

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>TNBES teroka potensi projek lebuhraya hijau</u> Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim, Yeo Bee Yin, dan Presiden/Ketua Pegawai Eksekutif TNB, Datuk Seri Ir. Azman Mohd hadir menyaksikan majlis itu di Persidangan dan Pameran Antarabangsa Teknologi Hijau dan Produk Eko Malaysia (IGEM) 2018.	Berita Harian	Rujuk lampiran 1 atau klik pada tajuk berita
2.	<u>TNBES tandatangani MoU projek lebuhraya hijau</u> Menteri Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC), Yeo Bee Yin (tengah) dan Presiden/Ketua Pegawai Eksekutif TNB, Datuk Seri Ir. Azman Mohd (dua, kiri) menyaksikan pertukaran dokumen MoU berkenaan.	Sinar Harian	Rujuk lampiran 2
3.	<u>Sasar 56 PBT diiktiraf rendah karbon</u> Malaysian Green Technology Corporation menyasarkan sebanyak 56 pihak berkuasa tempatan (PBT) diiktiraf Rangka Kerja Bandar Rendah Karbon (LCCF) menjelang 2020.	Berita Harian	Rujuk lampiran 3 atau klik pada tajuk berita
4.	<u>Developing sustainable energy</u> An energy-efficient lifestyle is important as it benefits both humans and nature.	New Straits Times	Rujuk lampiran 4
5.	<u>Program Tenaga Hijau Lebuhraya Senai-Desaru</u> Majlis menandatangani MoU tersebut disempurnakan Pengarah Urusan TNBES, Dr. Ir. Ahmad Jaafar Abd. Hamid; Presiden dan Ketua Pegawai Eksekutif MIGHT, Datuk Dr. Mohd. Yusoff Sulaiman dan Ketua Pegawai Eksekutif SDEB, Jamal Abd. Nasir Taharim pada Forum Pembiayaan Hijau sempena Persidangan dan Pameran Antarabangsa Teknologi Hijau dan Produk Eko (IGEM) 2018 disini hari ini.	Utusan Malaysia	Rujuk lampiran 5

6.	<u>5 syarikat menang anugerah MCY 2018</u> Anugerah Pencapaian Pengkomersialan adalah satu daripada lima kategori Anugerah MCY 2018 anjuran Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC).	Berita Harian	Rujuk lampiran 6
7.	<u>Gempa bumi, tsunami tidak dapat diramal</u> Jabatan Meteorologi mengesahkan negara tidak terlepas daripada ancaman gempa bumi yang bakal menjuruskan kepada tsunami, namun soal bila bencana itu akan melanda masih tidak dapat diramalkan.	Utusan Malaysia	Rujuk lampiran 7
8.	<u>'Govt reduced power consumption by 17.9pc last year'/ Govt slash power consumption by 17.9pc in 2017 - Energy Commission</u> “The Energy Commission is the agency appointed to implement and regulate these programmes. This programme is in line with the government’s commitment to reduce the country’s carbon intensity,” it said.	New Straits Times	Rujuk lampiran 8 atau klik pada tajuk berita
9.	<u>Showcase of winning local innovations</u> The winners were announced by Malaysia Debt Ventures Berhad (MDV) CEO Mohd Nizam Mohd Nadzri who headed the assessment panel during the final assessment session, and the awards were presented by Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin, accompanied by Ministry secretary-general Datuk Seri Dr Azhar Haji Yahaya.	The Star	Klik pada tajuk berita
10.	<u>TNB in tie-up to undertake green energy projects along Johor highway</u> The companies will explore potential green highway projects that can be implemented along the 77km expressway.	New Straits Times	Rujuk lampiran 9
11.	<u>Revised 11th Malaysia Plan combats climate change</u> Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin reportedly promised yesterday “good news” to renewable energy players with several new policies.	Malay Mail	Klik pada tajuk berita

12.	<u>Terengganu will ban plastic bags next year, says exco</u> He said the ban would be implemented in stages involving all supermarkets and restaurants, in support of the Ministry of Energy, Science, Technology, Environment and Climate Change, targeting zero plastic bags.	Malay Mail	Klik pada tajuk berita
13.	<u>Terengganu ikut larangan guna beg plastik</u> Exco Kerajaan Tempatan, Perumahan, Kesihatan dan Alam Sekitar, Dr Alias Razak berkata, ia selari dengan Fasa Satu (2019-2021) pelan tindakan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim ke arah sifar penggunaan plastik yang baru dilancarkan.	Sinar Harian	Klik pada tajuk berita
14.	<u>Dealing with plastic waste</u> I APPLAUD Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin for doing a great job in clamping down on illegal plastic recycling factories and banning the import of plastic waste.	The Star	Rujuk lampiran 10
15.	<u>Govt to impose pollution charges on businesses starting next year, says Yeo</u> Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin said the plan will be implemented in phases under the jurisdiction of state governments between next year and up to the 2021 grace period.	The Malaysian Reserve	Klik pada tajuk berita
16.	<u>Tax on plastics could reduce usage</u> Energy, Science, Technology, Environment and Climate Change (Mestec) Minister Yeo Bee Yin said any introduction of a new tax would be reviewed accordingly with the country's need.	The Malaysian Reserve	Klik pada tajuk berita
17.	<u>EU to engage local palm oil industry stakeholders in talks, plantations visits</u> The forum was officiated by Primary Industries Minister Teresa Kok in conjunction with the International Greentech and Eco Products Exhibition and Conference Malaysia (IGEM) 2018.	The Malaysian Reserve	Klik pada tajuk berita

