attracted the participation of six teams from five universities; namely, Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi MARA (UiTM), Universiti Utara Malaysia (UUM) and International Islamic University Malaysia (IIUM). The Moot Court was won by the team Competition from UM.

Beyond advocacy and educational activities, MyCC also continues with its enforcement of anti-competitive practices, proactively undertaking market reviews of various economic sectors, as well as investigating allegations of anti-competitive conduct and behaviour and taking appropriate action where necessary.

During the year, it conducted a market review on the pharmaceutical sector in accordance with section 11 of CA 2010. The main objectives of this market review were to understand the market structure and supply chain of the pharmaceutical sector, identify any anti-competitive practice among



Photo credit: Malaysia Competition Commission

Students participating in the first Moot Court Competition held on 17 October 2016 in Kuala Lumpur.



Photo credit: Malaysia Competition Commission

Participants at MyCC's Forum on Competition Law in the Pharmaceutical Sector held on 10 October 2016 in Kuala Lumpur.

the industry players and promote competition in the sector. The market review is still ongoing and is expected to be completed by March 2017.

In terms of anti-competitive investigations, MyCC issued two main decisions pursuant to Section 40 of CA 2010:

- Decision against Containerchain (M) Sdn. Bhd. (Containerchain), together with four container depot operators, namely Ayza Industries Sdn Bhd/Ayza Logistics Sdn Bhd; ICS Depot Services Sdn Bhd; E.A.E. Depot & Freight Forwarding Sdn Bhd; and Prompt Dynamics Sdn Bhd for engaging in price-cartel activities. Through these activities, the container depot operators increased the depot gate charges imposed on their customers from RM5 to RM25 and fixed a rebate of RM5 to hauliers.

- Decision against My E.G. Services Berhad (MyEG) and My E.G. Commerce Sdn Bhd (MyEG Commerce), after an investigation based on numerous complaints received alleging that MyEG had abused its dominant position in the provision and management of online Foreign Workers Permit (PLKS) renewals. MyCC found that the companies had infringed section 10(2)(d)(iii) of CA 2010 by abusing their dominant position in harming competition in the downstream market in which MyEG Commerce is participating as an insurance agent for online PLKS renewal applications.

The details of the two decisions can be found on MyCC's official website at www.mycc.gov.my.

MyCC continued to focus on advocacy and education on the importance of the CA 2010 by engaging with stakeholders from both the public and private sectors.

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Standards Malaysia continued to champion adherence to standards and quality control nationwide, advocating the usage of national and international standards to enable SMEs to gain a competitive advantage.

Spearheading Usage of Standards

Standards Malaysia continued to champion adherence to standards and quality control nationwide, advocating the usage of national and international standards to enable SMEs to gain a competitive advantage, especially on the global stage and to enhance the awareness of the rakyat on the importance of standards and quality.

During the year, it conducted a study on the economic impact from the usage of standards for the electrical and electronic (E&E), food and beverages (F&B) and agriculture sectors. The results

of this study showed a strong correlation between standards and economic performance, indicating that a 1% increase in standards will increase GDP by 0.02% (for E&E), 0.26% (for F&B) and 0.06% (for Agriculture).

The study also showed that standards have contributed to GDP growth of 1.3% (for E&E), 4.6% (for F&B) and 1.5% (for Agriculture). The outcome of the study will guide Standards Malaysia on how best to promote the adoption of standards among businesses, especially SMEs; and to provide evidence-based policy advice to other Government agencies and regulators. This is aimed ultimately at improving the quality of products in line with customer needs to increase sales

ZAHID ISMAIL,

DIRECTOR, PRODUCTIVITY AND COMPETITIVENESS DEVELOPMENT, MALAYSIA PRODUCTIVITY CORPORATION

For the past five years, we have been working with the Government, through the Competition, Standards and Liberalisation SRI, to reduce unnecessary regulatory burdens within our business environment.

During the year, among the projects undertaken by the Malaysia Productivity Corporation in this area were in reducing unnecessary regulatory burdens (RURB) for oil and gas services equipment (OGSE) Maintenance, Repair and Overhaul (MRO) companies to lower their operating costs.

Many companies want to establish their business in Malaysia, especially from Singapore as the cost of doing business in Singapore has been increasing, and they want to set up their regional hub in Malaysia instead. This interest in establishing their hub in Malaysia is also due to the uniqueness of services that these companies can offer. However, some of the movement of goods to Malaysia as well as from Malaysia is burdensome due to the regulatory requirements, which exist on three levels of Government: Local, State and Federal.

Hence, we have been working with these companies to identify these barriers to their business with an aim to remove those barriers. The RURB exercise is also

vital to ensure Malaysia remains relevant in the O&G sector.

Following this project, we have found that O&G companies face constraints in terms of permits related to tariff codes. We are therefore working with the Royal Malaysian Customs Department to eliminate this constraint.

These efforts are vital to ensure we secure investments from these O&G companies, as they may choose to expand their business to other countries instead. Additionally, the nature of the MRO industry is that it is based on speed. Time is crucial. If we can speed up the process, we can ensure we do not lose out on potential investments.

Additionally, in terms of facilitating the ease of doing business for foreign companies, one of the elements is meeting Government requirements. If the Government cannot help foreign companies to improve their efficiency, they will go somewhere else. Through this initiative, we hope to better facilitate the entry of foreign companies into Malaysia, with the ultimate aim of driving economic growth for our country.



Standards programme launched by Deputy Minister of MOSTI, YB Datuk Wira Diah, on 28 August 2016 in Melaka.

and enhance the competitiveness of these businesses.

Despite many challenges, 2016 marked another significant achievement on standards adoption amongst the industries. More than 1,070 companies have been certified to various standards, an increase of 10% as compared to the previous year, reflecting that industries have recognised the significant impact of embracing standards. To further increase standards adoption, Standards Malaysia is also piloting projects to require standards compliance as a pre-requisite for its vendors to create demand for quality products and services through Government procurement.

Apart from engaging with businesses, Standards Malaysia also undertook public outreach programmes to raise awareness and demand for quality products among the public. These included the Standards Awareness Programme (Program Kesedaran Standard) in Malacca on 28 August 2016, which was attended by 1,000 members

of the public of different ages. Furthermore, in collaboration with several agencies such as the Malaysia External Trade Development Corporation (MATRADE), the Malaysian Investment Development Authority (MIDA), and the Halal Industry Development Corporation (HDC), the Ministry of Tourism and Culture (MOTAC), the Ministry of Local Government and Housing, Sabah (MLGH Sabah) and all Standards Development Agencies (SDAs); 76 jointly-organised seminars on relevant standards were held throughout Malaysia in 2016 to assist industries in complying with standards. The seminars were attended by 7,920 participants.

Adding Value to Agriculture Products

Overseen by the Ministry of Agriculture and Agro-based Industry (MOA), the Malaysian version of the Good Agricultural Practice standard,

myGAP, has shown a CAGR of 40% and 45% in the number of certifications for fruit and vegetable farms and aquaculture, respectively, since its inception in 2011. This can be attributed to increased awareness, market access and funding incentives to farmers to upgrade facilities for myGAP certification.

The myGAP has been harmonised with ASEAN GAP and is now recognised in various markets, including Singapore which provides green lane access for myGAP produce. The demand for certification has also increased, especially for swiftlet farms due to requirements from China for all imports of edible bird's nests from Malaysia to be sourced from myGAP-certified farms. However, demand for certified produce remains low in the domestic market, requiring collaboration with supermarkets and grocers to demand for certified produce, step up enforcement and raise awareness among consumers.

Currently, MOA focuses on farms that volunteer for myGAP auditing as myGAP certification is currently voluntary, with the certification of farms left to the discretion of farmers. Fruit and vegetable farms that are certified by the Department of Agriculture (DOA) comprise small farms which account for only 3.4%, or 21,041 Ha, of the total farm land in Malaysia. Hence, there is a need for the larger farms to apply for myGAP certification.

In an effort to further enhance the standards of agricultural produce, the MOA has also allocated funds to assist farmers in upgrading their storage, sewage, collection, and other facilities. Over 2,000 farmers benefited from this assistance, impacting 1,996 farms under the Department of Agriculture (DOA), 11 farms under the Department of Veterinary Services (DVS) and 26 farms overseen by the Department of Fisheries (DOF). In addition

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myGAP-certified Asian seabass caged farm owner, Mohd Zain bin Daud, from Kelantan.

In an effort to further enhance the standards of agricultural produce, the MOA has also allocated funds to assist farmers in upgrading their storage, sewage, collection, and other facilities. Over 2,000 farmers benefited from this assistance.

to funding, the departments supported the MOA's efforts through engagement programmes including 24 capacity-building programmes by the DOA, awareness and promotion programmes by the DOF in Peninsular Malaysia's northern, southern, central and eastern zones as well as in Sabah and Sarawak and capacity-building and awareness initiatives held by the DVS in 13 states.

A fire in Look Buton, Semporna, Sabah destroyed a drying platform which impacted 25 farms that were earmarked for new certification. However, DOF has since repaired the platform and this will allow

certification of farms to be closed by early December 2016. Additionally, DOF has adopted a cluster approach for certification and stepped up efforts to identify and certify farms in other states.

Other challenges seen during the year include increasing farms' compliance with myOrganic. In 2016, only 15 new farms were certified, largely due to the stringent requirements. Many farms find it difficult to fulfil the requirements under myOrganic which includes a two-year conversion period before the farms can be considered for certification. The DOA will provide farms that are identified for

myOrganic with capacity-building and guidance on compliance to the standard.

Government Drives Adoption of Environmental Standards

Malaysia has embarked on sustainable development strategies which will enable economic growth without causing large scale damage to the environment, as outlined by the NTP and under the 11th Malaysia Plan. The country has also indicated its clear intention to be a front runner in the green economy. In line with this, the Ministry of Energy, Green Technology and Water (KeTTHA) has committed to support the transformation of industry towards environmentally-friendly ventures through green technology. Its major initiatives include GreenTech Malaysia's Green Procurement Flagship that focuses on catalysing sustainable consumption and production of green technology products and services among the public and private sectors. The Flagship addresses public procurement of green technology through the Government Green Procurement (GGP) policy and initiatives and implementation of the MyHIJAU Programme, including the MyHIJAU Mark recognition for certified green/eco-labelled products and services, MyHIJAU Directory and MyHIJAU SME & Entrepreneur Development Programme.

Under the development budget for 2016-2017, RM4.88 million has been allocated to create awareness and develop capacity-building among the industry and SMEs

through the development of a green technology industry programme and the implementation of GGP in Malaysia. The year 2016 saw 12 Ministries selected to implement GGP, while all Ministries are expected to implement GGP by 2017.

The GGP initiative is targeted at raising the public's quality of life by promoting sustainable consumption, while creating a new avenue for growth for Malaysian businesses. It is also seen to add value to local products and services, enhancing the ability of businesses to penetrate global markets that impose strict environmental standards.

