KEMENTERIAN TENAGA, SAINS, TEKNOLOGI, ALAM SEKITAR DAN PERUBAHAN IKLIM

Bil	Berita	Media	Capaian Berita Penuh
1.	**Sains bantu umat Islam jadi kuat / Kuasai pelbagai ilmu tangkis ancaman musuh**	Berita Harian	Klik pada tajuk berita dan Rujuk lampiran 1
2.	**Lynas: Keputusan kabinet kelak adalah keputusan rasmi kerajaan**	Malaysiakini	Klik pada tajuk berita
3.	**Kaukus parlimen sokong pendirian Mestecc isu Lynas**	Malaysiakini	Klik pada tajuk berita
4.	**Aussie's co-op on Lynas' waste needed**	Malaysian Reserve	Klik pada tajuk berita
5.	**PM: Cabinet to meet for final say on Lynas waste**	Malay Mail	Klik pada tajuk berita
6.	**No decision yet on Lynas waste disposal, says Dr M**	Free Malaysia Today	Klik pada tajuk berita
7.	**Putting people's health first**	My Sinchew.com	Klik pada tajuk berita
8.	**Lynas waste conflict shows Pakatan policies unclear, Umno MP claims**	Malay Mail	Klik pada tajuk berita
9.	**Antara Lynas dan kilang tayar terpakai / Antara Lynas dan kilang tayar**	Utusan Malaysia	Klik pada tajuk berita dan Rujuk lampiran 2
10.	**5 pengusaha kilang haram di Kuala Langat dipenjara**	Astro Awani	Klik pada tajuk berita
11.	**Suhu melampau jejas kesihatan**	Berita Harian	Klik pada tajuk

			berita
12.	**Husam dilantik Pengerusi KADA yang baharu**	Berita Harian	Klik pada tajuk berita
13.	**Ada apa dengan sains?**	Utusan Malaysia	Klik pada tajuk berita
14.	**Urus sisa toksik lebih baik**	Utusan Malaysia	Rujuk lampiran 3
15.	**Tindakan kecil beri impak besar**	Berita Harian	Rujuk lampiran 4
16.	**Waterspout likely brought on by hot spell**	The Star	Rujuk lampiran 5
17.	**Power Saving: TNB promotes energy efficiency**	New Straits Times	Rujuk lampiran 6
18.	**Balancing energy cost and sustainability**	The Star	Rujuk lampiran 7
19.	**Energy efficiency for the future**	The Star	Rujuk lampiran 8
20.	**Seronoknya sains: Pintar bersama sains maju bersama teknologi**	Utusan Malaysia	Rujuk lampiran 9
21.	**Sains untuk kesejahteraan**	Utusan Malaysia	Rujuk lampiran 10
22.	**Sasaran satu juta pengunjung**	Utusan Malaysia	Rujuk lampiran 11

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
23.	**Knight Frank positive on logistics / industrial sub-sector**	The Star	Rujuk lampiran 12
24.	**Motorcade amid deluge**	The Star	Rujuk lampiran 13

25.	**Centralised waste park**	The Sun Daily	Rujuk lampiran 14
26.	**Cabinet to meet, discuss Lynas, says PM**	New Straits Times	Rujuk lampiran 15
27.	**Detect early signs of heart disease in under a minute**	New Straits Times	Rujuk lampiran 16
28.	**Imbalance cost pass-through : Achieving a sustainable future via ICPT**	New Straits Times	Rujuk lampiran 17
29.	**Sisa logam bukan dari Lynas**	Utusan Malaysia	Rujuk lampiran 18
30.	**Ranap dihempap pokok**	Harian Metro	Rujuk lampiran 19
31.	**Misi Penerbangan Helikopter ke Marikh**	Kosmo!	Rujuk lampiran 20
32.	**Ribut petir, angin kencang: Banyak kenderaan rosak dihempap pokok di Lembah Klang**	Astro Awani	Klik pada tajuk berita
33.	**Honeywell kekalkan komitmen**	Utusan Malaysia	Klik pada tajuk berita

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
34.	**Tempesy Fury**	The Sun Daily	Rujuk lampiran 21
35.	**Mammoth Task**	The Sun Daily	Rujuk lampiran 22
36.	**Sarawak, Korea Selatan sama-sama untung - Abang Johari**	Astro Awani	Klik pada tajuk berita

LAMPIRAN 1
BERITA HARIAN (ISU): MUKA SURAT 5
TARIKH: 3 APRIL 2019 (RABU)

Kuasai pelbagai ilmu tangkis ancaman musuh

Penguasaan bidang sains, matematik teknologi pertahan ummah

Oleh Haika Khazi dan Mohd Husni Mohd Noor
bhnews@bh.com.my

Kuala Lumpur

Tun Dr Mahathir Mohamad menegaskan umat Islam perlu menguasai ilmu sains, matematik dan teknologi terkini jika mereka mahu menyelamatkan diri masing-masing daripada ancaman musuh.

Perdana Menteri berkata, ilmu itu penting pada zaman sekarang kerana pedang dan tombak sahaja tidak boleh menyelamatkan umat Islam daripada musuh.

Cipta senjata moden

Sebaliknya, Dr Mahathir berkata, umat Islam hanya boleh selamat jika mereka menguasai pelbagai ilmu sains dan teknologi, termasuk pembuatan senjata api moden seperti senapang, meriam, roket, kereta kebal, kapal perang dan pesawat canggih.

"Itu senjata yang perlu ada kepada kita untuk mempertahankan umat Islam. Tetapi oleh kerana kita tidak mempunyai ilmu sains, maka kita tidak boleh pertahankan diri daripada musuh serta terpaksa bergantung kepada orang lain.

[FOTO ASYRAF HAMZAH /BH]

Dr Mahathir *mendengar penerangan Pengarah Pusat Sains Negara, Mismah Jimbun (kiri) di Pusat Sains Negara, Kuala Lumpur, malam tadi.*

"Inilah yang akan berlaku kepada umat Islam jika mereka tidak menguasai fizik, kimia dan matematik lain yang membolehkan kita mencipta senjata canggih dan moden," katanya berucap merasmikan Minggu Sains Negara di Pusat Sains Negara di sini malam tadi.

Yang turut hadir, isteri beliau Tun Dr Siti Hasmah Mohd Ali.

Minggu Sains Negara 2019 bertemakan 'Sains Untuk Kesejahteraan' memberi mesej dan kesedaran sains dan teknologi memainkan peranan besar dan penting dalam mencapai kesejahteraan negara dan rakyat.

Fasa pertama Minggu Sains Negara bermula pada 1 hingga 7 April, manakala fasa kedua dijadualkan pada 2 hingga 8 Ogos depan.

Berikutan itu, Dr Mahathir menegaskan sejak dari dulu lagi kerajaan menekankan mengenai kepentingan menguasai ilmu sains dan matematik menerusi bahasa Inggeris.

"Tindakan kerajaan tertentu yang menolak mempelajari sains, teknologi dan matematik dalam bahasa Inggeris menyebabkan kita tidak kejar ilmu yang terkini dan moden kerana ia tidak datang kepada kita dalam bahasa kita.

"Saya percaya kita semua sekarang faham mengenai kepentingan penguasaan ilmu sains, termasuk perubatan yang menjadi sebahagian daripadanya," katanya.

LAMPIRAN 2
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 5
TARIKH: 3 APRIL 2019 (RABU)

ANALISIS

Oleh HERMAN HAMI

Antara Lynas dan kilang tayar

"KALAU tawan Putrajaya, kilang Lynas kita akan tutup". Itu janji pada 26 Februari 2012 oleh pemimpin utama pakatan pembangkang, Datuk Seri Anwar Ibrahim di hadapan ribuan warga Kuantan yang menyertai Himpunan Hijau 2.0.

Turut berada di atas pentas utama, Ahli Parlimen Kuantan, Fuziah Salleh dan beberapa lagi pemimpin utama PKR dan DAP yang kini membentuk kerajaan termasuk Datuk Seri Dr. Wan Azizah Wan Ismail.

Menjengah setahun selepas era Barisan Nasional (BN), kilang memproses nadir bumi di Gebeng itu masih beroperasi dan hampir pasti terus kekal dalam keadaannya seperti ketika janji itu dibuat lebih tujuh tahun lalu.

Terlalu banyak hirukpikuk mengenai Lynas sejak 2009. Yang membantah pemimpin politik tetapi yang menyokong operasinya pakar kejuruteraan kimia serta profesor dalam bidang nuklear.

Pada satu tahap, Lynas memasang Airborne Monitoring System (AMS) yang memaparkan maklumat kualiti udara setiap 10 minit. Ia dipasang di depan Ibu pejabat Polis Daerah (IPD) Kuantan. Ya, IPD dan papan itu bukan maklumat statistik jenayah.

Hakikatnya, ramai terus mempercayai ahli politik berbanding pakar sains. Malah pada 2011 apabila Ahli Parlimen Hulu Langat daripada Pas, Dr. Che Rosli Che Mat memberi pandangan tidak selari dengan Pakatan Rakyat, teruk beliau dihentam.

Sedangkan Dr, Che Rosli, bekas pensyarah sains nuklear Universiti Kebangsaan Malaysia (UKM) bercakap berdasarkan kepakarannya. Begitulah Malaysia, sampai bila politik akan terus mengatasi ilmu, Wallahualam.

Ketika kemuncak isu ini lapan tahun lalu, terlalu banyak momokan hingga ada yang jual tanah dan rumah. Malah ada yang mahu berpindah dari Kuantan selain cerita fiksyen ala Hollywood kononnya ikan dan manusia jadi mutasi gara-gara pencemaran Lynas.

Namun sedekad berlalu, kilang Lynas hasil pelaburan Australia yang bertaraf 'state of the art' itu beroperasi dengan selamat. Ini bertepatan dengan standard keselamatan tinggi ditetapkan agensi kerajaan seperti Lembaga Pelesenan Tenaga Atom (AELB).