18.	<u>Malaysia to consolidate green industry, says Yeo</u> Energy, Science, Technology, Environment and Climate Change (Mestecc) Minister Yeo Bee Yin said the government has envisioned the country to be the preferred investment destination for alternatives packaging and at the same time, is phasing out of single-use plastics.	The Malaysian Reserve	Klik pada tajuk berita
19.	<u>PUC cancels JV with GreenTech to bid for RE projects</u> GTMA is wholly-owned by Malaysian Green Technology Corp, an agency under the purview of the Ministry of Energy, Science, Technology, Environment and Climate Change.	The Edge Market	Klik pada tajuk berita
20.	<u>Malaysia moves on solar highway, PV monitoring, insurance and foreign support</u> SEDA has also launched the first national solar PV monitoring system (PVMS), a single platform that allows real-time data to be disseminated to the industry. The PVMS is funded by the Malaysian Electricity Supply Industries Trust Account (MESITA) under MESTECC.	PV Tech	Klik pada tajuk berita
21.	<u>Malaysia wants to lead R&D in alternatives for single-use plastics, minister says</u> Malaysia hopes to spearhead the research and development (R&D) and commercialisation of green packaging and other alternatives for single-use plastics. To do this, the government will facilitate a green financing model that “makes sense” for investors, said Minister of Energy, Science and Technology and Climate Change Yeo Bee Yin.	The Edge Market	Klik pada tajuk berita
22.	<u>All States Must Charge for Plastic Bags Used in Supermarkets & Restaurants Starting 2019</u> Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin explained that the charge will be imposed during “Phase 1 of the roadmap from 2019 to 2021”. This implementation is expected to be enforced by the local councils in each state.	World of Buzz	Klik pada tajuk berita

23.	<u>Malaysia to ban all non-recyclable plastics imports</u> Malaysian Energy, Green Technology, Science, Climate Change and Environment Minister Yeo Bee Yin has said that the country will introduce laws to ban imports of non-recyclable plastics next year.	Reb Market Intelligence	Klik pada tajuk berita
24.	<u>Terengganu to ban plastic bags next year</u> He said the ban would be implemented in stages involving all supermarkets and restaurants, in support of the Energy, Science, Technology, Environment and Climate Change Ministry's zero-plastic bags target.	The Malaysian Insight	Klik pada tajuk berita
25.	<u>T'ganu larang guna beg plastik tahun depan – Exco</u> Katanya, sebagai permulaan larangan akan dibuat secara berperingkat dengan melibatkan semua pasaraya dan restoran, sebagai sokongan kepada Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim yang mensasarkan sifar penggunaan beg plastik.	Malaysia Kini	Klik pada tajuk berita
26.	<u>SEDA Hosts Renewable Energy Certificate Workshop</u> Minister of Energy, Science, Technology, Environment and Climate Change, Yeo Bee Yin, officially opened the four-day conference yesterday.	BERNAMA	Klik pada tajuk berita
27.	<u>Skincare product from mangosteen wins commercialisation award</u> She told reporters after receiving the Commercialisation Achievement Award in conjunction with the Malaysian Commercialisation Year (MCY) 2018 from Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin at the Kuala Lumpur Convention Centre (KLCC) here today.	BERNAMA	Klik pada tajuk berita
28.	<u>Tenaga explores green energy projects along Senai-Desaru Expresway</u> Minister of Ministry of Energy, Science, Technology, Environment and Climate Change	New Straits Times	Klik pada tajuk berita

	(MESTECC), YB Yeo Bee Yin and President/Chief Executive Officer TNB, Datuk Seri Ir. Azman Mohd (second, left) were present to witness the exchange of the document at the International Greentech and Eco Products Exhibition and Conference Malaysia (IGEM) 2018.		
29.	<u>SEDA launches the country's first national solar photovoltaic monitoring system</u> Sustainable Energy Development Authority (SEDA) Malaysia, the country's authority on sustainable energy today successfully launched the first national solar PV monitoring system (PVMS) witnessed by YB Puan Yeo Bee Yin, Minister of Energy, Science, Technology, Environment and Climate Change (MESTECC) at the 9th International Greentech & Eco Products Exhibition & Conference Malaysia (IGEM) 2018.	PV Magazine	Klik pada tajuk berita

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
30.	<u>Government settles interest due on 1MDB Energy bond</u> The government has made the coupon payment amounting to US\$50.31 million (RM208.80 million) due today as part of a settlement agreement with International Petroleum Investment Co (IPIC), due for the US\$1.75 billion 1MDB Energy (Langat) Ltd (1MELL) bond.	The Sun Daily	Rujuk lampiran 11 atau klik pada tajuk berita
31.	<u>Better weather forecasting system</u> "An integrated weather and flood forecasting and early-warning system is being developed. The early warning system for tsunami and earthquake will be enhanced.	New Straits Times	Rujuk lampiran 12
32.	<u>Shah Alam terkesan dengan gempa</u> Perkara itu didedahkan oleh Pakar Gempa dan Tsunami, Datuk Dr Mohd Rosaidi Che Abas dalam Wacana 73: Gempa Bumi Dan Tsunami: Selamatkah Malaysia di Karangkrak, semalam.	Sinar Harian	Rujuk lampiran 13