With GGP, Malaysia joins the ranks of at least 43 other countries that now have public institutions adopting Sustainable Public Procurement/Government Public Procurement/GGP policies or policy measures.

The eco-labelling initiative is complementary to GGP, helping GGP implementers decide on which products are 'greener'. Eco-labels identify goods and services that are more environmentally-friendly throughout their life cycle from start to finish. At present, there are several eco-labels that have been introduced around the globe. For example, the European Union has the EU Ecolabel, Hong Kong has the Green Label, and Australia has The Good Environmental Choice Australia. Malaysia's eco-label falls under the MyHIJAU Programme, which aims to encourage the application of green technology and the adoption of more environmentally-friendly practices among businesses.

The following certification bodies have been recognised under the MyHIJAU Mark in Malaysia to provide environmentally-friendly certification schemes:

- SIRIM Eco Labelling Scheme (Type 1) by SIRIM QAS International Sdn

Bhd to certify the environmental attributes of green products and services;

- Energy-Efficiency Rating & Labelling Scheme by the Energy Commission for energy-efficiency labelling of electrical appliances; and
- Water-Efficient Products Labelling Scheme by the National Water Services Commission or SPAN.

As is the case in the rest of the world, the green initiative has faced difficulty in gaining support from industry to produce

environmentally-friendly goods. Hence, the expansion of GGP to all Ministries in 2017 through to 2020 is targeted at creating greater demand and expanding product groups as well as increasing the involvement of more implementing agencies. The introduction of the Green Income Tax Allowance (GITA) and Green Income Tax Exemption (GITE) in the 2014 budget should further encourage demand for the MyHIJAU Mark-certified products and services. GITA and GITE were announced by the YAB Prime Minister during the 2014 Budget Speech on 25 October 2013.

GITA is granted to companies on a project basis as an incentive

Malaysia has embarked on sustainable development strategies which will enable economic growth without causing large scale damage to the environment, as outlined by the NTP and under the 11th Malaysia Plan.



MYOrganic-certified oyster mushroom farm in Semenyih, Selangor.

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for investments in green technology for capital expenditure incurred for business purposes and where such investment is expected to derive green results. This is targeted to encourage companies to acquire assets (products, equipment and systems) which have been verified as green technology assets. GITE is given to qualifying companies providing green technology services and systems which have been verified by Malaysian Green Technology Corporation (GreenTech Malaysia). Other initiatives include engaging with identified agencies that provide Environmental Certification Schemes under the MyHIJAU Programme and the implementation and enforcement of the Minimum Energy Performance Standards (MEPS).

In 2016, 1,958 local products have been recognised as green products under the MyHIJAU Programme, including air conditioners, televisions, refrigerators and consumer products such as biodegradable detergent, representing an additional 519 products from 2015. As of 2016, 13,000 products have been recognised under the MyHIJAU Programme, against the target of

5,000 set in 2011.

KeTTHA, through GreenTech Malaysia, developed the MyHIJAU SME and Entrepreneurship programme to facilitate and encourage more producers, manufacturers, suppliers and service providers towards providing greener products and services. As of October 2016, 145 companies and businesses have participated in the business clinic and advisory session activities and 92 companies and businesses have been recognised under the Green Transformation initiatives.

Spearheading Food Safety

In 2012, the Ministry of Health (MOH) has introduced *Makanan Selamat Tanggungjawab Industri* (MeSTI), a food safety assurance certification programme which aims to ensure food manufacturing premises, especially those owned by SMEs, implement and maintain the Food Safety Assurance Programme (FSAP), which includes food hygiene and process control. MeSTI certification is currently performed

on a voluntary basis and is non-chargeable. Since 2014, MOH has collaborated with the Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNKK) for Kedai Rakyat 1Malaysia (KR1M); the Ministry of Plantation Industries and Commodities (MPIC) for oil repackers and refineries and the Prisons Department to increase the number of premises certified with MeSTI.

As a result, 98% of KR1M suppliers' premises, 71% of oil repackers and oil refineries that are registered with MPIC as well as 14 out of 18 the food processing premises in prisons across Malaysia are certified to a FSAP. MOH has also intensified its joint awareness campaigns with other agencies such as the Fisheries Development Authority of Malaysia (LKIM), Department of Fisheries (DOF), Department of Agriculture (DOA) and NGOs on the importance of FSAP to ensure food safety and market access.

MOH has also certified 40% of food manufacturing premises that are registered under the Food Safety Information System of Malaysia (FOSIM Domestic), while enhancing enforcement of the Food Act 1983 and its regulations to increase the number of food manufacturing premises implementing FSAP such as MeSTI. The number of food manufacturing premises certified with MeSTI certification have increased every year, totalling 3,133 since 2012, while certification for food product establishments has shown a growth of 40% during the same period.

In order to increase the number of food manufacturing premises implementing FSAP, MOH also collaborated with five major hypermarkets in Malaysia such as Aeon Co, Aeon Big, Giant, Mydin and Tesco on the Sustainable Supplier Development Programme (SSDP),

MOH has collaborated with the Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNKK) for Kedai Rakyat 1Malaysia (KR1M); the Ministry of Plantation Industries and Commodities (MPIC) for oil repackers and refineries and the Prisons Department to increase the number of premises certified with MeSTI.

which saw the participation of 11 food suppliers and 11 students from University Putra Malaysia (UPM). The initiative aims to improve food safety along the supply chain through public-private partnerships, strengthened market access locally and internationally and capacity-building.

As a result of this initiative, all of the SMEs moved towards compliance with FSAPs such as MeSTI, Good Manufacturing Practices (GMP) or Hazard Analysis Critical Control Points (HACCP). Meanwhile, the students received training based on SSDP Modules and were guided to develop FSAPs in food supplier premises under a six-month internship programme. They also received mentoring from the retailers, with 67% of the students offered employment upon their completion of the programme.

Besides SSDP, MOH also collaborated with UPM under the Smart Partnership Programme, which provided internship students with training on MeSTI modules by MOH. The students also assisted food manufacturing premises to develop FSAP for MeSTI certification. Fourteen food manufacturing premises were involved in the six-month programme, which saw 42% of premises certified with MeSTI. The remaining premises are in the process of corrective action and being upgraded.

MeSTI is now recognised by Singapore and green-lane access is given for MeSTI certified products i.e. Ready To Eat food (RTE) such as nasi lemak, sandwiches and kuih bulan. In addition, MOH has required exporters to be part of an FSAP such as MeSTI before issuance of Health Certificates and Free Sales Certificates.

In order to increase the number of food premises participating in this scheme, there is a need to collaborate

with local authorities to require MeSTI certification as a condition for the issuance of business licenses for food manufacturing premises. MeSTI certification should also be made a pre-requisite in the supply of food and beverages under Government contracts.

Despite the success achieved by MeSTI, there remain some challenges in sustaining MeSTI certified premises due to MOH's limited resources in terms of both budget and manpower to carry out verification activities. Furthermore, verification of food manufacturing premises for MeSTI compliance is not only confined to new applicants, but also for renewals, and regular monitoring for compliance. Since the introduction of MeSTI in 2012, only 43.2% of

MeSTI is now recognised by Singapore and green-lane access is given for MeSTI certified products i.e. ready to eat food (RTE) such as *nasi lemak*, sandwiches and *kuih bulan*.



myGAP-certified pineapple farm at Taman Kekal Pengeluaran Malaysia in Lepau, Johor.

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food manufacturing premises have renewed their certifications.

Keeping Malaysia Open for Business

Malaysia has autonomously liberalised 45 sub-services sectors. Of these, 27 sub-sectors were announced in 2009 while another 18 sub-sectors were announced in 2012. The amendments to relevant Acts for the liberalisation of 15 sub-sectors were completed in 2013, with the remaining three sub-sectors, architectural services (Architect Act 1967), engineering services (Engineering Act 1967) and quantity surveying services (Quantity Surveyor Act 1967) approved by Parliament in December 2014.

To deliver the full benefits of liberalisation, the Malaysia Productivity Corporation (MPC), an agency under MITI, has been tasked to evaluate domestic regulations and ensure the regulations support the opening of the market and the creation of a conducive business environment. Since 2014, MPC has reviewed and recommended the removal of various regulations for the education, healthcare, professional services, construction industries and ICT sectors.

MITI has also been continuously involved in developing the competitiveness of domestic industries. On 10 June 2016, the Minister of International Trade and Industry launched the National E-Commerce Strategic Roadmap, which has as two of its six thrusts the lifting of non-tariff barriers and the promotion of the national brand to boost cross-border e-commerce. The National ICT Association of Malaysia (PIKOM) subsequently held a Cross-Border E-Commerce Workshop on September 2016,

which attracted about 50 e-market players such as e-Lelong, Lazada, mudah.my and 11Street. Of these, 20 were local e-market players and logistics providers and 30 were from ASEAN, China, Hong Kong, Korea, Sri Lanka and Bangladesh. The workshop aimed to help merchants sell regionally, as well as assist both local and foreign e-marketplace players to coordinate assistance to their respective merchants to improve regional sales.

Meanwhile, Outsourcing Malaysia (OM) gathered buyers from Singapore and sellers from Malaysia in Singapore for a Structured B2B Networking Session in December 2016. The objectives of this session were to create a platform for local players to attain a wider market outreach and grow their customer database, build greater awareness on their brand and services and unlock the opportunities in a new market, and assess in real-time its return on investment (ROI). The networking session attracted 20 qualified buyer companies from Singapore and 15-20 OM member companies.

OM also held the Smart Sourcing Summit 2016, a business-to-business (B2B) session. This Summit aimed to grow and nurture domestic outsourcing players in line with the Business Services NKEA by facilitating their growth through various programmes and initiatives, one of which is market access. During the Summit, OM organised several structured B2B meetings for local industry players to meet with prospective regional and international clients.

The direct beneficiaries of these two initiatives were the Malaysian service providers under OM's Membership umbrella, which were provided a platform to reach a wider market to grow their customer base and bring greater awareness to their brand services.

Malaysia Productivity Corporation has been tasked to evaluate domestic regulations and ensure the regulations support the opening of the market and the creation of a conducive business environment.



MOVING FORWARD

MyCC will remain focused on raising awareness with stakeholders in both the private and public sectors, as well as educating them about the implications of bid rigging and enforcing CA 2010, especially in cases involving enterprises with large impact on consumers. MyCC will also need to build additional capacity and pursue knowledge and expertise in competition law through networking efforts, especially with the Ministry of Finance, the National Audit Department and the Malaysian Anti-Corruption Commission.

In terms of standards promotion and compliance, Standards Malaysia will work with relevant Ministries and Agencies to ensure that certification and standards compliance are made mandatory for companies to be eligible for schemes and incentives from Ministry/agencies. The GPP will also be expanded to more products to increase demand for standards compliance. Standards Malaysia will continuously ensure that the number of testing facilities (for identified industries e.g. automotive, E&E, construction and consumer goods) and Certifying Bodies will be increased.