Yang tak disangka, Pasir Gudang, Johor yang terletak 350 kilometer dari Kuantan pula berlaku pencemaran toksik. Begitulah, kecil atau besar, Lynas atau sekadar kilang tayar terpakai, yang penting harus pastikan operasinya mematuhi standard keselamatan.

Risiko ada di mana-mana, yang penting mesti diuruskan dengan betul. Jika tidak, kilang proses sisa plastik import yang kini meresahkan ramai pun ada ancaman pada alam sekitar. Maka ini kali, dengarlah cakap pakar sebelum keputusan muktamad dibuat Kabinet mengenai Lynas.

LAMPIRAN 3
UTUSAN MALAYSIA (FORUM): MUKA SURAT 19
TARIKH: 3 APRIL 2019 (RABU)

KONTRAKTOR yang ditugaskan membersihkan Sungai Kim-Kim mengambil sampel tanah, di Pasir Gudang, Johor Bahru, baru-baru ini. - UTUSAN/NUR AISYAH MAZALAN

Urus sisa toksik lebih baik

SAUDARA PENGARANG,

PEMBENTUKAN Jawatankuasa Kebangsaan Pengurusan Sisa-sisa Toksik dan Pembuangan Terjadual adalah tepat pada masanya dan perlu disokong semua pihak kerana ia dapat membantu menangani isu pembuangan sisa berbahaya di negara ini.

Dilaporkan Jabatan Alam Sekitar (JAS) telah menyiapkan draf akhir bagi penubuhan jawatankuasa itu ekoran kes pencemaran kimia di Sungai Kim Kim sebelum dihantar ke Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim untuk kelulusan.

Saya percaya jawatankuasa itu platform tertinggi untuk membuat keputusan bagaimana mengurus sisa toksik dengan lebih baik supaya insiden Sungai Kim Kim tidak berulang.

Selain daripada JAS dan agensi lain berkaitan, jawatankuasa itu perlu libatkan pakar dari institusi pengajian tinggi dan sektor swasta.

Mereka perlu mengkaji bagaimana sisa-sisa toksik dan terjadual diuruskan di negara-negara maju supaya tidak membahayakan orang ramai dan alam sekitar.

Mereka juga perlu mencari jalan untuk meningkatkan aktiviti penguatkuasaan mengikut undang-undang sedia ada terutamanya Akta Kualiti Alam Sekitar 1974 dan Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005.

Walaupun undang-undang sedia ada mengawal selia 77 jenis sisa berbahaya, pembuangan secara haram masih berleluasa kerana kekurangan penguatkuasaan manakala mereka yang terlibat pula cenderung mengelak daripada menanggung kos pelupusan dan pembayaran levi.

Insiden di Sungai Kim Kim hanyalah sebahagian kecil kes kerana terdapat banyak sungai dan jasad air lain di seluruh negara yang mungkin tercemar oleh bahan kimia toksik yang dibuang sewenang-wenangnya tanpa dikesan kerana pemantauan tidak dapat dijalankan 24 jam sehari.

Selain daripada pembuangan haram, sisa toksik juga boleh berpunca dari tempat pembuangan dan tapak pelupusan sampah.

Kebanyakan tapak pelupusan dan pembuangan sampah tidak direka dengan betul di mana gas dan air resapan sampah (*leachate*) perlu dikumpul dan dirawat dengan betul sebelum dilepaskan ke alam sekitar.

Ini merupakan punca udara berhampiran tercemar dan berbau busuk sekali gus mencemari tanah dengan bahan berbahaya.

Lebih memburukkan keadaan, tempat pembuangan sampah haram semakin meningkat bagi menampung permintaan syarikat tempatan dan asing serta pengimport bahan buangan.

Saya berharap jawatankuasa yang bakal ditubuhkan itu akan turut mencadangkan pindaan undang-undang sedia ada agar mereka yang membuang bahan kimia dipaksa membayar kos pemulihan alam sekitar dan rawatan mangsa yang menderita akibat perbuatan tidak bertanggungjawab mereka.

TAN SRI LEE LAM THYE
Pengerusi NIOSH

LAMPIRAN 4
BERITA HARIAN (ISU): MUKA SURAT 7
TARIKH: 3 APRIL 2019 (RABU)

Tindakan kecil beri impak besar

Tenaga Nasional Berhad (TNB) melancarkan kempen meningkatkan Kecekapan Tenaga (EE) bertujuan memberi peringatan serta membimbing rakyat Malaysia berhubung kepentingan kelestarian alam sekitar menerusi penjimatan tenaga.

Matlamat utama kempen ini adalah untuk memacu transformasi ke arah masa depan tenaga ekosistem yang dapat mengimbangi antara kemapanan alam sekitar, keselamatan dan penyediaan tenaga boleh ubah serta pembangunan ekonomi optimal.

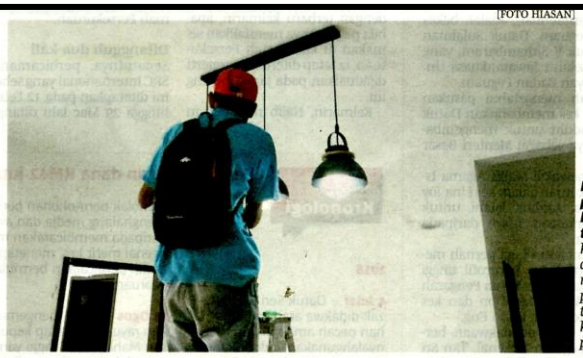
Mesej ini penting kerana kita melalui pengalaman suhu yang tinggi sejak beberapa tahun lalu dan bulan lepas yang menyebabkan penggunaan tenaga menerusi penyaman udara atau kipas menyumbang kepada penggunaan tinggi.

Ketua Pegawai Korporat TNB, Datuk Wira Roslan Ab Rahman, berkata permintaan terhadap tenaga makin meningkat secara global ketika ini dan dipercayai lebih banyak penggunaan kecekapan tenaga kemungkinan dapat mengubah cara penggunaan tenaga dalam kalangan pengguna.

> Kami percaya bahawa langkah kecil mampu memberi pulangan besar"

Roslan Ab Rahman,
Ketua Pegawai Korporat TNB

[FOTO HIASAN]



Lebih banyak penggunaan kecekapan tenaga *kemungkinan dapat mengubah cara penggunaan tenaga dalam kalangan pengguna.*

Roslan berkata, pihaknya percaya bahawa langkah kecil mampu memberi pulangan besar.

"Misi kami adalah meneruskan sumbangan kepada pembangunan masyarakat dengan menyediakan Malaysia yang selamat dan mempunyai tenaga boleh ubah mencukupi.

Kuasai inisiatif hijau

"Kami adalah peneraju dalam operasi ini dan mengenal pasti strategi, menguasai inisiatif hijau dalam perniagaan dan menguruskan karbon bagi menyediakan produk tenaga bersih dan perkhidmatan kepada pelanggan," katanya.

Hakikat, wujud ketidaksamaan dalam corak penjimatan tenaga dalam kalangan rakyat Malaysia dan sebahagian negara di dunia ini.

Corak penggunaan tenaga pada masa ini dan tekanan persekitaran berkaitan memberi kebimbangan kepada kerajaan Malaysia.

Sementara itu, Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC), Yeo Bee Yin, berkata rangka kerja pengawalseliaan membabitkan Akta Kecekapan Tenaga dan Pematuhan akan diperbaharui dalam Pelan Tindakan Kecekapan Tenaga Negara yang dijangka dapat mencapai 80 peratus kecekapan tenaga pada 2020.

Bagi mencapai matlamat itu, 50 bangunan kerajaan menggunakan lampu LED dan peralatan yang mempunyai Nilai Kecekapan Tenaga yang tinggi. Cara ini dijangka dapat menjimatkan RM47 bilion untuk tempoh 15 tahun.

Dalam memastikan pembangunan negara, TNB memperkukuhkan keupayaan mengikuti keadaan semasa ke arah ekonomi rendah karbon dengan mempromosikan penjanaan tenaga boleh diperbaharui, merangkul teknologi baru sepanjang operasi dan memperkasa pelanggan menerusi penggunaan kuasa mereka.

Usaha meningkatkan kepentingan penggunaan tenaga yang dapat memberi manfaat kepada 9.1 juta pelanggan, TNB memperkenalkan produk berinovasi berasaskan tenaga teknologi seperti meter pintar Maevi® and GSPARX® kepada pengguna di Malaysia.

LAMPIRAN 5
THE STAR (NATION): MUKA SURAT 6
TARIKH: 3 APRIL 2019 (RABU)

Waterspout likely brought on by hot spell

By LIEW JIA XIAN
jiaxian@thestar.com.my

GEORGE TOWN: The waterspout that wreaked havoc in three villages in Tanjung Tokong could have been driven by the hot spell in the state, said Universiti Sains Malaysia (USM) School of Physics Deputy Dean Assoc Prof H.S. Lim.

The phenomenon took place over the sea as it was warmer than land during midday.

"Warm and moist air is key to waterspout formation," he said.

"The warm air that rises rapidly forms lines of towering lower clouds called cumulus clouds."

Describing the phenomenon as "not normal", he said the waterspout on Monday was larger and stronger compared to the previous sightings of such phenomenon in Penang.

"This might be due to climate change," he said.

He added that waterspouts would occur during the transitional season, a change of northeast to southwest monsoon usually around March and April.

Prof Lim said the "rotation" would begin as air converges on the column of rising warm water.

"Although a waterspout is characterised as a tornado, it usually dies out when it travels from water to land. It will lose its energy (warm water).

"The public should avoid waterspouts as it can cause decent damage and kill people when the rotation of warm air is strong," he said.

USM's marine biologist Prof Dr Zulfigar Yasin said the size of the waterspout usually depends on the wind force.

"Waterspouts happen randomly ... (However), the probability of a waterspout happening will be higher when there is a thunderstorm.

"A waterspout is formed due to condensation in clouds and it can happen in both ways – from sea to the land and vice versa," he said yesterday.