33.	<u>'Make green growth a priority'</u> Environmental Protection Society of Malaysia president Nithi Nesadurai said that it is high time for Malaysia to move beyond using just green growth as the means for enhancing environmental sustainability.	The Star	Rujuk lampiran 14 atau klik pada tajuk berita
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ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
34.	<u>'Carbon emissions to rise this year'</u> Energy sector carbon emissions will rise in 2018 after hitting record levels the year before, dimming prospects for meeting Paris climate treaty goals, the head of the International Energy Agency (IEA) said Wednesday.	New Straits Times	Rujuk lampiran 15
35.	<u>Robot beri penjelasan kepada Ahli Parlimen Britain</u> Robot bernama Pepper itu berucap di depan Jawatankuasa Pemilihan Pendidikan Britain mengenai peningkatan penggunaan kepintaran buatan (AI) dan bagaimana sekolah-sekolah Britain perlu memberi respons,	Kosmo	Rujuk lampiran 16
36.	<u>Dubai solar park wins green energy prize</u> A Dh50 billion solar park at the heart of Dubai's drive to increase its use of renewable energy has won a global seal of approval.	The National	Klik pada tajuk berita
37.	<u>Data Is The Foundation For Artificial Intelligence And Machine Learning</u> Artificial intelligence (AI) and machine learning (ML) are going to have a huge impact on manufacturing. With these technologies, manufacturers will gain the computational power needed to solve problems that humans can't possibly solve.	Forbes	Klik pada tajuk berita

	<u>The World of A.I.</u> Judging by the breathless coverage, it can seem as if the only countries developing A.I. are the United States and China. But while companies in those two countries are leading the way in cutting-edge research and products, it's still early for the industry and other nations are working hard to become major A.I. players.	New York Times	Klik pada tajuk berita
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LAMPIRAN 1
BERITA HARIAN (BISNES): MUKA SURAT 51
TARIKH: 19 OKTOBER 2018 (JUMAAT)

PERSIDANGAN DAN PAMERAN ANTARABANGSA TEKNOLOGI HIJAU DAN PRODUK EKO MALAYSIA (IGEM) 2018

TNBES teroka potensi projek lebuh raya hijau

➔ Bekerjasama dengan MIGHT, SDEB untuk Lebuh Raya Senai-Desaru

Oleh Mahanum Abdul Aziz
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TNB Energy Services Sdn Bhd (TNBES), anak syarikat milik penuh Tenaga Nasional Bhd (TNB) bekerjasama dengan Malaysian Industry-Government Group for High Technology (MIGHT) dan Senai-Desaru Expressway Bhd (SDEB) untuk Program Tenaga Hijau (GEP) di sepanjang Lebuh Raya Senai-Desaru (E22) di Johor.

Satu memorandum persefahaman (MoU) dimeterai ketiga-tiga pihak semalam dengan TNBES diwakili Pengarah Urusannya, Dr Ir Ahmad Jaafar Abd Hamid; MIGHT oleh Presiden dan Ketua Pegawai Eksekutifnya, Datuk Dr Mohd Yusoff Sulaiman dan SDEB oleh Ketua Pegawai Eksekutifnya, Jamal Abd Nasir Taharim.

Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim, Yeo Bee Yin, dan Presiden/Ketua Pegawai Eksekutif



Yeo (tengah) selepas menyaksikan pemeterian MOU antara TNBES, MIGHT dan SDEB bagi program Tenaga Hijau di ibu negara, semalam.

TNB, Datuk Seri Ir. Azman Mohd hadir menyaksikan majlis itu pada Persidangan dan Pameran Antarabangsa Teknologi Hijau dan Produk Eko Malaysia (IGEM) 2018.

Berdasarkan MoU, syarikat akan meninjau potensi projek lebuh raya hijau yang boleh dilaksanakan di lebuh raya sepanjang 77 kilometer itu.

Persekitaran lebih hijau

Projek itu dijangka memanfaatkan pengguna lebuh raya dan komuniti sekitarnya melalui

infrastruktur dan ekosistem tenaga boleh diperbaharui (RE) dan cekap tenaga (EE) yang moden serta persekitaran yang lebih hijau.

Ketiga-tiga pihak akan bekerjasama ke arah menyokong Indeks Lebuh Raya Hijau Malaysia (MyGHI) di bawah Lembaga Lebuhraya Malaysia (LLM), sejajar dengan Matlamat Pembangunan Lestari (SDG), dengan menggabungkan pengangkutan dan kelestarian ekologi dalam reka bentuk, perancangan, pembinaan dan

penyelenggaraan lebuh raya.

Ketiga-tiga pihak juga akan memanfaatkan penyelesaian RE dan EE TNBES dengan memasang lampu diod pemancar cahaya (LED), memasang unit penyaman udara EE dan kemudahan panel solar serta mengintegrasikan sistem pemantauan bangunan TNBES, yang dikenali Making Electricity Visible (MAEVI).

Ia juga termasuk memasang, mengendalikan operasi dan menyelenggarakan rangkaian stesen mengecas kenderaan elektrik (EV) di lokasi terpilih.

[FOTO NURUL SYAZANA ROSE RAZMAN / BH]

LAMPIRAN 2
SINAR HARIAN (BISNES SINAR): MUKA SURAT 42
TARIKH: 19 OKTOBER 2018 (JUMAAT)



Menteri Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC), Yeo Bee Yin (tengah) dan Presiden/Ketua Pegawai Eksekutif TNB, Datuk Seri Ir Azman Mohd (dua, kiri) menyaksikan pertukaran dokumen MoU berkenaan.

TNBES tandatangani MoU projek lebuh raya hijau

ANAK syarikat penuh milik Tenaga Nasional Sdn Bhd, TNB Energy Services Sdn Bhd (TNBES) semalam, menandatangani Memorandum Persefahaman (MoU) dengan Kumpulan Industri Kerajaan Malaysia Untuk Teknologi Tinggi (MIGHT) dan Senai-Desaru Expressway Berhad (SDEB) untuk Program Tenaga Hijau (GEP) di sepanjang SDEB (E22) di Johor.

Melalui MoU itu, pihak terlibat akan meneroka projek lebuh raya hijau yang berpotensi untuk dilaksanakan di sepanjang lebuh raya 77km.