Moving forward, KeTTHA will continue its efforts to integrate sustainability and socioeconomic

growth to meet Malaysia's goal of becoming a developed nation by 2020 as well as achieve Malaysia's commitment of reducing its carbon intensity by up to 45% from 2005 levels by 2030 in line with the country's pledge at the 21st Conference of the Parties (COP 21).

Under the MeSTI programme, MOH and myGAP, MoA will continue to increase the awareness in the domestic market for certified produce. Efforts will be stepped up to ensure all suppliers to hypermarkets have their products certified.

In terms of sector liberalisation, the Malaysia Productivity Corporation (MPC) will be undertaking a case study to identify the best solution to reduce unnecessary regulatory burdens on Oil and Gas Services Equipment (OGSE) Maintenance, Repair and Overhaul (MRO) companies to lower their operating cost. Due to prevailing economic conditions, large companies such as Schlumberger, Kencana Petroleum and Baker Hughes are experiencing challenges from the MRO price hike, which then affects their SME contractors. The results of the case study will be used by MPC to replicate the model for MRO in aircraft and automotive, in line with the aspiration to establish MRO hubs in Malaysia.

NARROWING DISPARITY



CHARTING THE COURSE FOR INCLUSIVENESS



**DATUK SERI ABDUL
RAHMAN DAHLAN**

Minister in The Prime Minister's
Department

The success of a nation is only sustainable when all its people share equally in the prosperity of that nation: hence, the Narrowing Disparity SRI was conceived to narrow the income gap, especially between the Bumiputera and other ethnic groups in the nation. This SRI operates with the understanding that the empowerment of the Bumiputera community is an essential part of the national agenda for inclusive prosperity and success. Therefore, many agencies have come forth to provide facilities that cover various aspects of support for the Bumiputera, such as financial aid, capacity and capability development, infrastructure, social development and many other aspects.

We are still in the journey to narrow the economic gap between Bumiputera and non-Bumiputera, and a great deal of investments have been put towards this effort. Bumiputera economic empowerment efforts should not only be left to Government agencies, but also by the community as a whole. Thus, I hope that the beneficiaries of the programmes carried out by the Government that have achieved success in their respective fields will continue to play a role in helping the Bumiputera by creating job and business opportunities, developing supply chains, catalysing talent development, training and consulting, providing financial aid through the form of sponsorships or education scholarships in addition to sharing knowledge and experience to those who are just starting their transformational journey.

The Bumiputera Empowerment Agenda is one of the Government's main focus areas and the Government remains committed to shouldering this responsibility. However, the greater responsibility placed on Government agencies that support this initiative is to ensure that every programme carried out in line with this effort will create Bumiputera entrepreneurs that will continue to be competitive and successful in local and international markets. Further, I truly hope that those who have succeeded will give back for the wellbeing of the nation.



YAB Prime Minister Dato' Sri Najib Razak chairs a Bumiputera Economic Council meeting

OVERVIEW

The Narrowing Disparity SRI (ND SRI) was formed to improve Bumiputera representation in market equity, employment, high value-added occupations and management positions. It aims to help Bumiputera companies develop and enhance capacity, and improve competitiveness, besides reducing reliance on Government contracts.

To realise the objective of this SRI, policy measures were proposed to construct Bumiputera transformation programmes in order for the Bumiputera economy to be market-friendly and transparent. Five areas for game-changing development of the Bumiputera economy were brought into focus – education, employment, income levels, wealth creation and the overall performance of Bumiputera companies.

The initiatives under this SRI is spearheaded by Unit Peneraju Agenda Bumiputera (TERAJU), a unit established in 2011 specifically to lead, coordinate and drive Bumiputera economic participation in parallel with the National Transformation Programme. TERAJU is committed to ensure that Bumiputera entrepreneurs remain relevant and competitive, as emphasised by the YAB Prime Minister.

TERAJU is the backbone of the Bumiputera Economic Empowerment Agenda and coordinates all efforts under this agenda, which involves 25 Bumiputera Economic Empowerment units in all government agencies. Provided the support from the Bumiputera Economic Council, 94 Bumiputera-related KPIs are

able to be achieved, thus further strengthening the core of Bumiputera entrepreneurship and business activities in the country.

As of 2016, the efforts by TERAJU have succeeded in creating jobs, providing financial aid, developing human capital, attracting private investment and creating value worth of RM94.31 billion. These achievements are a result of the collaboration between various Ministries, the private sector, Government agencies and the Economic Corridor Authorities.

NARROWING DISPARITY

ENTREPRENEUR'S OBSESSION FOR SUCCESS

WATERBAY SDN BHD



Mohd Azhan Ahmad
Pulau Pinang
41

His passion for entrepreneurship drove Mohd Azhan Ahmad from Pulau Pinang to venture into business at the young age of 25, running a variety of businesses before starting Waterbay Sdn. Bhd., a dentistry supplier.

After 16 years in the business, he can now savour his success with his products having gained the trust of companies including the Ministry of Health Malaysia (Dental Division).

Yet he continues to awe his employees with his obsession for the business. "My obsession began when I was working with a private company that markets various dental products including mobile treatment chairs that are widely used in clinics and rural schools. I had the idea to create an automatic mobile treatment chair or 'Stuhl' after noticing two persons are needed to assemble that mobile chair and it took a long time to build," he says.

"I had fully devoted my life and energy into creating 'Stuhl' until I lost focus on my core business; I even used the company's profits for the chair creation. Fortunately I became aware of it and instead, I strived to increase the company's sales by setting aside a budget for research and development (R&D)," he continues.

Winning the SUPERB grant enabled him to increase his R&D team and expand the company's engineering sector by increasing the employment of engineers and designers who excel in their relative field.

"With the help of the SUPERB grant, we successfully created 'Stuhl' 2.0, the first automatic mobile treatment chair in Malaysia. We created 'Stuhl' with a more ergonomic design, compact, high quality and user friendly, whilst giving us the confidence to try and market our products globally," says Mohd Azhan.

"TERAJU has not only helped us in terms of funding but also provided us guidance and support in terms of skills and opportunity to expand our network with other agencies."

"TERAJU has not only helped us in terms of funding but also provided us guidance and support in terms of skills and opportunity to expand our network with other agencies.

"The opportunity to win the SUPERB grant was not easy, because I had to try four times to convince TERAJU panels about my obsession. Alhamdulillah, without giving up, I made it to the finals and won the grant at the fifth attempt," he says.

Mohd Azhan feels proud as his obsession has led to the successful creation of the automatic mobile treatment chair that enables blood donation programmes and outdoor dental treatment clinics or hospitals to be done comfortably.

"We aim to be innovators that cater to high-tech medical or dentistry products not only in Malaysia but also internationally," he adds.

According to Mohd Azhan, to be a successful entrepreneur, one has to have compassion, determination, persistence and hard work to confront the challenges of the business world.

LEADING YOUTHS TO BRIGHTER FUTURES



Auni Wadhiah Azahar
Kuala Terengganu
15

Auni Wadhiah Azahar, 15 years old, is from Kuala Terengganu, Terengganu. Her parents are divorced, and Auni currently lives with her mother, who works as a dressmaker, with a monthly salary of RM700. She is the youngest of three siblings, all of which are still studying. Despite familial and financial challenges, Auni had obtained straight A's in her UPSR examinations. Shortly after, Auni became a Yayasan Peneraju Pendidikan Bumiputera (Yayasan Peneraju) scholar under the Peneraju Tunas Geliga programme, and continued her secondary education in SMKA Dato' Haji Abbas in Kuala Terengganu, Terengganu. The conducive studying environment, as well as nurturing, development and financial support from Yayasan Peneraju, had enabled Auni to strengthen her academic performance. In 2016, Auni obtained 11 A's for PT3 examinations. She is currently in Form Four.



Winnie Kariza Bakri
Tawau, Sabah
25

Winnie Kariza Bakri, 25 years old, is from Tawau, Sabah. She is the eldest of five siblings. Her father is a retiree with an income of RM1,000 a month, while her mother is a full-time housewife. Although her initial ambition was to become a doctor, her average SPM results had led her towards the STPM pathway to obtain placement in public tertiary education. From there, Winnie began slowly realising her potential, successfully balancing her studies and her curriculum activities. With an STPM CGPA result of 4.0, Winnie was accepted as a Peneraju Tunas Potensi scholar, and continued her studies in Universiti Kebangsaan Malaysia (UKM) in 2012. Through Yayasan Peneraju's continuous development, as well as financial support, Winnie continued to excel in her studies. In 2016, she graduated with a first class honours in Bachelor of Social Science (Hons) Geography, with a CGPA of 3.77. In February 2017, she completed her Masters post-graduate degree in Environmental Management. Winnie is now working as a Grade 41 officer with the Ministry of Women, Family and Community Development.



Fikri Izzan Kip
Kuching, Sarawak
19

Fikri Izzan Kip, 19 years old, is from Kuching, Sarawak. He is the fourth of five siblings. His father is a research assistant in MARDI while his mother is a housewife. As a young boy, Fikri harboured aspirations of becoming an aerospace engineer. Fikri was first inducted as a Yayasan Peneraju scholar under the Peneraju Juruteknik Pesawat Berlesen programme in June 2016. Due to his determination, consistent performance and passion, Fikri had been promoted into the Peneraju Jurutera Pesawat Berlesen programme in January 2017. Now Fikri is more determined than ever to achieve his dream of becoming a licensed aircraft engineer.

NARROWING DISPARITY

399 Bumiputera companies have benefited from the Facilitation Fund by TERAJU

Providing a Springboard for Growth

In the endeavour to help the Bumiputera in capacity building and global expansion, TERAJU has introduced the Dana Mudahcara (Facilitation Fund), a facility established to be a tipping point in the initiative to attract private investments. One of the main objectives of the Facilitation Fund is to narrow the gap in private investments for Bumiputeras, besides functioning as an incentive by the government to include Bumiputera companies in projects and programmes in order to increase their investments in capacity development projects, especially within high impact NKEA sectors.

Since its launch in August 2011, TERAJU's drive in enhancing Bumiputera private investment reflects in the funds allocated amounting to RM2 billion, which has seen the completion of 447 projects with RM12.8 billion total investments. Currently 399 Bumiputera companies have benefited from the Facilitation Fund by TERAJU.

Since its inception, TERAJU has provided various business opportunities for Bumiputera companies with the introduction of a wide range of incentives for all types of companies, from start-ups to SMEs and potential listing in Bursa Malaysia.

One specific initiative to increase the participation of Bumiputera companies in mega projects involving the Government and private sectors and GLCs is the 'Carve Out and



Datuk Seri Abdul Rahman Dahlan with Yayasan Peneraju Scholars



INSKEN Participants.

Compete' programme. This initiative is parallel with TERAJU's role to aid the expansion of Bumiputera companies, based on six principles laid out under the Bumiputera Economic Transformation Programme; market-friendly, needs-based, merits-based, transparent, pro-development and sustainable.