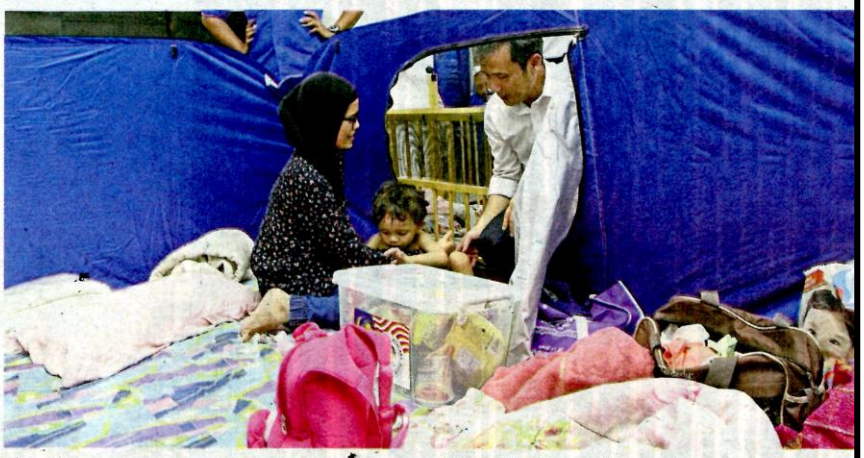
Dr Zulfigar advised people to stay indoors when such a phenomenon occurs in the future.

"Do not go outside and stay away from glass windows as it might shatter. Try to keep away from the water.

"If you are out in the open, try to go into a solid shelter or hide behind buildings to stop flying debris from hurting you," he said.

A waterspout was seen near the UDA low-cost flats near Tanjung Tokong in Penang on Monday.

In the photos and videos that went viral on social media, zinc sheets could be seen swirling mid-air and the waterspout, together with huge sea waves, was heading towards land.



Showing support: Penang Island City Council mayor Datuk Yew Tung Seang visiting residents of the UDA low-cost flats whose homes were damaged by the waterspout.

Watch the video
thestartv.com

Aftermath: One of the damaged houses near Tanjung Tokong in George Town.

The most recent waterspout was over Penang Bridge in March and October 2017.

However, waterspouts in Penang are weak and dissipate in less than 30 minutes unlike in areas where vast plains meet the sea and waterspouts can reach tornado speeds.

Waterspouts here generally exhibit winds of less than 30m per second, which is around 10 times less violent than tornadoes.

Meanwhile, Malaysian Meteorological Department director-general Datuk Alui Bahari said a waterspout could occur anywhere near the waters in Malaysia.

"It is usually formed during the monsoon transition phase, between April to May and October to November," he said.

"This is not a first for Penang."

LAMPIRAN 6
NEW STRAITS TIMES (NATION): MUKA SURAT 9
TARIKH: 3 APRIL 2019 (RABU)

POWER SAVING

TNB promotes energy efficiency

KUALA LUMPUR: Tenaga Nasional Bhd (TNB) is launching a campaign to promote Energy Efficiency (EE) with the intention to remind and educate Malaysians on the significance of environmental sustainability through power saving.

The larger purpose of the campaign is to steer the transformation towards a future energy ecosystem that delivers a balance between environmental sustainability, secure and reliable energy supply and optimal economic development.

This message is especially important as the country experiences some of the highest temperatures seen in the past years, in the last month. This has prompted many consumers to consume more energy through the usage of air-conditioners or fans or coolers, often leading to higher consumption.

"Given the increasing demand for energy at this time, and even globally, we believe more efficient energy usage is possible with change in energy consumption behaviour, which possibly necessitates a mindset shift", said TNB chief corporate officer Datuk Wira Roslan Ab Rahman.

Disparity exists in the adoption of energy-saving behavioural patterns among Malaysians and other parts of the world. Findings indicate that Malaysians are more apathetic towards the conservation of power. Malaysian scores pale in comparison to certain Western countries like Norway, Switzerland and Sweden according to the World Economic Forum report, Fostering Effective Energy Transition 2018.

The study shows that mindfulness of energy efficiency and adoption of power-conserving methods plus readiness for transition for secure, sustainable, affordable and reliable energy future is approximately 15 per cent higher in these countries, allowing those economies to make strategic energy investments committed towards environmental stewardship.

Current energy consumption patterns and associated environmental pressures have ignited the Malaysian government's concerns regarding energy conservation. Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin, highlighted that a regulatory framework, Energy Efficiency and Conservation Act (EECA) will be put in place to renew the National Energy Efficiency Action Plan, which is set out to achieve eight per cent energy efficiency by 2020.

The ministry has committed to retrofit 50 government buildings with energy efficient LED lightings and high-EEV (Energy Efficient Value) appliances. There is an expectation that this will lead to a savings of RM 47 billion over 15 years.

"We are at an interesting and important juncture of energy efficient evolution in the country. As the energy industry continues to evolve, TNB has become increasingly aware of the need to meet the global energy challenge and support the transition towards a low-carbon economy.

"With TNB having the ability to play a significant role in much of the ongoing change, it takes upon itself the responsibility to balance this shift although no single government, industry or institution can address the challenges alone," said TNB chief strategy and regulatory officer Datuk Fazlur Rahman Zainuddin.

"Energy is at the heart of modern economic prosperity. EE is believed to be the first leg of a sustainable global energy ecosystem, and as most things, this too begins at home.

"I believe it could be the first step towards mitigation of climate change, better energy security, growing green economies and delivering solid environmental benefits."

The current heatwave in the country has prompted Malaysians to consume more energy through the usage of air-conditioners and fans. FILE PIC

While TNB stresses on the importance of energy efficiency to its 9.1 million customers, through the introduction of product innovations in energy technology like the smart meter, Maevi® and GSPARX® to Malaysian households, it recognises these technologies as the first big step of empowering customers towards the sustainable energy industry of the future, beyond instilling environmental consciousness into the minds of Malaysians.

The company actively adopts efficient technologies and ensures that even the older plants are properly maintained and where possible, upgraded to maintain their efficiency.

Six of TNB's Distribution buildings were selected as models of energy-efficient buildings in the country. Under the Asean Energy Awards, Wisma TNB Jalan Timur was awarded First-Runner up under the Energy Management for Buildings and Industries Awards in the Large Building Category, for demonstrating excellence, creativity, practicality and dedication in the field of energy efficiency. With this initiative, TNB managed to reduce up to six per cent of energy consumption in the building.

"Our mission is to continue contributing to the nation's development by providing Malaysia with safe, secure and reliable energy. Having said this, we anchor our operations on an identified strategy; embracing green initiatives throughout our business, from managing our own carbon footprint to providing clean energy products and services to customers."

LAMPIRAN 7
THE STAR (NATION): MUKA SURAT 15
TARIKH: 3 APRIL 2019 (RABU)

BALANCING ENERGY COST AND SUSTAINABILITY

KUALA LUMPUR: There has been some discussion in the media recently on electricity tariff and how the downward movement of international coal and gas prices in recent months should be reflected in lower tariffs. This has been suggested by various bodies representing both domestic and non-domestic consumers.

Taking a step back, it is perhaps a good time to review the entire tariff setting process and how fuel prices affect this.

This brings us to imbalance cost pass-through (ICPT) that has been adopted by many other countries to maintain stability in domestic markets and protect them from international volatility. Usually the adoption of an ICPT mechanism is the first step towards liberalisation of the utility market, as mentioned by industry observers.

Under the incentive-based regulation (IBR) framework under Energy Commission, the Government fixes the tariff for a period of three years at a time (called the regulatory period) to ensure market stability.

However, as fuel comprises a major part of the tariff, fluctuations in international markets need to be built into the tariff. As per the ICPT mechanism, the Government reviews the actual fuel prices every six months and makes the necessary adjustment to reflect this.

Changes in fuel prices are reflected as rebates or surcharges depending on the decrease or increase of fuel prices, compared with the budgeted fuel prices set by the Government, which is passed on to consumers. The ICPT mechanism is meant to be fair and transparent, in line with global standards, and complies with the agreed IBR framework. From March 2015 till mid-2018, consumers have enjoyed a rebate of more than RM6.3bil.

Changes in fuel prices are reflected as rebates or surcharges which is passed on to consumers. From March 2015 till mid-2018, consumers have enjoyed a rebate of more than RM6.3bil.

In the current regulatory period (or RP2), the "budgeted" price for coal is set at US$75 per ton. Last year when the surcharge was fixed, coal prices had risen.

Since then coal prices have fallen to below US$90 per ton from the middle of last year. Given that there is usually a lag of six months for adjustment to actual fuel prices, there is a high likelihood of a lower surcharge for the next ICPT period (July-December 2019).

The tariff through the IBR framework has and continues to keep the interest of the *rakyat* in mind, given that the tariff for domestic or residential customers has already been capped and the surcharge is being subsidised by the Government.

Indeed, research has shown that electricity is a very small driver of cost of living; it comprises only 2.7% of the overall Customer Price Index, according to the CPI 2018 report from the Statistics Department. This means the small increase in electricity prices alone should have only a negligible impact on overall business costs and cost of living.

It may also be an opportune time to view the situation through a different lens, one that takes into account the long term sustainability of our future and the Malaysian economy – a perspective that is often referred to by economists.

Presently, Malaysia enjoys one of the lowest electricity tariffs in the world. However, much of this is due to the subsidies on natural gas that the Government has provided.

While reducing the cost burden on the *rakyat*, subsidies can also negatively impact the economy in the long run. Money that could be spent on other public amenities is being used to artificially hold down the price of natural gas. Is this something we can afford to ignore if we were to think of the future?

Consequently, it is important to note that the subsidy cannot last forever, and calls for a more efficient mechanism for subsidies to be more targeted.

This is one of the reasons why the Government has implemented a subsidy rationalisation plan. The aim of this is to reduce allocation on subsidies to enable efficient spending on development programmes.