TNB berkata, projek berkenaan dijangka akan memberikan kelebihan kepada pengguna lebuh raya dan komuniti sekitar melalui struktur dan ekosistem tenaga boleh diperbaharui moden (RE) dan tenaga efisien (EE) dalam persekitaran mesra alam.

"Semua pihak terlibat akan bekerjasama untuk menyokong Indeks Lebuhraya Hijau Malaysia (MyGHI) di bawah Lembaga Lebuhraya Malaysia (LLM) yang sejajar dengan Matlamat Pembangunan Mampan (SDG).," katanya dalam satu kenyataan.

TNB berkata, RE dan EE oleh TNBES akan dimanfaatkan dengan penyalan diod pemancar cahaya (LED), pemasangan unit penyaman udara EE, fasiliti solar dan integrasi sistem pemantauan bangunan TNBES yang dikenali sebagai Making Electricity Visible (MAEVI).

"Pemasangan, pengendalian dan penyelenggaraan rangkaian stesen pengisian tenaga (charging station) untuk kenderaan elektrik (EV) di kawasan terpilih juga termasuk dalam usaha tersebut," katanya.

LAMPIRAN 3
BERITA HARIAN (BISNES): MUKA SURAT 51
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Sasar 56 PBT diiktiraf rendah karbon menjelang 2020

Malaysian Green Technology Corporation menyasarkan sebanyak 56 pihak berkuasa tempatan (PBT) diiktiraf Rangka Kerja Bandar Rendah Karbon (LCCF) menjelang 2020.

Ketika ini, hanya 24 PBT yang berjaya mendapat pengiktirafan LCCF, antaranya, Majlis Bandaraya Shah Alam dan Majlis Perbandaran Subang Jaya di Selangor serta Majlis Perbandaran Hang Tuah Jaya di Melaka.

Ketua Pegawai Eksekutif Kumpulannya, Dr Mohd Azman Zainul Abidin, berkata sejak LCCF mula diperkenalkan pada 2011, banyak kejayaan telah dicapai terutama membabitkan pengurangan pelepasan karbon.

Katanya, sejak tujuh tahun lalu, hampir 9,400 tan pelepasan gas karbon dioksida (CO₂) berjaya dikurangkan sehingga kini hasil inisiatif LCCF itu.

"Kami yakin baki lagi 32 PBT ini akan mampu untuk mengikut segala kriteria yang ditetapkan dalam rangka kerja ini sekali gus mendapat pengiktirafan LCCF menjelang 2020," katanya kepada NSTP ketika ditemui selepas pelancaran laman sesawang LCCF.My pada Persidangan dan Pameran Antarabangsa Teknologi Hijau dan Produk Eko Malaysia (IGEM) ke-9 2018 di Kuala Lumpur, semalam.

LCCF adalah dokumen yang direka bentuk sebagai komitmen Malaysia mengurangkan intensiti pelepasan CO₂ sebanyak 45 peratus Keluaran Dalam Negara Kasar (KDNK) per kapita menjelang tahun 2030.

Kekangan kos

Ia terdiri daripada pendekatan pengurangan karbon di mana faktor pelepasan karbon bagi setiap aktiviti yang menghasilkan karbon difokuskan menggunakan empat elemen iaitu persekitaran bandar, pengangkutan bandar, infrastruktur bandar dan bangunan.

Mengulas lanjut, Mohd Azman berkata, faktor kos antara halangan



Kami yakin baki lagi 32 PBT ini akan mampu untuk mengikut segala kriteria yang ditetapkan dalam rangka kerja ini, sekali gus mendapat pengiktirafan LCCF menjelang 2020"

Mohd Azman Zainul Abidin,
Ketua Pegawai Eksekutif
Malaysian Green Technology
Corporation

utama untuk PBT mengikut kriteria ditetapkan dalam rangka kerja itu.

"Sebagai contoh, mungkin ada PBT berdepan kekangan kewangan untuk menukar kepada lampu LED di bangunan, namun mereka sebenarnya boleh melakukan penggantian itu secara berperingkat, tidak perlu secara menyeluruh," katanya.

Dalam pada itu, mengulas mengenai pelancaran LCCF.My, beliau berkata, laman web itu adalah platform perkongsian berkaitan teknologi dan kewangan hijau di Malaysia.

"Sesiapa saja boleh menyumbang artikel mengenai inisiatif hijau untuk dipaparkan di laman web ini," katanya.

LAMPIRAN 4
NEW STRAITS TIMES (NATION/ NEWS): MUKA SURAT 12
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Developing sustainable energy

SITI NURAZLINEE AZMI
KUALA LUMPUR

AN energy-efficient lifestyle is important as it benefits both humans and nature. More cooperation between the public and private sector in strengthening sustainability will create the potential to accelerate the growth of green energy in Malaysia.

Thus, in order to achieve its sustainable development goal, Tenaga Nasional Berhad's (TNB) subsidiary, TNB Energy Services Sdn Bhd (TNBES) has embarked on the construction of the Senai-Desaru Expressway Bhd (SDEB), a project conceptualised as a "Green Highway" which integrates transportation and preserves sustainability.

Environmental approaches will be used throughout the planning and designing of the highway without jeopardising nature.

This three-party cooperation was recently signed following a memorandum of understanding (MoU) between TNBES, Malaysian Industry-Government Group for High Technology (MIGHT) and SDEB during the International Green Eco and Technology Product Conference (IGEM 2018) here.

The MoU was signed by TNBES managing director, Dr Ir Ahmad Jaafar Abd Hamid, MIGHT president and chief executive officer Datuk Dr Mohd Yusoff Sulaiman and SDEB's chief executive officer Jamal Abdul Nasir Taharim.