Among the projects included in this programme are MRT Line 1 and Line 2 by MRT Corp, Menara Warisan Merdeka by PNB, Asia Aerospace City by MARA, and the Pan Borneo Sarawak Highway by Lebuhraya Borneo Utara Sdn Bhd. The total value of these projects amount to an impressive RM45.54 billion.

TERAJU has introduced various schemes to financially support Bumiputera companies, among them are the Teras Fund, Bumiputera SME Equity Financing Programme, Bumiputera Technology Fund, High Performing and Enhancement Cooperatives Programme, Facilitation

Financing Programme to Leapfrog Bumiputera Businesses in Retail and Distributive Trade, Bumiputera Entrepreneurs Startup Scheme (SUPERB), Bumiputera Export Business Programme, Tunas Usahawan Belia Bumiputera Programme, Bumiputera Entrepreneur Development Fund (Sabah, Sarawak, ECER, IRDA, NCIA), Dana Pembangunan Usahawan Bersama NGO and the National Institute of Entrepreneurship (INSKEN).

The Bumiputera Entrepreneurs Startup Scheme (SUPERB) has shown outstanding results and has helped develop many new successful entrepreneurs. Since the introduction of the scheme, a total of 101 new, creative and innovative entrepreneurs have received start-up grants of up to RM500,000. Funds amounting to RM100 million has been utilised in the effort to support these new entrepreneurs in strategic sectors that have great future potential.

Unleashing Bumiputera Talent

In line with one of the thrusts of the 11th Malaysia Plan to increase the number of high skilled professionals among Bumiputera in order to raise their employability and income-earning potential, various platforms have been made available for Bumiputera to enhance their skills and capabilities.

Yayasan Peneraju Pendidikan Bumiputera (YPPB) was established to reinforce capacity-building among Bumiputera wholly and sustainably. Through YPPB, short-term and long-term intervention programmes are developed to realise YPPB's aspiration in its drive to improve the quality, quantity and effectiveness of Bumiputera talents.

NARROWING DISPARITY



SUPERB Participants

A total of 101 new, creative and innovative entrepreneurs have received start-up grants of up to RM500,000.

This is in line with the Government's effort to develop Malaysia into a highly-skilled nation through education, and professional and vocational certification.

Programmes offered under YPPB include Peneraju Tunas, Peneraju Skil, Peneraju Profesional dan Skim Latihan Pendidikan 1Malaysia (SPP1M). As of September 2016, a total of 10,325 individuals have been awarded sponsorships by YPPB. Under Peneraju Tunas, 2,356 primary and secondary school students from low-income families and those that live in challenging environments have received financial aid from TERAJU. Under Peneraju Skil, 5,965 individuals have been provided upskilling training up to industry and international certification levels. The remaining 2,004 scholarship-holders under YPPB comprise of individuals that have been funded to obtain professional certification in the fields of accounting and finance.

Following the rapid expansion of the Bumiputera economy and the existence of a large number of new Bumiputera entrepreneurs, the management of programmes and activities in relation to the development and training of entrepreneurs has to be done systematically and efficiently. Thus, the National Institute of Entrepreneurship (INSKEN) was established to regulate the management of Bumiputera entrepreneur development and to date, a total of RM15 million has been spent for programmes under the purview of INSKEN.

The main function of INSKEN is to assess the effectiveness of policies and carry out initiatives to strengthen the efforts of Bumiputera entrepreneurs through collaborations with Government agencies and institutions as well as relevant local and international organisations. INSKEN also aids in capacity development planning and execution among Bumiputera entrepreneurs to ensure that all initiatives that are carried out are of a high standard of quality, effective and successful in implementation.



MOVING FORWARD ►

In 2017, TERAJU will launch the Bumiputera Economic Transformation Roadmap 2.0, with a comprehensive review of the transformation work over the past five years, and a clear way forward for the next phase of the Bumiputera economic transformation effort. With close partnership and support from all Ministries and Agencies, TERAJU will continue to drive its mandate to promote greater socio-economic inclusiveness, in line with the aspiration of the NTP.

SRI: PUBLIC FINANCE REFORM



**DATUK SERI JOHARI BIN
ABDUL GHANI**

Minister of Finance II

The Public Finance Reform Strategic Reform Initiative (SRI) was designed in early 2011 to implement public finance-related policies recommended by the National Economic Advisory Council (NEAC) in the New Economic Model (NEM). The main objective was to strengthen Malaysia's fiscal position that had been weakened following the 1998 Asian Financial Crisis.

Over the period of the last seven years, the Government has gradually reduced its fiscal deficit as a percentage of GDP from 6.7% in 2009 to 3.1% in 2016. Based on this trajectory, the Government remains on firm footing to achieve its target of a near balanced budget in 2020.

A number of initiatives have been implemented to achieve this, including strengthening tax administration and compliance by both the tax agencies of the Ministry of Finance, namely the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD). With IRBM focusing on direct tax revenue and RMCD on indirect tax, these agencies have never failed to produce desired results in improving tax administration and compliance.

On an annual average, IRBM managed to collect RM2 billion and RMCD more than RM150 million through implementation of initiatives these agencies designed during the Public Finance Reform SRI lab. These figures are additional to their usual collection target.

Also as part of initiatives under this SRI, and our effort to ensure long-term sustainability and stability of Malaysia's economy, the Government made the difficult decision to introduce the Goods and Services Tax (GST), a broad-based tax which replaced the two other consumption taxes, the Sales Tax and the Service Tax (SST). The GST was introduced in 2015 following long-drawn-out discussions among policy makers since the mid-1980s.

While the GST is implemented on a broader range of goods and services compared to the SST, at a rate of 6%, it was introduced at a lower quantum than that of the Sales Tax (10%) and Service Tax (6%). It also remains the lowest rate among the eight ASEAN countries which has implemented the GST.

In addition to strengthening our fiscal condition, the GST has allowed us to address loopholes in the

**BUILDING
RESILIENCE AND
SUSTAINABILITY
THROUGH FISCAL
REFORM**

Sales Tax and Service Tax as well as introduce a safety net for the public, which did not exist in the previous tax regime, through a list of essential goods and services which are exempted from GST. These include healthcare, education and child care. Furthermore, certain goods and services such as basic household essentials, while not GST-exempt, are subject to a 0% rate of GST. In effect, consumers are not charged GST on these zero-rated goods and services.

The improvements in tax administration and compliance and the introduction of the GST have allowed us to cushion the effect of low oil prices which have been affecting the global economy and impacting the Government's revenue collection. At the same time, the initiatives enabled the Government to reduce our reliance on oil-based revenue from 41.3% of revenue in 2009 to an estimated 14.6% in 2016. This indicates a more streamlined revenue collection system with a set of more efficient taxes as well as more diversified and broader revenue base.

On the expenditure side, the Government remains committed to enhance spending efficiency and effectiveness through optimisation and reprioritisation measures. In this regard, Government has undertaken subsidy rationalisation measures such as managed float fuel pricing mechanism as well as removal of sugar and flour subsidies. One direct result of these measures has been the Government's ability to introduce targeted, direct financial aid through programmes such as BRIM, which channels assistance to those truly in need such as the vulnerable and low-income groups.

Another policy initiative proposed through the NEM was the strengthening of expenditure control. The Government is



Essential goods and services are exempted from GST as a safety net measure.

The initiatives enabled the Government to reduce our reliance on oil-based revenue from 41.3% of revenue in 2009 to an estimated 14.6% in 2016.

addressing this through the implementation of Outcome-based Budgeting (OBB) which replaces the Modified Budgeting System. The new system allows us to optimise the outcome of expenditure and is in line with the Government's efforts to rationalise fiscal policy initiatives through better expenditure management, especially in ensuring better results and value for money through targeted programme implementation and minimum redundancy of programmes.









Moving forward, the SRI for fiscal reform will come entirely under the purview of the Ministry of Finance, in line with the transition of NTP initiatives from PEMANDU to the civil service. With the achievements of this SRI thus far and a clear plan moving forward, which have enabled the Government and the economy to withstand global economic fluctuations, we are confident that the country remains on the right track to achieve high-income status as envisaged by the NEAC in the NEM.

EXPENDITURE 2016

EXPENDITURE
2016

In the interests of transparency and accountability, the following is the summary of expenditure for NKRA and SRI. Meanwhile, the expenditure is not reported for the Economic Transformation Programme (ETP) as the ETP is private-sector driven and contains market sensitive data.









NKRA AND SRI 2016 OE* SPENDING

NATIONAL TRANSFORMATION PROGRAMME (NTP)						
NKRA	ACHIEVEMENT (%)		TOTAL 2016 OE ALLOCATION (RM)	TOTAL SPENT (RM)	% SPENT	
Fighting Corruption	79		942,740	658,028	70	
Assuring Quality Education	90		18,000,000	17,987,751	100	
Raising Living Standards of Low-Income Households	122		68,588,500	57,469,350	84	
Total			87,531,240	76,115,129		
SRI	ACHIEVEMENT (%)		TOTAL 2016 OE ALLOCATION (RM)	TOTAL SPENT (RM)	% SPENT	
Competition, Standards and Liberalisation	103		1,000,000	717,379	70	
Total			1,000,000	717,379		

*OE refers to Operating Expenditure

Note: No 2016 OE allocation for NKRA Addressing lost the Cost of Living, NKRA Improving Rural Development, NKRA Reducing Crime and NKRA Improving Urban Public Transportation

NKRA AND SRI 2016 DE* SPENDING

NATIONAL TRANSFORMATION PROGRAMME (NTP)						
NKRA	ACHIEVEMENT (%)		TOTAL 2016 DE ALLOCATION (RM)	TOTAL SPENT (RM)	% SPENT	
Reducing Crime	118		45,000,000	44,350,000	99	
Improving Urban Public Transportation	84		60,422,600	42,384,863	70	
Improving Rural Development	114		2,552,460,300	2,378,930,886	93	
Total			2,657,882,900	2,465,665,749		
SRI	ACHIEVEMENT (%)		TOTAL 2016 DE ALLOCATION (RM)	TOTAL SPENT (RM)	% SPENT	
Public Finance Reform	56		10,514,370	10,514,370	100	
Total			10,514,370	10,514,370		

*DE refers to Development Expenditure

Note: No 2016 DE allocation for NKRA Addressing the Cost of Living, NKRA Fighting Corruption, NKRA Raising Living Standards of Low-Income Households and Assuring Quality Education

AGREED UPON PROCEDURES BY PwC

A core tenet of the National Transformation Programme (NTP) has been transparency and accountability. In this Annual Report, the 2016 key performance indicators for each National Key Result Area (NKRA), National Key Economic Area (NKEA) and Strategic Reform Initiatives (SRI) are published in full, with achievements versus targets listed*. PEMANDU endeavored to ensure the scoring system is transparent and stringent. Extensive rigour has been put into confirming the collection of data, tabulations of statistics, and results are accurate. External validation is also key to effectively evaluate the efficacy of the NTP. To this end, PEMANDU engaged PricewaterhouseCoopers Malaysia (PwC), an independent professional services firm, to conduct a series of Agreed-Upon-Procedures – specific tests and procedures to

review reported results for the KPIs and projects announced. The AUP is applied to a sample taken from each KPI. It is then checked against guidelines and formulae developed in the initial PEMANDU lab sessions, and prescribed by PEMANDU. Over the course of this exercise, PwC's findings highlighted a number of exceptions on the samples selected, which were subsequently addressed and reflected in this Annual Report. PwC confirmed that the results reported for the selected samples in the Annual Report have been validated according to the Agreed-Upon-Procedures. PwC also identified opportunities to improve processes and the quality of information. PEMANDU, together with the relevant Ministries and private sector stakeholders will be taking positive prescriptive actions to effect these improvements over the next 12 months.