Climate change and rising temperatures are very apparent over the past few months. However, as in other developed economies, perhaps it's time for Malaysians to take control and adopt more energy efficient practices to reduce energy consumption and therefore rising bills, the example being set by the Energy Minister Yeo Bee Yin herself, with her proposal to make government buildings energy efficient and attain a savings of RM47bil by 2030.

LAMPIRAN 8
THE STAR (NATION): MUKA SURAT 9
TARIKH: 3 APRIL 2019 (RABU)

ENERGY EFFICIENCY FOR THE FUTURE

KUALA LUMPUR: Tenaga Nasional Bhd is launching a campaign to promote energy efficiency, with the intention to remind and educate Malaysians on the significance of environmental sustainability through power saving.

The larger purpose of the campaign is to steer the transformation towards an energy ecosystem in the future that delivers balance between environmental sustainability, secure and reliable energy supply, and optimal economic development.

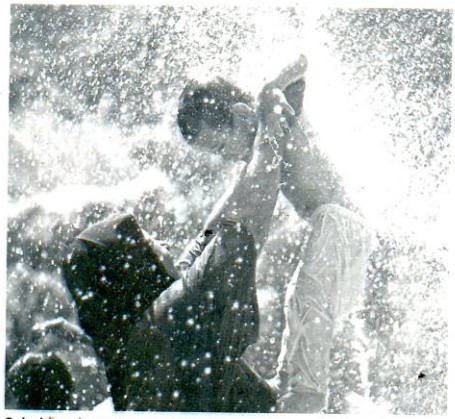
This message is especially important as in the last month we experienced some of the highest temperatures that we have seen in the past years, prompting more usage of air conditioners, fans or coolers, often leading to higher power consumption.

"Given the increasing demand for energy at this time, and even globally, we believe more efficient energy usage is possible with change in energy consumption behaviour which possibly necessitates a mindset shift," said TNB chief corporate officer Datuk Wira Roslan Ab Rahman.

Disparity exists in the adoption of energy saving behavioural patterns among Malaysians and other parts of the world.

Findings indicate that Malaysians are more apathetic towards conservation of power; Malaysian scores pale in comparison with countries like Norway, Switzerland and Sweden, according to the World Economic Forum report *Fostering Effective Energy Transition 2018*.

The study shows that mindfulness of energy efficiency and adoption of power conserving methods plus readiness for transition to a secure, sustainable, affordable and reliable energy future is about 15% higher in these European countries, allowing their economies to make strategic energy investments towards environmental stewardship.



Splashing time: Mother and son cooling off at a water fountain to escape the heat. The recent heatwave sent energy bills of households soaring due to increased usage of air-conditioners and fans.

Current energy consumption patterns and associated environmental pressures have ignited the government's concerns regarding energy conservation.

Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin highlighted that a regulatory framework, the Energy Efficiency and Conservation Act (EECA), will be put in place to renew the National Energy Efficiency Action Plan, which set out to achieve 8% energy efficiency by 2020.

To set the tone, the ministry committed to retrofit 50 government buildings with energy efficient LED lighting and high energy efficient value appliances.

There is an expectation that this will lead to savings of RM47bil over 15 years.

"We are at an interesting and important juncture of energy efficient evolution in the country," said TNB chief strategy and regulatory officer Datuk Fazlurr Rahman Zainuddin.

"As the energy industry continues to evolve, TNB became increasingly aware of the need to meet the global energy challenge and support the transition towards a low-carbon economy.

"With TNB having the ability to play a significant role in much of the ongoing change, it takes upon itself the responsibility to balance this shift, as no single government, industry or institution can address the challenges alone."

Having contributed to the nation's development, TNB's intention is to enhance its capabilities and stay abreast of the transition towards a low-carbon economy by promoting renewable energy generation, embracing new technologies throughout the operations, and empowering customers to make better use of their power usage through energy efficiency.

"Energy is at the heart of modern economic prosperity. Energy efficiency is believed to be the first leg of a sustainable global energy ecosystem, and as most things, this too begins at home.

"I believe it could be the first step towards mitigation of climate change, better energy security, growing green economies, and delivering solid environmental benefits," Fazlurr said.

While TNB stresses on the importance of energy efficiency to its 9.1 million customers, through the introduction of product innovations in energy technology like the Maevi and GSPARX smart meters to Malaysian households, it recognises these technologies as the first big step of empowering customers towards the sustainable energy industry of the future, besides instilling environmental consciousness in Malaysians.

TNB also actively adopts efficient technologies and ensures that even the older plants are properly maintained and where possible, upgraded to maintain their efficiency.

As an example, TNB decommissioned inefficient and ageing combined cycle gas turbine (CCGT) plants and replaced them with cutting-edge CCGT technologies that enabled the plants to achieve generation efficiency of up to 60%.

Additionally, six of TNB's distribution buildings were selected as models of energy efficient buildings in the country.

At the Asean Energy Awards, Wisma TNB Jalan Timur in Petaling Jaya was first-runner up under the Energy Management for Buildings and Industries Awards in the Large Building Category, for demonstrating excellence, creativity, practicality and dedication in the field of energy efficiency.

With this initiative, TNB has managed to reduce up to 6% of energy consumption in the building.

"We believe it's the small steps that give us the eventual mileage," said Roslan.

"Sustainability lies at the core of all that we do and is embedded in our company policies and inextricably linked with our business strategy and decisions.

"Our mission is to continue contributing to the nation's development by providing Malaysia with safe, secure and reliable energy.

"Having said this, we anchor our operations on an identified strategy – embracing green initiatives throughout our business, from managing our own carbon footprint to providing clean energy products and services to customers."

LAMPIRAN 9
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 21
TARIKH: 3 APRIL 2019 (RABU)

UTUSAN MALAYSIA
RABU • 03.04.2019
Mega
sains
mega utusan malaysia

Seronoknya sains

USAHA mempromosi sains dan menarik minat golongan muda terhadap bidang itu sewajarnya menonjolkan elemen keseronokan serta bagaimana sains dan teknologi dapat membantu memudahkan urusan seharian.

Minggu Sains Negara akan menjadi platform menjana minat pelbagai lapisan masyarakat supaya cintakan sains dan alam sekitar untuk kesejahteraan.

Ini kerana peranan sains amat penting dan menjadi teras pembangunan serta menjadi penanda aras kemajuan tamadun manusia.

LAMPIRAN 9 (SAMB.)
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 22
TARIKH: 3 APRIL 2019 (RABU)

Pintar bersama sains maju bersama teknologi

Oleh LAUPA JUNUS
laupajunus@hotmail.com

SATU daripada prasyarat utama hendak mencapai negara maju adalah rakyatnya mempunyai ilmu dan menguasai sains dan teknologi.

Malaysia sedang menuju ke arah itu tetapi berdepan dengan banyak cabaran.,

Rakyat Malaysia perlu berupaya untuk menguasai sains dan teknologi untuk menyemarakkan lagi perkembangan ekonomi, kemajuan masyarakat dan sebagai sumber ekonomi baharu untuk memacu negara mencapai status negara maju.

DR. MOHD. AZHAR YAHAYA

Masyarakat perlu mempersiapkan diri untuk mendepani cabaran Revolusi Perindustrian Keempat (IR 4.0) dengan mengamalkan dan mengadaptasi teknologi masa hadapan.

Perubahan yang dibawa oleh IR 4.0 dipacu tiga domain teknologi utama iaitu fizikal, digital dan biologikal. Ini merangkumi *Augmented Reality*, kepintaran buatan (*Artificial Intelligence*) robotic, *Internet of Things* (IoT), *Autonomous Vehicle*, percetakan 3-D g, teknologi nano, bioteknologi dan perkomputeran awanan (*cloud computing*).

Pelbagai usaha perlu dilaksanakan dengan melahirkan lebih banyak bakat yang diperkasakan dengan kemahiran abad ke-21 untuk menerajui negara dalam bidang S&T dan mampu beradaptasi kepada teknologi disruptif.

Kerajaan telah menyediakan pelbagai platform untuk meningkatkan kesedaran orang ramai mengenai kepentingan sains dan seterusnya melahirkan lebih ramai lagi generasi penyumbang kepada kemajuan sains dan teknologi.

Bagi memastikan keperluan modal insan ini tercapai, pembudayaan inovasi dan kreativiti di semua peringkat masyarakat perlu dipergiat menerusi pelaksanaan program dan aktiviti berteraskan sains, teknologi dan inovasi (STI). IR 4.0 meletakkan cabaran yang hebat kepada semua sektor di negara ini yang memerlukan kita melakukan perubahan seiring dengan transformasi digital untuk kekal berdaya saing sama ada di dalam atau luar negara.

ANTARA bahan pameran di Pusat Sains Negara yang sedia menanti kedatangan pengunjung sempena Minggu Sains Negara 2019.

MINGGU SAINS NEGARA

Cabarannya menuntut pembaharuan atau penemuan pelbagai teknologi dalam bidang seperti robotik automasi, penjanaan kuasa elektrik, AI, *virtual reality*, *augmented reality* dan sebagainya.

Walau bagaimanapun, asas kepada perkara ini adalah sejauh mana kesedaran setiap individu mengenai keperluan tersebut. Ilmu dan pendidikan adalah teras dalam usaha mempersiapkan pelajar dan graduan menangani cabaran baharu revolusi tersebut.

Dalam hal ini pembudayaan dalam bidang tenaga, sains teknologi, alam sekitar dan perubahan iklim (ESTECC) menggambarkan tanggungjawab merujuk kepada nama kementerian itu sendiri.

Pendidikan ESTECC perlu dimulakan dari peringkat sekolah rendah lagi untuk menyemai minat pelajar dalam bidang tersebut kerana merekalah yang akan melahirkan sumber manusia berasaskan sains dan teknologi bagi memenuhi kehendak pasaran dalam bidang penyelidikan, perindustrian, pembangunan dan penyelenggaraan.