The exchange of MoU document was witnessed by Minister of Energy, Science, Technology, Environment and Climate Change Yeo Bee Yin and TNB president/ chief executive officer, Datuk Seri Ir Azman Mohd.

Through the MoU, the companies will explore the potential of the 77km Senai-Desaru Expressway in Johor in terms of the ecosystem surrounding the project as well as providing infrastructure towards Energy Efficiency (EE) and Renewable Energy (RE) access.

The project which is expected to benefit the local communities and highway users, includes re-fixing



Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin (centre) with TNB president/chief executive officer Datuk Seri Ir Azman Mohd (third from left) and Malaysian Industry Government Group for High Technology Datuk Dr Mohd Yusoff Sulaiman after the signing ceremony on Wednesday. Looking on are TNBES managing director Dr Ir Ahmad Jaafar Abd Hamid (left), SDEB chief executive officer Jamal Abdul Nasir Taharim (third from right), deputy minister Isnaraisah Munirah (second from right) and ministry secretary general Dain Badriyah Abd Malek (right).

the lights using light emitting diodes (LEDs), installing energy-efficient air conditioning and a building monitoring system via online energy control system known as the 'Making Electricity Visible (MAEVI)'.

It is in line with the theme of IGEM 2018 which focuses on implementing the United Nations Sustainable Development

Goals (UNSDG).

IGEM 2018, currently held at the Kuala Lumpur Convention Centre, is a three day event that started on Oct 17 featuring 250 exhibitors.

As a major exhibitor, TNB provides a special space for visitors to witness the exhibition entitled 'Customer Empowerment Through Smart Renewables'.



Saifulnihar Jalaluddin

Yong Chin Kuek

Donald Wong

This particular segment highlights the 'Green, Bright and Positive' concept of modern and contemporary design, in line with TNB's aspiration to support and prioritise the sustainable green technology initiative while catering to the taste of future.

Among the attractions are exhibition booths offering 'green' products and services such as Charge EV Charging Station, Smart Grid, Floating Solar, Biomass and Biogas, Smart Meter and Hydroelectric.

SP Setia Maintenance Executive, Saifulnihar Jalaluddin meanwhile said he was at the exhibition to find energy efficient products which could be applied in residential areas.

"The most attractive exhibition is the TNB showroom which indeed demonstrates that solar technology is more cost effective and worthwhile especially in terms of energy-saving. It can be easily introduced to residents at residential areas, as it would benefit

them," he said.

Nagase (Malaysia) Sdn Bhd, electronic group deputy general manager Yong Chin Kuek said the use of electric vehicles are on the rise and increasing fast.

"It is high time that more EV charge stations are built to accommodate these electric vehicles on the road. Hopefully more charging stations will be introduced to meet the demand," he said.

For Hong Kong's Powerwatt Engineering chief executive officer, Donald Wong, his purpose of visiting IGEM 2018 was to explore business opportunities through existing business networks between countries like Malaysia, Hong Kong and China.

"Solar industry is the energy of the future which is now gaining momentum in many countries including China and Hong Kong which are now actively involved in developing solar energy technologies.



Visitors at TNB's booth at IGEM 2018

LAMPIRAN 5
UTUSAN MALAYSIA (BISNES): MUKA SURAT 44
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Program Tenaga Hijau Lebuh Raya Senai-Desaru

Oleh **NABILA YASMIN RAZIB**

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■ KUALA LUMPUR 18 OKT.

ANAK syarikat Tenaga Nasional Bhd. (TNB), TNB Energy Services Sdn. Bhd. (TNBES) menandatangani memorandum persefahaman (MoU) dengan Kumpulan Industri-Kerajaan Malaysia bagi Teknologi Tinggi (MIGHT) dan Senai-Desaru Expressway Bhd. (SDEB) bagi membangunkan Program Tenaga Hijau di sepanjang Lebuh Raya Senai-Desaru (E22), di Johor.

TNB berkata, di bawah MoU tersebut, ketiga-tiga syarikat akan meneroka potensi projek lebuh raya hijau yang boleh dilaksanakan di sepanjang lebuh raya sepanjang 77 kilometer itu.

Katanya, projek itu dijangka memberi manfaat kepada peng-

guna lebuh raya dan komuniti sekitarnya melalui infrastruktur dan ekosistem moden kecekapan tenaga (EE) dan tenaga boleh diperbaharui (RE) serta persekitaran yang lebih hijau.

“Ketiga-tiga pihak akan bekerjasama untuk menyokong Indeks Lebuh Raya Hijau Malaysia (MyGHI) di bawah Lembaga Lebuh Raya Malaysia (LLM), sejajar dengan Matlamat Pembangunan Mampan (SDG) dengan menggabungkan kemapuan pengangkutan dan ekologi dalam reka bentuk, perancangan, pembinaan dan penyelenggaraan lebuh raya,” katanya dalam kenyataan di sini hari ini.

Majlis menandatangani MoU tersebut disempurnakan Pengarah Urusan TNBES, Dr. Ir. Ahmad Jaafar Abd. Hamid; Presiden dan Ketua Pegawai Eksekutif MIGHT, Datuk Dr. Mohd. Yusoff

Sulaiman dan Ketua Pegawai Eksekutif SDEB, Jamal Abd. Nasir Taharim pada Forum Pembiayaan Hijau sempena Persidangan dan Pameran Antarabangsa Teknologi Hijau dan Produk Eko (IGEM) 2018 di sini hari ini.

Yang turut hadir, Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim, Yeo Bee Yin dan Presiden serta Ketua Pegawai Eksekutif TNB, Datuk Seri Ir. Azman Mohd.