**Exceptions were made where targets featured market-sensitive data. In such instances, this information was kept confidential at the request of involved parties.*




KEY PERFORMANCE 2016

NTP PERFORMANCE 2016

All three methods have been formulated to provide a pragmatic representation of the actual KPI numbers in percentages. The overall NKRA/NKEA/SRI composite scoring is the average of all scores.

SCORING METHOD	DESCRIPTION
Method 1	Scoring is calculated by a simple comparison against set 2016 targets.
Method 2	Scoring is calculated by dividing actual results against set 2016 targets with an added rule: <ul style="list-style-type: none"> If the scoring is less than 100%, score #2 is taken as the actual percentage If the scoring is equal or more than 100%, score #2 is taken as 100%
Method 3	Scoring is calculated by dividing actual results against set 2016 targets with an added rule: <ul style="list-style-type: none"> If the scoring is equal and less than 50%, score #3 is indicated as 0 If the scoring is more than 50% and less than 100%, score #3 is indicated as 0.5 If the scoring is equal or more than 100%, score #3 is indicated as 1

METHODS 1 AND 2	
Achievement	Traffic Lights
90% and above	
51%-89%	
50% and less	

METHODS 3		
Achievement	Scoring	Traffic Lights
100% and above	1	
51%-99%	0.5	
50% and less	0	

NKRA - ADDRESSING THE RISING COST OF LIVING					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Direct handout to the Rakyat through BRIM	100%	100%	100%	100%	100%
TOTAL			100%	100%	100%

NKRA - FIGHTING CORRUPTION					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Transparency International (TI) - Corruption Perception Index (CPI) score	55	49	89%	89%	0.5
Percentage of disposal of corruption cases within 1 year upon registration	85%	74.4%	88%	88%	0.5
Percentage of conviction rate for corruption cases	85%	79%	93%	93%	0.5
Tabling of AuG Report in every Parliament Session	2	2	100%	100%	1.0
Percentage of resolution of cases highlighted in AuG Report Series 1-3 2014 1 year after being tabled in Parliament	85%	96.6%	114%	100%	1.0
Percentage completion on insertion of corporate liability provision in MACC Act	80%	40%	50%	50%	0.0
Number of Corporate Integrity Pledge (CIP) signatories implementing prevention measures	60	23	38%	38%	0.0
Percentage of Public Private Partnership (PPP) projects to sign Integrity Pact	100%	100%	100%	100%	1.0
Political Financing Framework i. Present to Cabinet - 33% (by 2016) ii. AGC to prepare Act - 66% iii. Table to Parliament - 100%	100%	100%	100%	100%	1.0
Transparency International (TI)-Global Corruption Barometer (GCB) score	60	N/A (No Survey Conducted)	0%	0%	0%
Percentage of results of direct negotiation contracts published online, excluding Strategic and Security contracts	100%	100%	100%	100%	1.0
TOTAL			79%	78%	59%

KEY PERFORMANCE 2016

NKRA - REDUCING CRIME					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Reduce Overall reported Index	5%	2.8%	56%	56%	0.5
Percentage improvement of Perception Crime Indicator	10%	23.8%	238%	100%	1.0
To roll out the Phase 1 of the Modern Policing project to the entire IPK KL	100%	117%	117%	100%	1.0
Percentage development of a Community Engagement Index	100%	125%	125%	100%	1.0
Number of PDRM Mobile Patrol Vehicles (MPVs) that are beyond lifespan replaced	500	0	0%	0%	0%
Percentage of Orang Kena Pengawasan (OKP) who attended treatment programme in the community to maintain recovery for at least a year	40%	60.2%	151%	100%	1.0
Upskilling of Inmates: i) Number of inmates undergoing certified skill training ii) Percentage completion of a training facility for prisoners to learn new skills	100%	138%	138%	100%	1.0
Percentage of summonses issued by PDRM paid in 2016 under the category POL 257	30%	39.7%	132%	100%	1.0
TOTAL			118% 	79% 	79%

NKRA - EDUCATION					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Nationwide pre-school enrolment, including NGO (4+ and 5+ years only)	90%	85.6%	95%	95%	0.5
English literacy rate among Year 3 students	95%	94.8%	100%	100%	1.0
Percentage of Band 1 & 2 schools	37%	39.9%	108%	100%	1.0
Percentage of Band 6 & 7 schools	0.8%	2.0%	40%	40%	0.0
Percentage of teachers improved to at least minimum competency level through CPD	85%	85.8%	101%	100%	1.0
Percentage of principals improved to at least minimum competency level through CPD	85%	94.4%	111%	100%	1.0
Numeracy rate	100%	100%	99%	99%	0.5
Bahasa Melayu literacy rate	100%	98.6%	99%	99%	0.5
Percentage of teacher trained in the Pro-ELT programme that have increased by at least one proficiency band in CEFR	100%	92.3%	92%	92%	0.5
New English teachers from IPG achieved C1 based on CEFR before posting	80%	64%	80%	80%	0.5
Percentage completion of initiatives under Phase 1 of IPG Transformation Roadmap Implementation Plan 2016-2017	35%	34.6%	99%	99%	0.5
The completion of survey on the percentage of secondary schools with functioning science laboratories	100%	100%	100%	100%	1.0
Percentage readiness of the new ministry restructuring operational plan	100%	30%	30%	30%	0.0
Number of students utilising VLE at least in 1 lesson session per week	1,000,000	1,517,371	152%	100%	1.0
National childcare enrolment rate (0-4)	15%	6.8%	45%	45%	0.0
TOTAL			90%	85%	60%

KEY PERFORMANCE 2016

NKRA - RAISING LIVING STANDARD OF LOW INCOME HOUSEHOLDS					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Number of new participants in 1AZAM programme monitored at the minimum of 6 months after implementation	7,225	7,898	109%	100%	1.0
Number of new existing AZAM participants increased their income by RM300 - RM500 for any 3 months	8,600	10,225	119%	100%	1.0
Number of 1AZAM participants in Financial Literacy and Debt Management Programme	7,225	9,731	135%	100%	1.0
Number of 1AZAM project in collaboration with NGO and Corporate Sector	3	4	133%	100%	1.0
Number of 1AZAM community / group based programme	16	16	100%	100%	1.0
Beyond 1AZAM participants obtained minimum 50% increased in income from existing AZAM project	700	2,329	333%	100%	1.0
To ensure 100% updates in eKasih system	100%	100%	100%	100%	1.0
Develop B40 Entrepreneurs from Micro segment to Small Enterprise (SME category)	50	50	100%	100%	1.0
Adoption of Information and Communications Technology via registration among B40 participants via Orang-e platform	16,000	16,849	102%	100%	1.0
Adoption of Information and Communications Technology via registration among B40 participants via eRezeki platform	2,050	2,222	108%	100%	1.0
TOTAL			122% 	91% 	91%

NKRA - IMPROVING RURAL DEVELOPMENT					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Rural Development : Rural Basic Infrastructure					
Roads Delivery (km length)	601.5	755.42	126%	100%	1.0
Water Delivery: Number of Households	3,000	4,429	148%	100%	1.0
Electricity Delivery: Number of Households	9,875	9,922	100%	100%	1.0
Housing: Number of HousesHousing: Number of Houses	11,223	12,133	108%	100%	1.0
Rural Development: 21st Century Village					
Desa Lestari Programme: Number of Villages that successfully initiate business at least one (1) of the approved economic projects that has been completed	20	20	100%	100%	1.0
Rural Business Challenge: (b3) Percentage of 2014 RBC winners with more than 30% increase of incomes.	80.0%	82.6%	103%	100%	1.0
TOTAL			114% 	100% 	100%

NKRA - IMPROVING URBAN PUBLIC TRANSPORT					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Number of KL Budget Taxi Fleet - at par with ASEAN Best in Class	2,000	2,264	113%	100%	1.0
KL Monorail Expansion Project: LOA issuance to new contractor and completion of preliminary design review	100%	70%	70%	70%	0.5
Bus Rapid Transit Corridor 1 (KL-Klang) project: Completion of tender evaluation by JTAS	100%	85%	85%	85%	0.5
Urban Public Transport Customer Satisfaction Level (GKL/KV)	85%	84%	99%	99%	0.5
AM Peak Urban Public Transport Ridership (GKL/KV)	500,000	435,439	87%	87%	0.5
KTM Komuter On Time Performance during AM Peak (within 10 minutes)	90%	96.9%	108%	100%	1.0
MOC approval on new CTSS concept / Dec 2016	100%	92%	92%	92%	0.5
Launching of Journey Planner App Dec 2016	100%	80%	80%	80%	0.5
Utilisation of PRASARANA's stage bus in GKL /KV	80%	82%	103%	100%	1.0
Total number of PRASARANA Stage Bus Captain in GKL	2,090	2,182	104%	100%	1.0
Completion of Integrated Cashless Payment System (ICPS)	60%	56%	93%	93%	0.5
Number of Bus Info Panel Installed in GKL/KV	3,000	1,300	43%	43%	0.0
Number of additional parking bays at Klang Valley Rail Network	1,530	1,547	101%	100%	1.0
Percentage of construction progress of Parkway Dropzone Facilities: a) Dato' Harun b) Serdang c) Batu Tiga	100%	71.7%	72%	72%	0.5
Percentage of completion of KTMB Ticketing System (AFC)	100%	99.6%	100%	100%	1.0
ITT Gombak Project: Site possession	100%	72.9%	73%	73%	0.5
TOTAL			84%	82%	62%