Pembudayaan ESTECC merupakan salah satu inisiatif kementerian terlibat bagi membantu menarik minat pelajar terhadap STEM (Sains, Teknologi, Kejuruteraan Matematik) serta sebagai platform pendedahan ilmu ke arah memilih aliran pendidikan dan kerjaya terutama dalam bidang sains dan teknologi.

Dalam hal ini minat terhadap bidang STEM dalam kalangan pelajar juga perlu diberikan perhatian serius. Perkara ini penting bagi memastikan negara mempunyai modal insan yang berpengetahuan dan berkemahiran selari dengan keperluan negara.

Secara tidak langsung, program ini akan meningkatkan pembangunan modal insan dan menarik minat pelajar untuk memilih bidang dan jurusan STEM sebagai kerjaya serta mengiktiraf sumbangan saintis, ahli akademik serta individu dalam mempromosikan sains.

Program kesedaran sains teknologi dan inovasi (STI) memerlukan penglibatan semua pihak secara berterusan dan menyeluruh. Bagi memberi impak yang lebih besar dan menyeluruh, adalah wajar satu minggu khas dikhususkan

MESTECC memberi fokus kepada masalah penggunaan plastik bagi menjamin kehidupan yang lebih sejahtera

LAMPIRAN 9 (SAMB.)
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 23
TARIKH: 3 APRIL 2019 (RABU)

DEMONSTRASI atau eksperimen mudah antara pendekatan untuk menarik minat pengunjung.

sebagai satu inisiatif untuk menyemarakkan gerakan sains kebangsaan.

Bagi merealisasikan aspirasi ini, penganjuran minggu sains harus dilaksanakan dengan menggemblengkan semua aktiviti berteraskan STI anjuran kementerian, industri dan sektor swasta. Penglibatan menyeluruh semua pihak seperti guru, pelajar, ibu bapa, pertubuhan bukan kerajaan dan industri diyakini dapat meningkatkan kesedaran dan minat terhadap kepentingan STI.

Menyedari akan kepentingan dan cabaran bidang sains, Kementerian Tenaga Sains, Teknologi Alam Sekitar dan Perubahan Iklim (MESTECC) menganjurkan Minggu Sains Negara (MSN) pada minggu ini bagi menjana minat orang ramai akan kepentingan bidang tersebut.

Ketua Setiausaha kementerian, Datuk Seri Dr. Mohd. Azhar Yahaya, berkata, pameran pada kali ini menampilkan konsep yang menepati perkembangan sains semasa termasuk berkaitan STEM dan IR 4.0.

"Kita akan tampilkan peralatan berkaitan teknologi IoT, *augmenterd reality* yang dapat menarik minat pelajar dalam sains dan matematik serta bersifat interaktif," ujarnya.

Penganjuran minggu atau hari sains telah diamalkan di beberapa buah negara seperti Afrika Selatan, China, Kanada, Norway dan United Kingdom manakala negara seperti India dan Thailand memperuntukkan satu hari sahaja bagi sambutan hari sains.

Penganjuran program ini adalah selari dengan sambutan World Science Day yang dianjurkan oleh Pertubuhan Pendidikan, Sains dan Kebudayaan Bangsa-Bangsa Bersatu (Unesco) sejak 2002.

Jemaah Menteri pada 13 Disember 2017 telah bersetuju supaya kementerian berkenaan menganjurkan MSN di seluruh negara setiap tahun sebagai salah satu inisiatif sains kebangsaan.

MSN merupakan salah satu daripada inisiatif MESTECC dalam usaha memupuk minat terhadap ilmu sains.

Sambutan ini akan mengenengahkan pelbagai hasil usaha kerajaan dalam menggalakkan pembangunan dan kemajuan STI negara.

Kata beliau, MSN sewajarnya menjadi platform untuk menyemarak dan membudayakan STI di pelbagai peringkat dan penglibatan semua yang terlibat.

"Seterusnya ia memberi kesedaran kepada rakyat betapa pentingnya STI dalam menjana pertumbuhan ekonomi dan menjadikan Malaysia sebuah negara yang maju," ujarnya lagi.

MSN 2018 yang julung kalinya diadakan pada 1 hingga 7 April 2018 telah mendapat sambutan menggalakkan dalam kalangan masyarakat.

INFO

Minggu Sains Negara Fasa 1

Tarikh: 1 hingga 7 April 2019

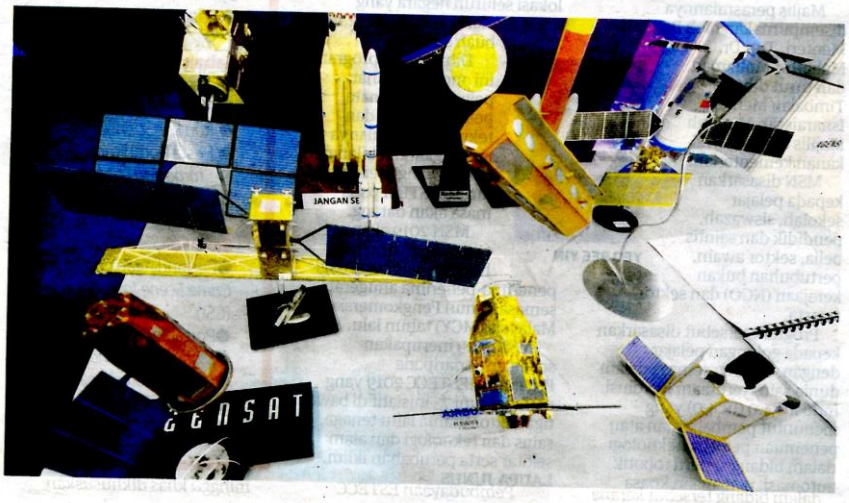
- Melibatkan lima negeri iaitu Wilayah Persekutuan, Terengganu, Kedah, Sabah dan Sarawak.
- Fasa kedua akan dilaksanakan pada 2 hingga 8 Ogos 2019 di sembilan buah negeri yang lain.
- Program ini dirasmikan oleh Perdana Menteri, Tun Dr. Mahathir Mohamad di Pusat Sains Negara, malam tadi.

Antara objektif khusus program:

(i) Meningkatkan kesedaran masyarakat terhadap kepentingan sains, teknologi dan inovasi (STI) dalam kehidupan seharian.

(ii) Menarik minat dan meningkatkan bilangan pelajar yang memilih jurusan STEM selaras dengan agenda STEM.

(iii) Menghargai dan mengiktiraf sumbangan dan kejayaan dalam bidang sains.



LAMPIRAN 10
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 23
TARIKH: 3 APRIL 2019 (RABU)

AZHAR Yahaya menurunkan tandatangan sebagai tanda sokongan terhadap pengharaman penggunaan plastik sekali guna di Pusat Sains Negara.

Sains untuk kesejahteraan

DALAM pada itu, Sains Untuk Kesejahteraan dipilih sebagai tema Minggu Sains Negara (MSN) 2019 bertujuan meningkatkan kesedaran dalam kalangan pelajar khususnya dan orang ramai tentang penjagaan alam sekitar bagi memastikan kesejahteraan rakyat.

"Kita tumpukan kempen hindari penggunaan plastik sekali guna pada Minggu Sains Negara kali ini," ujar Dr. Mohd. Azhar.

Katanya, ini penting bagi memberi peringatan dan meningkatkan kesedaran dalam pengurusan alam sekitar selain kepada pembangunan ekonomi.

Kata beliau, matlamat kementerian adalah bagaimana sains dapat dimanfaatkan untuk pembangunan dan bagaimana sikap kita terhadap alam sekitar.

"Kita kena menyayangi alam sekitar dan sejauh mana kita memahami peranannya dalam menjamin kehidupan yang lebih sejahtera," ujarnya sambil merujuk kepada isu pembuangan sisa toksik yang mencemarkan Sungai Kim Kim di Pasir Gudang, Johor baru-baru ini.

Justeru katanya, tema tersebut adalah signifikan kepada kehidupan seharian manusia kerana sains dan teknologi memberi kesan yang besar terhadap kelestarian alam sekitar dan masyarakat.

Memandangkan pembangunan teknologi diperlukan untuk pembangunan negara, adalah sangat penting untuk menyepadukan ilmu sains dan teknologi dengan sains sosial dalam membincangkan isu berkaitan teknologi dan kesannya terhadap kelestarian persekitaran.

Kadar perkembangan teknologi yang pesat memerlukan pertimbangan yang teliti dan bermakna ke arah teknologi yang mencerminkan perkongsian nilai masyarakat dan persekitaran.

PENGUNJUNG mencuba penggunaan bahan pameran.

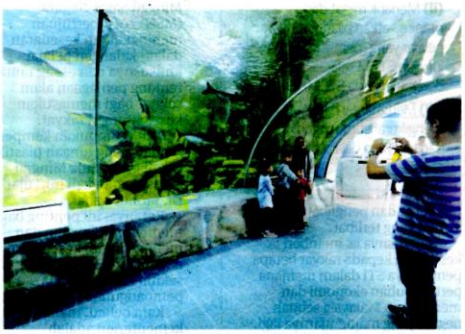
LAMPIRAN 11
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 24
TARIKH: 3 APRIL 2019 (RABU)

Sasaran satu juta pengunjung

MINGGU Sains Negara (MSN) yang dianjurkan kali ini agak unik dan mempunyai kelainan iaitu diadakan secara dua fasa melibatkan empat negeri dan Kuala Lumpur yang terlibat dalam fasa pertama. Dengan sekian banyak aktivit yang dirancang dan sebahagiannya telah berlangsung , kira-kira sejuta pengunjung disasarkan datang pada minggu kali ini.

Pengisiannya menunjukkan kesungguhan Kementerian Tenaga , Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC) untuk mendekatkan sains kepada masyarakat dan bukan sebaliknya. Menterinya Yeo Bee Yin mahu supaya masyarakat menghargai sains dan kepentingannya dalam memacu pembangunan negara.

"MSN merupakan platform bagi meningkatkan kesedaran masyarakat terhadap kepentingan sains dan teknologi dalam kehidupan manusia dan kemajuan negara.