Tambah kenyataan itu, pihak-pihak yang terlibat juga akan memanfaatkan penyelesaian RE dan EE TNBES dengan menyalakan cahaya diod pemancar cahaya (LED), memasang unit penyaman udara EE dan kemudahan panel solar, dan mengintegrasikan sistem pemantauan bangunan TNBES yang dikenali sebagai Membuat Elektrik Terlihat (MAEVI).



YEO BEE YIN (lima dari kiri) dan **Azman Mohd.** (dua dari kiri) menyaksikan majlis menandatangani MoU antara TNBES, MIGHT dan SDEB sempena IGEM 2018 di Kuala Lumpur, semalam.

LAMPIRAN 6
BERITA HARIAN (ANUGERAH): MUKA SURAT 26
TARIKH: 19 OKTOBER 2018 (JUMAAT)

5 syarikat menang anugerah MCY 2018

➔ Hasil kajian kulit manggis raih Anugerah Pencapaian Pengkomersialan

Oleh Haryani Ngah
aryani@bh.com.my

Kuala Lumpur

Inovasi kulit manggis untuk penjagaan kulit wajah hasil penyelidikan Syarikat Biopro Cosmeceutical Sdn Bhd muncul sebagai pemenang utama kategori Pencapaian Pengkomersialan bersempena Anugerah Tahun Pengkomersialan Malaysia (MCY) 2018.

Produk berjenama DERMAGS Skin Care itu dibangunkan berdasarkan hasil kajian pensyarah Universiti Teknologi Malaysia (UTM), Dr Mariani Abdul Hamid ketika mengikuti pengajian peringkat Doktor Falsafah di Universiti Dong-

gok, Korea Selatan.

"Berdasarkan kajian penyelidikan dan pembangunan (R&D), saya dapati kulit manggis mempunyai banyak kelebihan serta baik untuk mencerahkan kulit, antipenuaan dan membaiki pulih sel mati. Manggis sebagai sumber asli tempatan dibangunkan menggunakan teknologi nano memberi banyak kelebihan kepada produk ini," katanya selepas majlis penyampaian anugerah, di sini, semalam.

Catat jualan RM6.3 juta

Produk dihasilkan syarikat Spin-Off UTM dan incubatee Teknologi Park Malaysia itu berjaya dieksport ke luar negara seperti Singapura, China, India dan beberapa negara lain mencatat jualan sehingga RM6.3 juta untuk tempoh Januari hingga September 2018.

Anugerah Pencapaian Pengkomersialan adalah satu daripada lima kategori Anugerah MCY 2018 anjuran Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTEC).

Setiap pemenang utama memenangi RM130,000, manakala lima lagi pemenang saguhati masing-



Bee Yin (tengah) dan Ketua Setiausaha Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim, Datuk Seri Dr Mohd Azhar Yahaya (lima dari kanan) bersama pemenang utama Anugerah MCY 2018 di Kuala Lumpur, semalam.

masing menerima RM50,000. Jumlah keseluruhan hadiah adalah RM1 juta. Anugerah disampaikan oleh menterinya, Yeo Bee Yin.

Majlis penganugerahan itu diadakan bersempena penganjuran International Greentech & Eco Products Exhibition & Conference Malaysia (IGEM).

Bagi kategori Usahasama Penyelidikan dan Perniagaan ia dimenangi oleh produk RESCUE_I Mo-

nitoring System hasil inovasi penyelidik Universiti Teknologi Pertronas (UTP) dan syarikat Semarak Motivasi Sdn Bhd iaitu syarikat yang mengkhusus dalam bidang kejuruteraan keselamatan.

Produk Versatile Graphene hasil inovasi penyelidikan Universiti Putra Malaysia (UPM), muncul pemenang utama kategori Usahawan Penyelidikan MCY 2018. Syarikat Anderes Fourdy Sdn Bhd yang menghasilkan

produk Emergency Evacuation System bagi menyelesaikan masalah tabulasi manual ketika kecemasan muncul pemenang utama kategori Inovator Baharu MCY 2018.

Produk Rumah Ketam UNIMAS yang dihasilkan penyelidik Universiti Malaysia Sarawak (UNIMAS) untuk meningkatkan pendapatan golongan B40, terutama nelayan dipilih sebagai pemenang utama kategori Usahawan Sosial MCY.

LAMPIRAN 7

UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 4

TARIKH: 19 OKTOBER 2018 (JUMAAT)

LINGKARAN API PASIFIK

INFO

KEWUJUDAN TITIK GEMPA DI MALAYSIA

TEMENGGOR, PERAK • 2014 - 2016 • 11 titik gempa • Bermagnitud kecil (1.5 - 4.1) • Kedalaman cetek ULU BENDUL, KUALA PILAH • 2009 • 4 titik gempa • Bermagnitud kecil (2.0 - 3.5) • Kedalaman cetek MANJONG, PERAK • 2009 • 1 titik gempa • Bermagnitud kecil (2.7) • Kedalaman cetek JERANTUT, PAHANG • 2009 • 1 titik gempa • Bermagnitud kecil (3.0) • Kedalaman cetek	BUKIT TINGGI, PAHANG • 2007 - 2009 • Lebih dari 30 titik gempa • Bermagnitud kecil (1.6 - 3.5) • Kedalaman cetek SABAH • Sehingga kini • Puluhān titik gempa di Sabah meliputi kawasan sekitar Gunung Kinabalu, Tawau, Lahad Datu, Ranau, Kundasang, dan Sandakan • Berskala kecil hingga sederhana (4-5.9) • Kedalaman cetek hingga sederhana (10-70km) SARAWAK • Sehingga kini • lebih dari 20 titik gempa • Berskala kecil hingga sederhana (3.5- 5.3) • Kedalaman cetek
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Gempa bumi, tsunami tidak dapat diramal

KUALA LUMPUR 18 Okt. - Jabatan Meteorologi menegaskan negara tidak terlepas daripada ancaman gempa bumi yang bakal menjuruskan kepada tsunami, namun soal bila bencana itu akan melanda masih tidak dapat diramalkan.