KEY PERFORMANCE 2016

NKEA - AGRICULTURE						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
AGRI EPP1: Unlocking value from Malaysia's biodiversity through herbal products	Number of clinical trials to be conducted for nutraceutical and cosmeceuticals	10	10	100%	100%	1.0
	Total sale of herbal product (RM Million)	4.5	4.47	99%	99%	0.5
AGRI EPP2: Expanding the production of swiftlet nests	Total export of Edible Bird Nest product (MT)	200	381	191%	100%	1.0
AGRI EPP3: Venturing into commercial scale seaweed farming in Sabah	Total production of Seaweed under Cluster and Mini Estate (MT)	2,000	1,742.20	87%	87%	0.5
AGRI EPP4: Farming through integrated cage aquaculture systems	Total production of farmed fish by anchor companies (MT)	9,000	10,991.31	122%	100%	1.0
AGRI EPP5: Cattle in Oil Palm estates	Total cattle in population	56,500	41,536	74%	74%	0.5
AGRI EPP 6: Replicating integrated aquaculture model (iZAQs)	Total production of farmed shrimps (MT)	27,000	24,846.77	92%	92%	0.5
AGRI EPP7: Upgrading capabilities to produce premium fruit and vegetables	Total production from Taman Kekal Pengeluaran Makanan (TKPM) and anchor companies (MT)	60,000	63,347.06	106%	100%	1.0
AGRI EPP8: Strengthening the export capability of the processed food industry	Total sales of anchor companies and Small and Medium Enterprise (SME) (RM mil)	285	297.87	105%	100%	1.0
	Number of new Small and Medium Enterprise (SME) under Anchor Companies (AC)	15	22	147%	100%	1.0
AGRI EPP9: Fragrant Rice for non-irrigated areas	Total tonnage of fragrant rice produced (MT)	3,000	2,340.62	78%	78%	0.5
	Total area Planted (ha)	1,000	563.02	56%	56%	0.5
AGRI EPP10: Scaling up and strengthening paddy farming in Muda area	Total production from amalgamated land (MT)	320,000	320,228.50	100%	100%	1.0
	Total land area amalgamated (Ha)	5,000	5,296.86	106%	100%	1.0
	Total land acquisition (no. of lots)	8,790	9,038	103%	100%	1.0
AGRI EPP11: Scaling up and strengthening of paddy farming in other irrigated areas	Total production from amalgamated land (MT)	140,000	178,110.28	127%	100%	1.0
AGRI EPP13: Establishing dairy clusters in Malaysia	Total fresh milk produced (mil litre)	23.5	14.96	64%	64%	0.5
AGRI EPP14: Seed Industry Development	Total seeds produced (MT)	105	50	48%	48%	0.0
AGRI EPP17: Pasar Komuniti	Total sales from PAKAR (RM million)	77	83.57	109%	100%	1.0
TOTAL				101%	89%	76%

NKEA - BUSINESS SERVICES						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
BS EPP1: Growing Aviation Maintenance, Repair and Overhaul Services	Revenue from MRO services (RM Mil)	4,000	5,600	140%	100%	1.0
BS EPP2: Building globally-competitive outsourcers	Overseas sales revenue (RM mil)	3,007	2,641.3	88%	88%	0.5
	Projected Investment Value (RM mil)	635	765.97	121%	100%	1.0
BS EPP3: Making Malaysia a Global Data Center Hub	Total DC services revenue (RM mil)	1,100	1,001	91%	91%	0.5
	Percentage completion of site readiness for implementation of Sedenak Iskandar Data Hub (SIDH)	100%	101.7%	102%	100%	1.0
BS EPP4: Jump-starting a vibrant green technology industry	Revenue generated from green technology subsectors e.g. Energy/Building/Transport/Waste/Water/Services (RM mil)	4,000	4,969	124%	100%	1.0
	New investment in green technology realised (RM mil)	2,900	3,545	122%	100%	1.0
BS EPP 5: Growing Large Pure-Play Engineering Services	Revenue from pure play engineering services companies (RM mil)	100	87.82	88%	88%	0.5
BS EPP7: Making Malaysia The Hub For Aerospace OEMs In South East Asia Leveraging On 'Asia Aerospace City'	Committed investments from OEM, Tier 1 and Tier 2 companies (RM mil)	1,000	1,600	160%	100%	1.0
BS EPP 8: Developing SMEs in the Global Aerospace Manufacturing Industry	Number of SMEs certified (i.e. AS9100 or NADCAP)	10	8	80%	80%	0.5
TOTAL				112%	95%	80%

NKEA - COMMUNICATIONS CONTENT AND INFRASTRUCTURE						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
CCI EPP1: My Creative Content	Revenue of export from Creative Content (RM mil)	670	1,217.84	182%	100%	1.0
	Total estimated production spending under the "Film in Malaysia Incentive" (RM mil)	100	86.8	87%	87%	0.5
CCI EPP5: e-Healthcare	Number of targeted Healthcare Facilities rolled-out with e-Healthcare applications	500	515	103%	100%	1.0
CCI EPP6: e-Government	Number of Agencies On-Board Digital Document Management System 2.0 (DDMS 2.0)	10	33	330%	100%	1.0
	Percentage increase from 2015 in number of online transactions at Ministries	10%	11.6%	116%	100%	1.0
CCI EPP7: Broadband For All	Number of ports providing highspeed broadband with the speed up to 100Mbps in capital cities and major towns	150,000	168,664	112%	100%	1.0
	Number of ports providing high speed broadband in sub-urban areas (SUBB)	133,000	127,546	96%	96%	0.5
	Percentage of access (coverage) to LTE wireless broadband (% of connected population on LTE)	65%	63.9%	91%	91%	0.5

KEY PERFORMANCE 2016

NKEA - COMMUNICATIONS CONTENT AND INFRASTRUCTURE (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
CCI EPP8: Extend Reach	Number of program sites commissioned	350	380	109%	100%	1.0
CCI EPP10: Regional Network	Percentage of implementation of submarine cables (linking Sabah, Sarawak, and Peninsular Malaysia) rollout	30%	35%	117%	100%	1.0
	Percentage completion of Implementation of new international submarine cable	50%	50%	100%	100%	1.0
TOTAL				131%	98%	86%

NKEA - ELECTRICAL AND ELECTRONICS						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
E&E EPP1: Executing a Smart Follower Strategy for Mature Technology Semiconductor Fabrication Plants	Number of advance analytical services provided to the industry	700	708	101%	100%	1.0
	Number of trained engineers and students in Failure Analysis (FA), Material Analysis (MA) and Wafer Testing	100	135	135%	100%	1.0
	Number of wafer testing services provided to local E&E companies	5	5	100%	100%	1.0
	Number of projects utilising metrology lab	30	31	103%	100%	1.0
EPP2: Developing assembly and test using advanced packaging technology	Number of Advance Packaging companies in operation that provide value added services to Advanced Packaging companies	1	0	0%	0%	0.0
EPP3: Developing Integrated Circuit Design Firms	Number of jobs created from new Integrated Circuit (IC) design firms	50	0	0%	0%	0.0
	Number of companies adopted Green Motion Controller (GMC) products	2	2	100%	100%	1.0
EPP4: Supporting the growth of substrate manufacturers and related industries	Number of supporting industry companies for substrate manufacturers	1	0	0%	0%	0.0
EPP 5: Silicon production	Number of new silicon producer in production	1	0	0%	0%	0.0
EPP6: Growing wafer and cell producers	Additional solar wafer or cell production in Malaysia (MW)	500	1,525	305%	100%	1.0
EPP7: Increasing solar module producers	Additional solar module production in Malaysia (MW)	500	1,420	284%	100%	1.0
EPP8: Developing LED front-end operations	Number of quality project approved for epitaxy manufacturer	1	1	100%	100%	1.0
E&E EPP10: Creating local Solid State Lighting (SSL) champions	Total annual sales of local LED companies under SMECorp capacity building program (RM mil)	115	125.2	109%	100%	1.0
	Number of new LED products internationally certified	30	38	127%	100%	1.0

NKEA - ELECTRICAL AND ELECTRONICS (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
EPP11: Building a test and measurement hub	Number of new products to enhance Test & Measurement local ecosystem	4	4	100%	100%	1.0
	No. products tested utilising QAV test centre (both Penang & Selangor)	48	48	100%	100%	1.0
EPP13: Growing automation equipment manufacturing	Number of high impact project in operation for Automation Equipment	1	1	100%	100%	1.0
	Number of new automation projects undertaken by local companies, agencies and institutes in system design, prototyping, proof-of-concept and system customisation at National Instruments Academy and Innovation Nucleus (NI-AIN)	25	15	60%	60%	0.5
EPP16: Development of Balance of Systems for Photovoltaic	Number of Balance of Systems company in operation for Solar PV industry	1	0	0%	0%	0.0
EPP17: Growing Embedded Systems Industry	Number of new embedded systems projects approved under the Digital Malaysia Embedded Systems Funding Programme	4	3	75%	75%	0.5
	Number of new embedded / IOT projects confirmed	2	2	100%	100%	1.0
EPP18: Enabling Electric Vehicle Component Manufacturing	Percentage of completion of homologation test for Li-ion battery (for electric and hybrid vehicles) to be ready for commercial production	100%	81%	81%	81%	0.5
	Percentage of completion of homologation test for EV bus to be ready for commercial production	100%	88%	88%	88%	0.5
E&E EPP20: Enabling Nanotechnology for Electrical & Electronics (E&E) Industry	Number of companies adopting commercial graphene and nanotechnology products for E&E applications	2	2	100%	100%	1.0
	Total number of new quality NKEA E&E projects approved by MIDA	10	10	100%	100%	1.0
	Percentage realised investment of E&E sector projects since 2011 till 2014 (RM bil)	80%	75%	94%	94%	0.5
EPP1-20: Cross Cutting Enablers	Total approved investment for E&E sector (RM bil)	6.0	9.2	153%	100%	1.0
	Number of R&D projects awarded by CREST	12	11	92%	92%	0.5
	Number of R&D projects commercialized or implemented	3	3	100%	100%	1.0
	Number of Eco Design application undertaken by companies/ organisations utilising Eco Industrial Design Centre (EIDC) shared facilities	20	20	100%	100%	1.0
TOTAL				97%	75%	70%

KEY PERFORMANCE 2016

NKEA - EDUCATION						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
EDU EPP1: Scaling up early child care and education centres	Private pre-school enrolment, including NGO (4+ and 5+ years only)	473,397	439,543	93%	93%	0.5
EDU EPP5: Scaling up private skills training provision	No. of SKM qualified students from private accredited centres	38,000	35,804	94%	94%	0.5
	Number of students trained in industry based approach	6,000	9,367	156%	100%	1.0
	Improving the knowledge and expertise for TVET instructors	10,000	13,923	139%	100%	1.0
EDU EPP7: Building an Islamic finance and business education discipline cluster	Number of students enrolled at HEIs in the Islamic finance and business programme	17,000	15,606	92%	92%	0.5
	Number of international academics who are members of ICIFE	150	145	97%	97%	0.5
EDU EPP10: Building a hospitality and tourism discipline cluster	Number of students enrolled in private HLLs in cluster contact of hospitality and tourism	1,800	6,447	358%	100%	1.0
	Number of student enrolled at private HLLs in the hospitality and tourism program	26,000	18,982	73%	73%	0.5
EDU EPP11: Lanching EduCity@ Iskandar	Number of students enrolled in EduCity @ Iskandar	5,000	4,478	90%	90%	0.5
EDU EPP12: Championing Malaysia's international education brand	Number of international students enrolled	160,000	172,886	108%	100%	1.0
	Number of post graduate international students enrolled in HLLs	35,000	30,598	87%	87%	0.5
EDU EPP14: Building a games development cluster	Number of students enrolled in private HEIs with games cluster contact	500	344	69%	69%	0.5
EDU EPP17: Building an accounting cluster	Number of students enrolled in Sunway TES collaboration with public HEIs programme	1,020	850	83%	83%	0.5
TOTAL				117%	91%	64%