PINTU masuk Pusat Sains Negara sedia menanti kedatangan pengunjung.

Penganjurannya juga dilaksanakan di beberapa buah negara lain seperti Afrika Selatan, China, Kanada, Norway, India, Thailand dan United Kingdom," ujarnya pada majlis perasmian MSN di Pusat Sains Negara malam tadi.

Majlis perasmiannya disempurnakan oleh Perdana Menteri, Tun Dr. Mahathir Mohamad dan turut dihadiri Timbalan Menteri, Isnaraissah Munirah Majilis dan pegawai kanan kementerian.

MSN disasarkan kepada pelajar sekolah, siswazah, pendidik dan saintis belia, sektor awam, pertubuhan bukan kerajaan (NGO) dan sektor swasta.

Program tersebut disasarkan kepada golongan pelajar dengan cabaran semasa dalam dunia sains terutaam Revolusi Industri 4.0 (IR 4.0) yang menuntut pembaharuan atau penemuan pelbagai teknologi dalam bidang seperti robotik automasi, penjanaan kuasa elektrik, kepintaran buatan, *virtual reality*, *augmented reality* dan sebagainya. Asas kepada perkara ini adalah sejauh mana kefahaman, penghayatan dan kesedaran setiap individu mengenai keperluan tersebut.

Dalam masa yang sama ilmu dan pendidikan adalah teras dalam usaha mempersiapkan pelajar dan graduan menangani cabaran baharu revolusi tersebut manakala pendidikan dan pembudayaan sains, teknologi dan inovasi (STI) perlu dimulakan dari peringkat sekolah rendah lagi untuk menyemai minat pelajar dalam bidang tersebut.

MSN pada tahun ini menetapkan jumlah sasaran pengunjung yang ramai dan terlibat dalam setiap program dan aktiviti yang dianjurkan.

Mobile Science Centre akan melaksanakan aktiviti di 24 lokasi seluruh negara yang menyasarkan penglibatan 2,100 buah sekolah.

Diharapkan program ini menarik minat pelajar dalam mata pelajaran sains dan teknologi seterusnya meningkatkan bilangan pelajar yang mengambil jurusan STEM pada masa akan datang.

YEO BEE YIN

MSN 2019 akan turut mempamerkan hasil-hasil inovasi bagi penerima-penerima anugerah semasa Tahun Pengkomersialan Malaysia (MCY) tahun lalu.

MSN 2019 merupakan sebahagian daripada Program MESTECC 2019 yang merangkumi 73 inisiatif di bawah tiga sektor utama iaitu tenaga, sains dan teknologi dan alam sekitar serta perubahan iklim.-

LAUPA JUNUS

PENGUNJUNG teruja melihat pameran hidupan liar di Pusat Sains Negara.

PENGISIAN PROGRAM

Pusat Sains Negara, Bukit Kiara Kuala Lumpur pada 27 Mac hingga 7 April 2019

- Pembukaan galeri baru *Science Valley*.
- Pelepasan rama-rama hidup secara serentak (*Malaysia Books of Records*).
- PSN E-*Sport tournament*.
- RC Jet (PSN cawangan utara).

Terengganu

- *Science Troopers*.
- Ekspo Sains.
- Sesi perkongsian idola sains oleh Prof. Dr. Wan Ahmad Tajuddin.
- Sesi perkongsian Sains Untuk Kesejahteraan oleh penyanyi dan pengacara Heliza Helmi.
- Forum kepentingan vaksin.
- Pameran fotografi dan bengkel asas fotografi (kemunculan istimema adik Syukur Khamis).
- *Science Island Hopping*.

Sabah

- Demonstrasi sains.
- Pertandingan roket air.
- *Run For Science*'19.
- Pesta Rombituon.
- *Stargazing at Maragang Hill*.

Sarawak

- Pertandingan penyiasatan *Crime Scene Investigation* (CSI).
- Portable Planetarium.
- *Marking Star Chart*.
- Penceraban cuaca.
- Projek roket.
- *Household e-waste*.

LAMPIRAN 12
THE STAR (STAR BIZ): MUKA SURAT 4
TARIKH: 3 APRIL 2019 (RABU)

Knight Frank positive on logistics/ industrial sub-sector

PETALING JAYA: The logistics/ industrial sub-sector is expected to continue remaining favourable in 2019, mainly attributable to the strong inflow of foreign direct investments in the manufacturing sector.

Knight Frank Malaysia in its Malaysia Commercial Real Estate Investment Sentiment Survey 2019, said more than a third of respondents anticipate capital growth in this market segment.

"Despite challenges in the Klang Valley retail market, this sub-sector continues to be favoured, particularly among selected developers. Besides undertaking retail developments, key players are hopeful their retail assets can become more competitive upon completion of asset enhancement initiatives."

Knight Frank said the logistics/ industrial sub-sector is expected to outperform in 2019 as more businesses and manufacturers embrace the Industry 4.0 age.

The property consultancy said the outlook for the healthcare/ institutional sub-sector is also positive as more investors shift their focus on these recession-proof segments.

"The respondents opined that the healthcare/institutional sub-sector had performed relatively well in 2018. The favourable performance of this sub-sector is expected to continue into 2019, supported by growing demand and fundamentals.

"The survey results revealed that 33% of respondents anticipate an increase in the yield of healthcare/ institutional assets in 2019."

Meanwhile, some respondents lamented the increased challenges in raising funds for commercial real estate, particularly the conventional assets.

Knight Frank said the healthcare and institutional assets will be somewhat insulated from this challenge.

Beyond the Klang Valley, the property consultancy said Penang continues to be favoured for its hotel/leisure and healthcare/institutional sub-sectors, supported by its Unesco World Heritage Site of George Town and its many attractions as well as its position as a leading medical tourism destination in the country.

"The southern region of Johor remains attractive for the logistics/ industrial sub-sector as the state maintains its position as the leading investment destination in the country for the manufacturing sector.

"Sabah continues to experience a tourism boom with 3.8 million tourist arrivals recorded in 2018. Supported by its rich natural environment and cultural diversity, the potential for its hotel/leisure sub-sector remains positive."

While pockets of opportunities may still be present in selected office sub-markets, Knight Frank said the overall outlook is gloomy moving into 2019, with the majority of respondents expecting occupancy and rental rates to fall.

"There is no immediate catalyst to address the growing mismatch in supply and demand," it said.

LAMPIRAN 13
THE STAR (NATION): MUKA SURAT 4
TARIKH: 3 APRIL 2019 (RABU)

Motorcade amid deluge

Heavy rains led to flash floods within the Klang Valley area. Road users near Serdang KTM Commuter station, including the Prime Minister's convoy, was heavily affected due to the floods. — AZMAN GHANI/ The Star

LAMPIRAN 14
THE SUN DAILY (NEWS WITHOUT BORDERS): MUKA SURAT 6
TARIKH: 3 APRIL 2019 (RABU)

Centralised waste park

To manage clean plastic waste imports better

BY **ASHWIN KUMAR**
newsdesk@thesundaily.com

KUALA LUMPUR: A centralised waste park will be set up to process and recycle plastic waste in every state, Housing and Local Government Minister Zuraida Kamaruddin, said yesterday.

Any plastic waste recycling factory outside the designated area will be declared illegal once the centralised waste park is operational, she added.

"By placing all plastic waste factories in a centralised waste park, we can monitor and manage clean plastic waste imports better.

"That is the way forward," Zuraida said in reply to a question from Che Abdullah Mat Nawi (PAS-Tumpat).

She also said her ministry was working with the Customs Department to inspect every container entering the country so that only clean plastics are allowed in.

The ministry is in talks with state governments on suitable locations for the parks, including on the conversion of landfills for such facilities.

There are also plans for each state to have a waste-to-energy (WTE) park, with larger states having more than one.

Each WTE plant will require land of between 4.04ha and 8.09ha.

Zuraida said the federal government would engage the state governments on land allocation if the states do not have enough land for the plant.

LAMPIRAN 15
NEW STRAITS TIMES (NEWS): MUKA SURAT 5
TARIKH: 3 APRIL 2019 (RABU)

'NO DECISION YET'

Cabinet to meet, discuss Lynas, says PM

PUTRAJAYA: Prime Minister Tun Dr Mahathir Mohamad said the cabinet has not decided on the future of the Lynas Malaysia Sdn Bhd (Lynas) project.

"We will answer queries on the Lynas project when we discuss in the cabinet.

"There will be differences in opinion. It is quite normal, but what is determined by the cabinet is official," he said after witnessing the signing ceremony between the KA Petra Sdn Bhd and Hutchinson Port Holdings Ltd to jointly develop the Ship-to-Ship Transfer Hub.

The government had in December stipulated two key conditions for Lynas to enable the company renew its operation licence.

The first is that the company is required to send 450,000 tonnes of water leached purification waste containing radioactive substances out of this country.

The second condition is that it needs to submit an action plan to dispose "Neutralisation Underflow Residue" (NUF), which do not contain radioactive materials.

This is subject to Regulations 9(6) and 9(7), as well as other regulations under the Environmental Quality (Scheduled Wastes) Regulations 2005. The licence renewal application will only be considered after it complies with the conditions.

LAMPIRAN 16
NEW STRAITS TIMES (HIGHER ED): MUKA SURAT 30
TARIKH: 3 APRIL 2019 (RABU)

Detect early signs of heart disease in under a minute

Mohamad Sabri Sinal received two major awards from Shibaura Institute of Technology in Japan.

THE number three must be a lucky digit for Universiti Utara Malaysia (UUM) tutor Dr Mohamad Sabri Sinal who was recently awarded the President's Award by Shibaura Institute of Technology in Japan.

Completing his postgraduate studies within three years while publishing three journal articles and presenting three conference papers proved fruitful for this academician from UUM's School of Computing.

He also received the Functional Control System Award.

"I am deeply honoured to receive these two major awards symbolic of the success of young Malaysians who are able to compete abroad, thus elevating the country to the highest level."