Ketua Pengarahnya, Alui Bahari berkata, sehingga kini, masih belum ada kaedah saintifik untuk meramal bila dan di mana ia akan berlaku, bahkan perubahan iklim yang didakwa menjadi punca bencana tersebut masih dibahaskan pakar.

Jelasnya, Malaysia terletak di zon pertembungan antara plat-plat Indo-Australia dan plat Eurasia di sebelah barat serta timur adalah plat Filipina.

“Maka, kejadian gempa bumi bermagnitud sederhana dan kuat di zon pertembungan plat-plat tersebut berpotensi menyebabkan gegaran di Malaysia.

“Bagaimanapun, keaktifan garis sesar di Malaysia dan potensi kejadian gempa bumi pada masa hadapan sedang dikaji Jabatan Mineral dan Geosains melalui Projek Pemetaan Garis Sesar dan Kawasan Risiko Gempa Bumi yang dijangka selesai menjelang 2020,” katanya dalam kenyataan baru-baru ini.

Dalam pada itu, Alui menambah, kejadian gempa bumi kuat di sempadan pertembungan tersebut turut meningkatkan risiko kawasan pantai negara dilanda tsunami.

Sehubungan itu, beliau berkata, jabatan melalui Sistem Amaran Awal Tsunami Nasional Malaysia (SAATNM) memantau secara 24 jam sebarang aktiviti gempa bumi dan tsunami di beberapa kawasan yang berkemungkinan terlibat bagi menjamin keselamatan orang ramai.

ALUI BAHARI

LAMPIRAN 7 (SAMBUNGAN) UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 4 TARIKH: 19 OKTOBER 2018 (JUMAAT)

Malaysia diancam gempa bumi, tsunami?

Oleh NAZWIN NAZRI
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■ KUALA LUMPUR 18 OKT.

SUATU ketika dahulu, Malaysia dianggap bebas daripada ancaman gempa bumi dan tsunami, namun fakta itu sudah tidak tepat malah kini negara dikesan berisiko dilanda bencana berkenaan berikutan berada berhampiran dalam zon aktif pertembungan plat bumi.

Beberapa kawasan di negeri khususnya Sabah dikategorikan amat berisiko tinggi dengan ancaman gempa bumi selain Pahang dan Negeri Sembilan yang direkodkan mengalami gegaran manakala negeri di pesisiran pantai Barat Daya dari Perak sehingga Perlis berisiko tinggi dilanda tsunami.

Ini kerana, negara terkesan dengan proses pertembungan plat dari arah barat membabitkan Lautan Indo-Australia yang menghimpit kerak bumi Sumatera, Indonesia dan Semenanjung Malaysia manakala dari Timur berpunca daripada plat Filipina dan Pasifik menumpu ke arah Sabah dan Asia Tenggara.

Senario itu secara tidak langsung telah menghasilkan tekanan kepada kerak bumi di bawah Malaysia dan tenaga yang terkumpul perlu dilepaskan cepat melalui pecahan-pecahan kecil pada kerak bumi sekali gus mengakibatkan zon lemah seperti sesar lama kembali aktif.

Sebaik sahaja sesar lama kembali aktif, gelinciran akan berlaku sekali gus menghasilkan gempa bumi yang akan menjuruskan berlakunya tanah runtuh selain tsunami.

Pensyarah Jabatan Geologi



PASUKAN penyelamat menjalankan operasi dalam tragedi gempa bumi Gunung Kinabalu, Sabah pada 2015.

Universiti Malaya, Prof. Madya Mustafa Kamal Shuib berkata, Sabah merupakan negeri paling berisiko tinggi mengalami gempa kerana banyak titik gempa telah direkodkan di Ranau, Kundasang, Tawau, Gunung Kinabalu dan Lahad Datu selain di Sandakan.



MUSTAFA KAMAL SHUIB

"Kita berjaya mengenal pasti beberapa sesar di kawasan terabit yang bakal menjadi punca gempa bumi pada masa akan datang. Ini kerana Sabah terletak berhampiran zon pertembungan plat-plat di Sulawesi, Indonesia serta Filipina. Keadaan itu menyebabkan Sabah dihimpit daripada arah selatan dan timur utara

"Namun kalau melihat kedudukan geografi Semenanjung, ia berada agak jauh daripada zon

aktif pertembungan antara plat yang menghasilkan gempa bumi kerana Semenanjung berada di pinggir kawasan zon gempa dan kesannya amat lemah," katanya kepada Utusan Malaysia baru-baru ini.

Malah jelas Mustafa Kamal, Sabah pernah dilanda gempa bumi berukuran 5.9 skala Richter di Gunung Kinabalu pada 2015 sehingga mengakibatkan 17 kematian ekoran tanah runtuh, selain itu di Tawau dan Lahad Datu juga pernah merekodkan kejadian dengan gegaran 6.0 skala Richter.

"Gempa bumi seperti di Gunung Kinabalu itu akan membentuk kesan susulan seperti batuan tidak stabil terutamanya di kawasan cerun, maka kejadian tanah runtuh boleh terjadi pada masa akan datang sehingga mengorbankan nyawa," ujarnya.

Ditanya sama ada kemungkinan skala gempa bumi akan meningkat di Sabah susulan beberapa kejadian baru-baru ini termasuk tsunami di Palu, Indonesia, beliau menjelaskan, Sabah boleh mengalami gempa bermagnitud sederhana dan pantai timur Sabah pula berisiko ancaman tsunami.