NKEA - FINANCIAL SERVICES						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
FS EPP1: Revitalising Malaysia's Equity Markets	Increase velocity in the market Average Daily Value (ADV) - (RM billion)	1.9	1.812	95%	95%	0.5
	Increase in new issuance from both IPO and also secondary market (new issue of shares from rights issue, special issue etc) (RM billion)	11	15.33	139%	100%	1.0
	Improve breadth and depth of product offerings Number of new products and offerings	5	7	140%	100%	1.0
FS EPP2: Deepening and Broadening Bond Markets	Registration of P2P platform operators	100%	100%	100%	100%	1.0
FS EPP5: Insuring most, if not all, of our population	Conversion of composite insurance and takaful licences under the Financial Services Act 2013 and Islamic Financial Services Act 2013 [Phase 2]	100%	100%	100%	100%	1.0

NKEA - FINANCIAL SERVICES (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
FS EPP10: Becoming the Indisputable Global Hub for Islamic Finance	Launch of Islamic Fund and Wealth Management Blueprint by 2H FY2016	100%	99%	99%	99%	0.5
	Issuance of Professional Standards by Chartered Institute of Islamic Finance Professionals (CIIF), as the professional body for Islamic finance professionals	100%	100%	100%	100%	1.0
TOTAL				110%	99%	86%

NKEA - GREATER KL						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
GKL EPP1: Attracting 100 of the world's most dynamic firms within priority sectors	Number of Letter of Intent or equivalent Incentive Offer concluded for MNCs to set up Regional Headquarters/Regional Hub activity in GKL	13	13	100%	100%	1.0
	Number of new high skilled jobs committed / approved	600	1,862	310%	100%	1.0
	Amount Spent by MNCs in 2016 (RM million)	550	1,130	205%	100%	1.0
	Realized Annual Jobs (high skilled jobs on payroll) based on committed / approved jobs for 2016	350	540	154%	100%	1.0
GKL EPP2: Attracting the right mix of internal and external talent	Number of approved application under Returning Expert Program	800	398	50%	50%	0.0
	Percentage of issuance of Employment Pass Process within 5 working days	80%	82%	103%	100%	1.0
	New JPA scholars under STAR Program	1,200	1,217	101%	100%	1.0
	Number of approved applications under Residence Pass-talent Program	1,200	1,234	103%	100%	1.0
GKL EPP3: Connecting KL to Singapore via a High Speed Rail system	Formulation of Bilateral Committee TOR – reviewed and finalized by SPAD	100%	100%	100%	100%	1.0
	Regulatory Framework – reviewed & finalized by SPAD	100%	100%	100%	100%	1.0
GKL EPP4: Mass Rapid Transit [KWP/Innovation]	Percentage completion of trackwork Installation works	100%	100%	100%	100%	1.0
	No. trains delivered and tested at Sungai Buloh Depot	50	52	104%	100%	1.0
	Percentage completion of trial operations for Phase 1	100%	100%	100%	100%	1.0
	Accident frequency Rate Ratio	1.5	1.0	100%	100%	1.0
	TI Packages to be awarded as per planned by end 2016	100%	127.3%	127%	100%	1.0

KEY PERFORMANCE 2016

NKEA - GREATER KL						
EPP		Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
GKL EPP5: Revitalising the Klang River into a Heritage and Commercial Centre for Greater KL/KV	Percentage completion of Sewerage Treatment Plant in Bunus	60%	66%	111%	100%	1.0
	Percentage completion of Sewerage Treatment Plant in Jinjang Kepong	11%	11.1%	101%	100%	1.0
	Water quality results from 2 selected water quality monitoring stations meet WQI \geq 60 (Class III) i) Sungai Gombak (IK17 - Stn. Tun Razak) ii) Sungai Klang (IK25 - Stn. Abdullah Hukum)	100%	100%	100%	100%	1.0
	Completion of planning stage for the implementation of Public Outreach Programme (POP) until the appointment of consultants for phases 3, 4 and 5	100%	100%	100%	100%	1.0
	Percentage of construction progress for River Beautification and interceptor drainage system works	20%	17.4%	87%	87%	0.5
	Compliance of wastewater discharge quality from all completed Waste Water Treatment Plant to Water Quality Index(WQI) \geq 76.5 i) Pasar Harian Selayang ii) Pasar Jalan Kelang Lama iii) Pasar Air Panas iv) Pasar Sentul Pasar v) Pasar Borong Kuala Lumpur	100%	100%	100%	100%	1.0
	Effluent from 98 communal grease traps installed to comply with Malaysian Sewerage Industry Guideline (FOG \leq 50 mg/l)	100%	100%	100%	100%	1.0
GKL EPP6: Greening Greater KL to ensure residents enjoy sufficient green space	Number of trees tagged with GPS Coordinates	40,000	43,325	108%	100%	1.0
	Number of trees sponsored	2,500	7,298	292%	100%	1.0
	Number of parks adopted/sponsored	4	4	100%	100%	1.0
GKL EPP7: Creating iconic places and attractions	Heritage Trail 5 : Percentage completion of Phase 1 project development	50%	50.7%	101%	100%	1.0
	Heritage Trail 5 : Percentage completion of Phase 2 project design	100%	65%	65%	65%	0.5
	Percentage completion of the outcome evaluation report for effectiveness of Heritage Trail 1-3	100%	100%	100%	100%	1.0
GKL EPP8: Creating a comprehensive pedestrian network	Percentage completion of Baseline study to calculate footfall (usage) for both NKEA and non-NKEA Pedestrian Network in KL	100%	100%	100%	100%	1.0
	Percentage completion of feasibility study to develop a pipeline for the upgrade or development of new pedestrian networks in KL for 2017 onwards	100%	100%	100%	100%	1.0
GKL EPP9: Solid Waste Management	Percentage completion of pre-treatment system and upgrading of Leachate Treatment System in Taman Beringin	100%	100%	100%	100%	1.0

NKEA - GREATER KL (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
GKL B0#3: Sewerage Non-River	Langat sewage treatment plant and network	24%	26.3%	110%	100%	1.0
	Percentage of construction of Pipe Network in Petaling Jaya Utara (Package D47)	99%	93.6%	84%	84%	0.5
	Percentage of construction of Pipe Network in Kajang 1 & 3 (Package D49)	40%	43.5%	113%	100%	1.0
	Percentage of construction of Pipe Network Lot 130 Klang (Package D55)	99%	99%	100%	100%	1.0
TOTAL				114%	97%	93%

NKEA - HEALTHCARE						
No	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
HEALTH EPP2: Creating a supportive ecosystem to grow clinical research	Number of new clinical trials	155	162	105%	100%	1.0
	Number of new clinical trials performed in MOH facilities	99	101	102%	100%	1.0
HEALTH EPP3: Pursuing pharmaceutical export opportunities	Percentage of offtake proposal processed within 87 working days as stipulated in SOP approved by Ministry of Finance (by processed means completion of price negotiations)	100%	100%	100%	100%	1.0
	Percentage of licensed pharmaceutical (Scheduled Poisons) manufacturers which fulfill GMP requirement	100%	100%	100%	100%	1.0
	Export growth of pharmaceutical products (RM mil)	678	737.31	109%	100%	1.0
HEALTH EPP4: Reinvigorating health travel through better customer experience, proactive alliances and niche marketing	Revenue generated from Healthcare Travellers (RM mil)	1,000	1,123.03	112%	100%	1.0
	Revenue generated from Healthcare Tourists (RM mil)	660	687.72	104%	100%	1.0
HEALTH EPP7-14: Medical device	Percentage of time taken to process complete submission received in 2016 for establishment license within 30 working days	90%	100%	111%	100%	1.0
	Number of GLP labs for preclinical testing of medical devices	1	1	100%	100%	1.0
	Number of medical device to be registered	70,000	82,306	118%	100%	1.0
	Medical device export (RM billion)	10.6	9.69	91%	91%	0.5
HEALTH EPP15-17: Senior Living	Senior Living: Private Aged Healthcare Facilities and Services Bill to be tabled and presented in the Parliament by end of 2016	100%	50%	50%	50%	0.0
TOTAL				100%	95%	88%

KEY PERFORMANCE 2016

NKEA - OIL, GAS & ENERGY						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
OGE EPP2: Developing marginal field	Total production from marginal field (oil and gas) (kboe/d) Production from Marginal Field (Oil) - Thousand Barrel per Day (kbd) Production from Marginal Field (Gas) - Million Standard Cubic Feet Per Day (MMscfd)	*Information kept confidential at the request of involved parties				
OGE EPP3: Intensifying exploration activities	Numbers of explored well					
OGE EPP5: Unlocking premium gas demand in Peninsular Malaysia	Implementation of Third Party Access (Amendment of Gas Supply Act) 2013 : 90% 2014 : 90% 2015 : 90% (10% converted to milestone with 100% target, achieved 70% in 2015, balance milestone to be monitored in 2016 with 100% target)	100%	100%	100%	100%	1.0
	Implementation of Third Party Access (Completion of relevant instruments for Implementation plan for third party access)	100%	96%	96%	96%	0.5
	Gas Pricing & Marketing – RAPID & Pengerang COGEN Power GSA @ market price	100%	95%	95%	95%	0.5
OGE EPP6: Attracting MNCs to bring their global oil field service and equipment operations to Malaysia	Amount of committed investment by Oil & Gas Supplier and Services and Equipment companies (RM mil)	650	683.7	105%	100%	1.0
OGE EPP7: Local companies successful in going international	Number of first time bidders (companies) for international projects in new markets segments (includes new countries or new segments within the same country)	10	10	100%	100%	1.0
OGE EPP 8: Attracting MNCs to set up operations in Malaysia and partner with local firms	Number of MNCs bringing their global operations to Malaysia or mergers/JVs between local OGSE companies with global MNCs	6	6	100%	100%	1.0
OGE EPP9: Improving energy efficiency	Number of buildings audited	10	10	100%	100%	1.0
	Reduction of Special Industrial Tariff (SIT) by 2% for 2016	100%	100%	100%	100%	1.0
OGE EPP10: Building up renewable power capacity	Total installed RE capacity through FIT Mechanism	400	412	103%	100%	1.0
	Large Scale Solar (LSS) Guidelines by 2016	100%	100%	100%	100%	1.0
OGE EPP 11: Deploying Nuclear Energy for Power Generation	Deploy 50 MW under Net Energy Metering (NEM)	100%	90%	90%	90%	0.5
	Finalising the drafting of the Atomic Energy Act	100%	90%	90%	90%	0.5

NKEA - OIL, GAS & ENERGY (continued)

EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
OGE EPP13: Increase in petrochemical output	Establishment of industrial park in PIPC to complement existing investments by DIALOG-Vopak and PETRONAS	100%	25%	25%	25%	0.0
	JPDC to secure potential downstream investors to PIPC via LOIs	6	7	117%	100%	1.0
	Revision of PIPC Masterplan will ensure the masterplan continues to be relevant, accurate and realistic with the current development of downstream oil and gas industry	100%	50%	50%	50%	0.0
	Development of critical PIPC infrastructure projects planned for 2016 to support DIALOG-Vopak and PETRONAS	100%	85%	85%	85%	0.5
TOTAL				96%	89%	73%

NKEA - PALM OIL AND RUBBER

No	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
POR EPP1: Accelerate the replanting and new planting of oil palm and increasing independent smallholders' income	Area of replanting and new planting approved for smallholders (ha)	7,000	11,475	164%	100%	1.0
	Area of replanting and new planting implemented by smallholders (ha)	15,000	17,663	118%	100%	1.0
	Crop Integration implemented (ha)	500	508	102%	100%	1.0
	Number of individual projects under livestock integration scheme (goat and cattle)	85	27	32%	32%	0.0
POR EPP2: Improving FFB Yield	Total FFB sold to mills by all cooperatives by year end (MT)	40,000	47,766.32	119%	100%	1.0
	Number of new cooperatives (KPSM) start selling FFB to mills with minimum 500 MT/year	5	5	100%	100%	1.0
	New area of plantations/smallholders complying with MSP0/RSPO/CoGAP (ha): (i) MSP0	50,000	122,521	245%	100%	1.0
	New area of plantations/smallholders complying with MSP0/RSPO/CoGAP (ha): (iii) CoGAP	50,000	22,442.05	45%	45%	0.0
	National Average Yield (MT/ha/yr)	20.50	15.91	78%	78%	0.5
	National FFB Production (million MT)	103	86.33	84%	84%	0.5
	Number of new members of 30-tonner club	100	116	116%	100%	1.0
	Suresawit kit to assist certification of oil palm nurseries as follows:- Number of samples tested	150,000	171,067	114%	100%	1.0
POR EPP3: Improving Workers' Productivity in Plantations and Estates	Take up rate of mechanisation grant (RM750,000 for 20% discount for machine purchase)	100%	84.5%	85%	85%	0.5
POR EPP4: Increasing the Oil Extraction Rate	Number of Palm Oil Mills certified by MPOB for Code of Practice and other international certifications:(i) CoPM/MSP0	10	9	90%	90%	0.5
	Oil Extraction Rate (%)	21.50%	20.2%	94%	94%	0.5

KEY PERFORMANCE 2016

NKEA - PALM OIL AND RUBBER (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
POR EPP5: Developing Biogas facilities at Palm Oil Mills	Progress of biogas plant construction for 8 new mills (%)	100%	150%	150%	100%	1.0
	Progress of 2 new mills with biogas plant connected to the grid (%)	100%	350%	350%	100%	1.0
POR EPP6: Developing Oleo-Derivatives	Take up rate of the pre-commercialization and technology acquisition funds (%)	100%	144.8%	145%	100%	1.0
POR EPP8: Expediting growth of Food and Health-based downstream segment	Take up rate of funds for food and health-based products (%)	100%	80.5%	80%	80%	0.5
POR EPP9: Ensuring sustainability of the upstream rubber industry	Area of replanting and new planting by rubber smallholders (ha)	6,802	6,802	100%	100%	1.0
POR EPP10: Increasing world market export of rubber and rubber products	Malaysian export of natural rubber and compound rubber (mil MT)	1	1	100%	100%	1.0
	Malaysian export revenue from latex products (RM bil)	13	14	108%	100%	1.0
	Number of standards met by rubber and rubber products using the newly commissioned equipment	5	4	80%	80%	0.5
POR EPP11: Commercialising Ekoprena and Pureprena	Sales of Ekoprena and Pureprena (MT)	700	409	58%	58%	0.5
	Commercial collaboration trial product produced (number of agreements signed)	6	7	117%	100%	1.0
TOTAL				115%	89%	76%

NKEA - TOURISM						
No	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
TOUR EPP1: Positioning Malaysia as a vibrant shopping destination	Total tourist spend on shopping (RM bil)	31	26	84%	84%	0.5
	Total Footfalls at Malls at BBKLCC	100	131,493	131%	100%	1.0
TOUR EPP4: Positioning Malaysia as a leading ecotourism destination	Number of visitors to MMBH Sites	625,000	859,409	138%	100%	1.0
	Percentage completion of upgrading of Sepang Environmental Interactive Centre (EIC)	100%	100%	100%	100%	1.0
TOUR EPP5: Expanding tourism offerings in niche areas	Revenue generated from golf tourism (RM million)	330	335	102%	100%	1.0
TOUR EPP6: Developing Cruise Tourism	Number of cruise passengers at primary ports	550,000	682,063	124%	100%	1.0
TOUR EPP7: Positioning Malaysia as a vibrant events & entertainment destination	Number of international cruise calls at Malaysian ports	394	435	110%	100%	1.0
	Number of international tourists at International Events supported by MYCEB	78,000	98,813	127%	100%	1.0
TOUR EPP9: Establishing Malaysia as a leading business tourism destination	Number of approved designated entertainment & lifestyle zones	1	0.7	70%	70%	0.5
	Total delegates present for event secured (delegate days)	300,000	378,412	126%	100%	1.0

NKEA - TOURISM (continued)						
EPP	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
TOUR EPP11: Enhancing air connectivity to Malaysia from priority markets	Total weekly seats from identified priority countries by all Malaysian carriers	120,500	142,088	118%	100%	1.0
TOUR EPP12: Improving mix & quality of hotels & integrated resorts	Number of new 4-star & 5-star hotel rooms	2,500	2,924	117%	100%	1.0
TOTAL				104%	91%	87%

NKEA - WHOLESALE & RETAIL						
No	KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
WR EPP1: Increasing number of large format stores	Number of new hypermarkets	6	7	117%	100%	1.0
	Number of new superstores	5	12	240%	100%	1.0
WR EPP2: Modernising via the Small Retailer Transformation Programme (TUKAR)	Number of establishments modernized under the TUKAR programme	150	151	101%	100%	1.0
WR EPP4: Transforming automotive workshops (ATOM)	Number of workshops modernized under the ATOM programme	100	100	100%	100%	1.0
WR EPP5: Developing makan bazaars	Identify new Makan Bazaar site	1	1	100%	100%	1.0
WR EPP7: Virtual Mall	Number of sellers in amaxMall	500	646	129%	100%	1.0
WR EPP11: Organising unified Malaysia sales	Number of sub-sectors involved in 1Malaysia Unified Sale	60	60	100%	100%	1.0
TOTAL				127%	100%	100%

KEY PERFORMANCE 2016

SRI - NARROWING DISPARITY

KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Total value of business opportunities created for Bumiputera companies (RM billion)	10.0	11.54	115%	100%	1.0
Achieve financing approval for Bumiputera companies at a minimum of 3.0 times against respective government funds received	3.0	3.20	107%	100%	1.0
Increase in G.E.T (Growth, Employment Created and Turnover/Revenue) for 60% micro and small companies participating in INSKEN500 programmes	10%	9.1%	91%	91%	0.5
TOTAL			104% 	97% 	83%
















SRI - COMPETITION, STANDARDS AND LIBERALISATION

KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Number of fruit and vegetable farms certified (new/renewed) under myGAP	750	829	111%	100%	1.0
Number of aquaculture farms certified (new/renewed) under myGAP	158	159	101%	100%	1.0
Number of livestock farms/premises certified (new/renewed) under myGAP	200	210	105%	100%	1.0
Number of new fruit and vegetable farms certified under myOrganic	20	15	75%	75%	0.5
Number of new certifications obtained by companies from Accredited Certification Bodies	1,070	1,225	114%	100%	1.0
Number of new food production establishments certified for 'Makanan Selamat Tanggungjawab Industri' (MeSTI)	710	744	105%	100%	1.0
Number of new products under MyHIAU Programme	1,800	1,958	109%	100%	1.0
TOTAL			103% 	96% 	93%







SRI - HUMAN CAPITAL DEVELOPMENT					
KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Percentage of women on board (Public Companies only from SSM)	20%	16.6%	83%	83%	0.5
Percentage of women on public listed board (BURSA)	12%	12%	100%	100%	1.0
No. of new childcare centres > At the Workplace > Institutions > Government > Registered Home Based > Notification for at-home care below 4 children	100%	131%	131%	100%	1.0
Number of additional women placements from Women Directors Programme and 30% Club	25	14	56%	56%	0.5
No. of companies that provide childcare benefits or facilities to employees	50	32	64%	64%	0.5
Number of trained childcare minders through Kursus Asuhan PERMATA or Kursus Asas Asuhan	1,200	1,637	136%	100%	1.0
Data collection system to be extended to all registered childcare centres	100%	95.3%	95%	95%	0.5
To complete Labour Force Information Survey	100%	80%	80%	80%	0.5
HR Capability Building Programmes for SMEs	25,000	33,735	135%	100%	1.0
PSMB Contact Centre Customer Satisfaction Survey	80%	83%	104%	100%	1.0
Number of Employers Registered with National Human Resource Centre (NHRC)	6,000	11,605	193%	100%	1.0
Minimum Wages Statutory Inspection (including)	30,000	38,245	127%	100%	1.0
Draft on the review of EA, IRA and Trade Union ready and submitted to AGC (If TPPA is signed)	100%	70%	70%	70%	0.5
Number of women placements	150	168	112%	100%	1.0
Effectiveness of Graduate Employability Management Scheme (GEMS) & Upskilling (i) Number of trainees under GEM and Upskilling programme (ii) 80% from those trained in 2015 are employed	100%	99.5%	100%	100%	1.0
Percentage completion of identification of critical skills gap report	100%	100%	100%	100%	1.0
Number of new companies offering flexible work arrangements, family friendly facilities or benefits	30	32	107%	100%	1.0
Number of internship placements	15,000	16,452	110%	100%	1.0
TOTAL			100% 	87% 	78%

KEY PERFORMANCE 2016

SRI - PUBLIC SERVICE DELIVERY TRANSFORMATION

KPI	Target (FY)	Actual (YTD)	Method 1 %	Method 2 %	Method 3 %
Implement LEAN Healthcare at MoH hospitals	15	36	240% 	100% 	1.0 
Average lift uptime at 5 PPRs under DBKL	90%	0%	0 	0 	0 
Rollout road maintenance to protocol and main roads under DBKL	43%	107%	119% 	100% 	1.0 
Implement LEAN Healthcare at university hospitals with MOHE	1	1	100% 	100% 	1.0 
TOTAL			140% 	100% 	100% 

SRI - PUBLIC FINANCE REFORM

KPI	Target	Actual (FY)	Method 1 (YTD)	Method 2 %	Method 3 %
Percentage of Implementation of Accrual Accounting Activities in 2016	100%	55.7%	56% 	56% 	0.5 
TOTAL			56% 	56% 	50% 


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