His published journal articles and conference paper proceedings focused on a combination of artificial intelligence, statistics and algorithm programming to generate high-performance computer mechanisms to detect early signs of stroke and uncertain heart activity done continuously through ECG data recorded for to 12 hours.

Through a study, 12-hour ECG data used together with the created mechanisms enabled the detection of early signs of heart disease in under a minute.

"In addition to carrying out main duties as a postgraduate student, I embarked on many of my initiatives to facilitate collaboration between Malaysian universities such as UUM, Universiti Putra Malaysia and Universiti Malaysia Perlis and Shibaura Institute of Technology.

"Although the schedule was packed with studies, I managed to balance it to ensure that everything that I planned went well because as a Malaysian student overseas, I am an ambassador for the country."

He was given the opportunity to teach, assist in supervision and conduct research with the support of Japanese professors and university administration.

"Nothing is easy in life and I began from scratch to reach this level. Hopefully it becomes an inspiration to others to continue to work hard," he added.

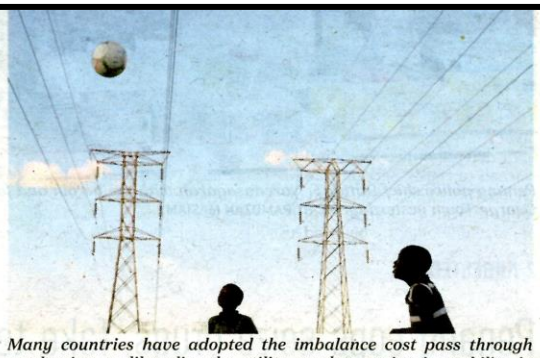
The President's Award is the university's highest recognition presented to a student with the best overall academic achievement involving a few stringent screenings to select the final candidates.

Meanwhile, the Functional Control System award is awarded by the university and Department of Functional Control System to the best overall postgraduate student in accordance with the merit of academic achievement, best research publication and best thesis.

LAMPIRAN 17
NEW STRAITS TIMES (NEWS): MUKA SURAT 11
TARIKH: 3 APRIL 2019 (RABU)

IMBALANCE COST PASS-THROUGH

Achieving a sustainable future via ICPT



Many countries have adopted the imbalance cost pass through mechanism to liberalise the utility market, maintain stability in domestic markets and protect them from international volatility. REUTERS PIC

KUALA LUMPUR: There have been discussions in the media recently around electricity tariffs and how the downward movement of international coal and gas prices in recent months should be reflected in lower tariffs.

It is perhaps a good time to review the entire tariff setting process and how fuel prices affect this. This brings us to the Imbalance Cost Pass-Through (ICPT), that has been adopted by many countries to maintain stability in domestic markets and protect them from international volatility. Usually the adoption of an ICPT mechanism is the first step towards the liberalisation of the utility market, as mentioned by industry observers.

Under the Incentive Based Regulation) (IBR) framework under Energy Commission (ST), the government fixes the tariff for a period of three years at a time (called regulatory period) in order to ensure market stability. However, as fuel comprises a major part of the tariff, fluctuations in international markets need to be built into the tariff. As per the ICPT mechanism, the government reviews the actual fuel prices every six months and makes the necessary adjustment to reflect this.

Changes in fuel prices are reflected as rebates or surcharges depending on the decrease or increase of fuel prices compared with the budgeted fuel prices set by government, which is passed onto consumers. The ICPT mechanism is meant to be fair and transparent, in line with global standards and complies to the IBR framework. Since March 2015, consumers have enjoyed a rebate of more than RM 6.3 billion until the middle of last year.

In the current regulatory period (or RP2), the "budgeted" price for coal is set at US$ 75/tonne (RM306/tonne. However, last year when the surcharge was fixed, coal prices had risen. Since then coal prices have fallen by a quarter to below US$ 90/ton since the middle of last year. Given that there is usually a lag of six months for adjustment to actual fuel prices, there is high likelihood there will possibly be a lower surcharge for the next ICPT period during July to December this year.

The tariff through the IBR framework has and continues to keep the interest of the people in mind, given that the tariff for domestic or residential customers has been capped and the surcharge is being subsidised by the government.

Research has shown that electricity is a small driver of cost of living; it comprises only 2.7 per cent of the overall CPI (CPI = Customer Price Index; Source: CPI 2018 report from Department of Statistic) basket. This means the small increase in electricity prices alone should have only a negligible impact on overall business costs and cost of living.

It may also be the right time to view the situation through a set of different lenses, one that takes into account the long term sustainability of our future and the Malaysian economy.

Presently, Malaysia enjoys one of the lowest electricity tariffs in the world, However, much of this is due to the subsidies on natural gas that the government has provided. While reducing the burden on the rakyat, these subsidies can negatively impact the economy in the long run.

Money that could be spent on other public amenities is being used to artificially hold down the price of natural gas.

Consequently, it is important to note that these subsidies cannot last forever. This calls for a more efficient mechanism of subsidies.

This is one of the reasons why the government has implemented a subsidy rationalisation plan, which aims to reduce allocation on subsidies to enable efficient spending on development programmes.

The effects of climate change and rising temperatures are apparent over the past few months.

However, as in other developed economies, maybe it is time for Malaysians to adopt more energy efficient practices to reduce energy consumption and rising bills.

LAMPIRAN 18
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 5
TARIKH: 3 APRIL 2019 (RABU)


LOJI Lynas di Gebeng, Kuantan

Sisa logam bukan dari Lynas

Oleh MOHD. SHARIZA ABDULLAH
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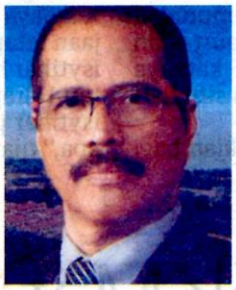
KUANTAN 2 April – Lynas Malaysia Sdn. Bhd. (Lynas) yakin bahawa tidak mungkin logam dari residu kilang syarikat itu yang beroperasi di Gebeng di sini berpindah ke dalam air bawah tanah kerana reka bentuk kemudahan simpanan dan pemantauan berterusan yang dilakukannya.

Pengurus Besar Pematuhan Keselamatan dan Pengawalan Radiasinya, Prof. Ismail Bahari berkata, Jawatankuasa Semakan Lynas yang ditubuhkan kerajaan Pakatan Harapan (PH) juga tidak memberi sebarang petunjuk bahawa peningkatan konsentrasi logam berat di dalam air bawah tanah adalah disebabkan operasi Lynas.

"Tanah di daerah ini secara semulajadi lebih tinggi dalam nikel dan kromium daripada residu Lynas.


ISMAIL BAHARI

"Kami yakin bahawa tidak mungkin logam berpindah daripada residu Lynas ke dalam air bawah tanah," katanya dalam satu kenyataan di sini hari ini.

Timbalan Menteri di Jabatan Perdana Menteri, Fuziah Salleh sebelum ini dilaporkan berkata, air bawah tanah di bawah Lynas tercemar dengan logam berat.

Fuziah yang juga Ahli Parlimen Kuantan mendakwa bahawa air bawah tanah yang tercemar akan memberi kesan kepada penduduk kampung yang tinggal di sekitar Gebeng kerana sebahagian daripada mereka masih bergantung kepada telaga tiub untuk kegunaan harian mereka.

Presiden Gerakan, Datuk Dr. Dominic Lau Hoe Chai mempersoalkan pendirian kerajaan mengenai laporan Jawatankuasa Semakan Lynas yang mendapati bahawa sebarang peningkatan dalam kepekatan logam berat di dalam air bawah tanah bukan disebabkan oleh operasi Lynas.

Sementara itu, dalam satu kenyataan terdahulu, Ismail berkata, jawatankuasa berkenaan yang terdiri daripada pakar dalam pelbagai bidang telah menyatakan bahawa operasi Lynas adalah berisiko rendah, mematuhi peraturan berkaitan dan kemudahan penyimpanan residu dikendalikan dengan cara selamat serta diluluskan oleh pengawal selia.

Jawatankuasa tersebut juga, katanya, menyatakan bahawa Lynas merupakan syarikat pengeluaran nadir bumi dan ia tidak boleh dibandingkan dengan loji nuklear atau kilang yang menghasilkan thorium atau uranium.

"Risiko sinaran tidak ditentukan oleh separuh hayat sesuatu bahan sahaja tetapi lebih penting oleh tahap pendedahan.

"Malaysia mengguna pakai tahap pendedahan yang dibenarkan oleh Suruhanjaya Antarabangsa Bagi Perlindungan Radiologi (ICRP) untuk kedua-dua pekerja dan orang awam yang mana Lynas mematuhi sepenuhnya tahap ini," katanya.

LAMPIRAN 19
HARIAN METRO (SETEMPAT): MUKA SURAT 20
TARIKH: 3 APRIL 2019 (RABU)

ANTARA kenderaan yang mengalami kerosakan akibat dihempap pokok tumbang berikutan ribut di sekitar ibu kota, semalam.

Ranap dihempap pokok

■ *Lebih 20 kenderaan rosak akibat ribut di sekitar ibu kota*

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Kuala Lumpur

Lebih 20 kenderaan dilaporkan mengalami kerosakan akibat pokok tumbang susulan hujan lebat dan ribut di sekitar ibu kota, semalam.

Jurucakap Pusat Gerakan Operasi (PGO) Jabatan Bomba dan Penyelamat Malaysia (JBPM) Kuala Lumpur berkata, pihaknya menerima enam laporan berhubung kejadian pokok tumbang bermula jam 3.30 petang.

Katanya, antara kawasan dilaporkan berlaku pokok tumbang adalah belakang Apartmen Putra Majestik, (Jalan Ipoh), Arata Kondominium, (Jalan Tunku), Institut Penyelidikan Perubatan (Jalan Pahang), Jalan Kolam Air 4, Bukit Jalil dan Ibu Pejabat Polis Bukit Aman.

"Kami turut mengarahkan beberapa anggota dari Balai Bomba dan Penyelamat (BBP) Sentul, Jalan Tun Razak, Jinjang dan Bukit Jalil ke lokasi untuk bantuan pembersihan pokok tumbang di enam lokasi terbabit.

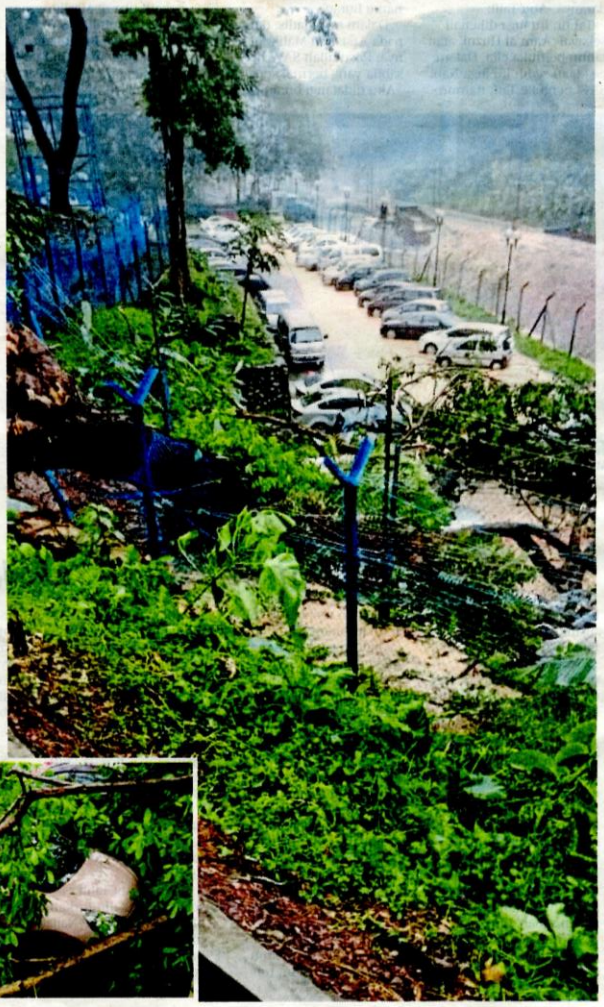
"Anggota memotong dan mengalihkan pokok tumbang, seterusnya memastikan kawasan dalam keadaan selamat dengan bantuan Angkatan Pertahanan Awam Malaysia (APM).

"Tiada mangsa dilaporkan cedera akibat pokok tumbang itu," katanya dalam kenyataan di sini, semalam.

Sementara itu, Jurucakap JBPM Selangor, ketika hubungi di sini, semalam, turut memaklumkan pihaknya menerima lima laporan kejadian banjir kilat susulan hujan di sekitar negeri itu bermula jam 4 petang.

"Banjir kilat dilaporkan berlaku di stesen transit aliran massa (MRT) Awan Besar, Jalan SK9, Seri Serdang, Sungai Besi Indah, Besraya dan Stesen Komuter Serdang.

"Kejadian menyebabkan kesesakan lalu lintas di beberapa laluan akibat dinaiki air," katanya.



LAMPIRAN 20
KOSMO! (INFINITI): MUKA SURAT 25
TARIKH: 3 APRIL 2019 (RABU)

LAMPIRAN 20 (SAMB.)
KOSMO! (INFINITI): MUKA SURAT 26
TARIKH: 3 APRIL 2019 (RABU)

Helikopter seberat 1.8 kilogram berlegar di atmosfera Marikh

HELIKOPTER ini bakal diterbangkan ke Marikh pada Februari 2020 nanti.

HELIKOPTER merupakan antara pengangkutan udara yang popular dengan kepelbagaian fungsi dan versatiliti yang dimilikinya.

Selain digunakan untuk tugas memindahkan manusia atau barang dari satu tempat ke tempat lain, kapal terbang berbilah-bilah kipas di atasnya itu juga boleh dijadikan sebagai medium pemantauan atau penjelajahan.

Melihat helikopter terbang berlegar-legar di ruang udara Bumi bukanlah pemandangan yang asing lagi.

Bagaimanapun, sekumpulan saintis daripada Pentadbiran Aeronautik dan Angkasa Lepas Kebangsaan (NASA) percaya bahawa helikopter juga boleh diterbangkan ke ruang angkasa yang lain khususnya planet Marikh.

Agensi angkasa itu mahu menerbangkan helikopter sebagai salah satu alternatif baharu menjelajahi planet merah itu.

Helikopter mini tanpa penumpang itu dijadualkan tiba di Marikh dalam masa dua tahun lagi dan menjadi sebahagian daripada misi pemantauan Marikh 2020 oleh NASA.

Tujuan utamanya hanyalah satu, iaitu bagi menjawab persoalan sama ada manusia suatu hari nanti dapat hidup dalam persekitaran Marikh atau sebaliknya.

Begitupun, menerbangkan helikopter terbabit bukanlah suatu tugas mudah, lebih-lebih lagi apabila ia perlu dikendalikan dari jarak ribuan juta kilometer dari Bumi.

TUGAS pemantauan dan penjelajahan di Marikh bakal dibantu helikopter bermula Februari 2020 nanti. – Gambar hiasan

PARA saintis meneliti helikopter sebelum ujian penerbangan dilakukan.

TZANETOS (kiri) dan Aung (tengah) meneliti hasil ujian penerbangan di Makmal Pendorongan Jet (JPL).

Bahkan, Marikh yang juga jiran kepada planet Bumi memiliki kepadatan atmosfera kira-kira satu peratus berbanding planet yang manusia huni ini dengan suhu sejuk sehingga negatif 90 darjah Celsius.

Ruang silinder vakum

Justeru itu, kata Pengurus Projek NASA, Mimi Aung, untuk melihat sama ada helikopter yang bakal diterbangkan itu mampu mengharungi keadaan tersebut, NASA menjalankan replikasi keadaan persekitaran planet Marikh di Makmal Pendorongan Jet (JPL) di Pasadena, California, Amerika Syarikat baru-baru ini.

"Atmosfera Marikh adalah kira-kira satu peratus daripada kepadatan atmosfera planet Bumi.

"Bagi mendapatkan persekitaran yang seakan-akan sama dengan kepadatan atmosfera itu, anda perlu menerbangkannya sehingga 30,480 meter tinggi semasa menjalani ujian itu di atmosfera Bumi.

"Jadi anda tidak boleh mendapatkan persekitaran ujian seperti itu di tempat lain di Bumi selain membinanya sendiri," jelasnya.

Menariknya, helikopter yang berfungsi membantu kerja-kerja pemantauan di Marikh itu hadir dengan berat tidak melebihi 1.8 kilogram.

Ia diperbuat dengan 1,500 kepingan-kepingan gentian karbon, aluminium gred penerbangan, silikon, tembaga, kerajang dan gabus.

Helikopter mini itu diuji di dalam ruang silinder vakum khusus setinggi 7.6 meter.

UJIAN penerbangan helikopter itu dilakukan dalam ruang silinder vakum khusus di California, Amerika Syarikat baru-baru ini.

Semasa ujian penerbangan itu, nitrogen dan oksigen dalam ruang terbabit telah digantikan dengan karbon dioksida iaitu gas yang membuatkan atmosfera di Bumi sangat nipis.

Kemudian, sistem bebanan graviti sebagai simulasi keadaan di Marikh iaitu kira-kira 38 peratus lebih rendah berbanding Bumi mula diterapkan.

Selain itu, disebabkan suhu di planet Marikh begitu rendah, helikopter tersebut turut dilengkapi pemanas yang mampu mengekalkan kehangatan pada peralatannya.

Biarpun diuji dengan pelbagai simulasi, helikopter terbabit masih berjaya diterbangkan setinggi 5 sentimeter dan keseluruhan ujian tersebut telah dirakam sebelum dimuat naik ke laman Vimeo.

Konduktor ujian helikopter Marikh di JPL, Teddy Tzanetos berkata, seluruh warga NASA teruja melihat pencapaian yang ditunjukkan semasa ujian penerbangan itu.

"Kami hanya perlukan helikopter ini terapung serendah 5 sentimeter untuk mendapatkan kesemua maklumat yang diperlukan.

"Disebabkan helikopter itu direka untuk terbang di ruang atmosfera nipis seperti Marikh, maka ujian penerbangan ini dilihat sudah memadai," ujarnya.

Tambah Tzanetos, pihaknya tidak sabar melihat helikopter terbabit tiba di ruang atmosfera Marikh pada Februari 2020 nanti.

Sementara itu, Aung menambah, kejayaan ujian penerbangan yang dilakukan baru-baru ini menjadi indikasi kepada tahap persiapan helikopter itu untuk diterbangkan.

Malah, Aung terlalu yakin dengan mengatakan penerbangan seterusnya sudah boleh dilakukan di Marikh.

"Apabila melihat helikopter kami melepasi siri ujian di ruang silinder vakum itu, saya tidak dapat menidakkan hakikat bahawa kenderaan ini suatu hari nanti mampu mencipta sejarah tersendiri.

"Hal ini kerana sebelum ini, ruang silinder itu jugalah yang digunakan oleh mesin penjelajahan misi jelajah angkasa seperti Ranger Moon, Voyagers dan Cassini semasa sesi ujian dilakukan," ujarnya.

LAMPIRAN 21
THE SUN DAILY (NEWS WITHOUT BORDERS): MUKA SURAT 4
TARIKH: 3 APRIL 2019 (RABU)

TEMPEST FURY ... City Hall workers clearing fallen trees at the Bukit Aman police headquarters in Kuala Lumpur yesterday after the area was battered by a storm. No injuries were reported.

LAMPIRAN 22
THE SUN DAILY: MUKA SURAT DEPAN
TARIKH: 3 APRIL 2019 (RABU)

MAMMOTH TASK ... A North Kuching City Council tugboat pulls a huge cluster of rubbish during daily clean-up operations in Sungai Sarawak yesterday. – *BERNAMAPIX*