Di samping itu, mengulas tentang risiko di Semenanjung, beliau memberitahu, titik gempa turut direkodkan di Jerantut dan Bukit Tinggi, Pahang serta Kuala Pilah, Negeri Sembilan.

"Titik gempa di Bukit Tinggi, wujud disebabkan kehadiran sesar aktif yang dinamakan sesar Bukit Tinggi malah pernah menghasilkan gempa berskala kecil sekali gus mengakibatkan sesar-sesar besar dan lama diaktifkan semula.

"Sementara itu, kawasan di pantai Barat Daya dari Perlis hingga ke utara Perak pula terdedah dengan ancaman tsunami, tetapi pihak berkuasa mengambil langkah memasang alat penggera bagi memastikan amaran dapat dikeluarkan kepada penduduk berisiko," ujarnya.

KESAN kerosakan pada Gunung Kinabalu, Sabah akibat kejadian gempa bumi berskala 5.9 Richter yang berlaku pada 2015.



LAMPIRAN 8
NEW STRAITS TIMES (NEWS/ NATION): MUKA SURAT 64
TARIKH: 19 OKTOBER 2018 (JUMAAT)

**'Govt reduced
power
consumption
by 17.9pc
last year'**

PUTRAJAYA: The government is on track to reduce its carbon footprint after saving 47.7 million kilowatt hours of electricity at all 25 ministries and the Prime Minister's Department last year.

The Energy Commission yesterday said this translated into savings of up to RM17.4 million, thanks to the government's energy-saving programmes.

It said the government slashed power consumption by 17.9 per cent and reduced carbon dioxide emissions by 33,100 thousand tonnes.

"This comparison of savings is based on a baseline that was formulated from data in 2013, prior to the implementation of the programme to improve energy efficiency and electricity consumption in government buildings in 2014.

"Compared with 2016, a savings of 7.3 per cent, or RM6.3 million, has been recorded."

The significant increase in savings, it added, was possible due to the success of government initiatives, including setting the air conditioner temperature at 24°C, retrofitting the Building Control System and the conversion to light-emitting diodes for lights in ministry buildings.

"The Energy Commission is the agency appointed to implement and regulate the programme.

"The programme is in line with the government's commitment to reducing the country's carbon emissions," it said.

It was reported that on April 1 last year, the power generation industry spent RM15.1 billion to generate 120,059 gigawatt hours of electricity for 8.45 million customers in the peninsula.

To reduce fossil fuel dependency, experts were quoted as saying that the energy mix was introduced as an alternative.

In Malaysia, the energy mix strategy was said to have successfully reduced dependency on oil from 87 per cent in 1980, to less than one per cent today.

LAMPIRAN 9

NEW STRAITS TIMES (NEWS/ BUSINESS): MUKA SURAT 23
TARIKH: 19 OKTOBER 2018 (JUMAAT)



Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin (centre) with (from left) TNB Energy Services Sdn Bhd managing director Dr Ahmad Jaafar Abd Hamid, Malaysian Industry-Government Group for High Technology president and chief executive officer (CEO) Datuk Mohd Yusoff Sulaiman, Senai-Desaru Expressway CEO Jamal Abd Nasir Taharim, TNB CEO Datuk Seri Azman Mohd and other officials at the signing of a memorandum of understanding between the three companies yesterday. PIC BY NURUL SYAZANA ROSE RAZMAN

SENAI-DESARU EXPRESSWAY

TNB in tie-up to undertake green energy projects along Johor highway

KUALA LUMPUR: Tenaga Nasional Bhd (TNB) and two other parties plan to undertake green energy projects along the Senai-Desaru Expressway in Johor.

TNB signed a memorandum of understanding (MoU) with Malaysian Industry-Government Group for High Technology (MIGHT) and Senai-Desaru Expressway Bhd for the Green Energy Programme yesterday.

The companies will explore potential green highway projects that can be implemented along the 77km expressway.

TNB said the projects were ex-

pected to benefit commuters and communities through a modern renewable energy and energy-efficient infrastructure as well as a greener environment.

"The three parties will collaborate to support the Malaysia Green Highway Index by combining transportation and ecological sustainability in highway design, planning, construction and maintenance," it said.

The parties will tap TNB's renewable energy and energy efficiency solutions by retrofitting light-emitting diode lightings, installing energy-efficient air-con-

ditioning units and solar panel facilities, and integrating TNB's building monitoring system known as "Making Electricity Visible".

It also includes installing, operating and maintaining a network of electric vehicle charging stations at selected locations.

The MoU was signed by TNB Energy Services Sdn Bhd managing director Dr Ahmad Jaafar Abd Hamid, MIGHT president and chief executive officer (CEO) Datuk Mohd Yusoff Sulaiman and Senai-Desaru Expressway CEO Jamal Abd Nasir Taharim.

LAMPIRAN 10
THE STAR (VIEWS): MUKA SURAT 41
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Dealing with plastic waste

I APPLAUD Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin for doing a great job in clamping down on illegal plastic recycling factories and banning the import of plastic waste. Stopping the issuance of new licences is also a major deterrent to this plastic scourge. Seeing her and her ministry working hard to stop pollution and climate change gives us all the reassurance that our nation now has a good chance of preventing further damage to the environment.

Pollution and climate change is devastating the earth and global warming is happening faster than earlier thought by scientists. Although great work has been done recently, it is only on the local front. YB Yeo, her ministry and the government need to escalate it further onto the international stage to make a bigger dent and impact for a cleaner environment.

Imported plastic waste must be stopped at its source. It is not enough to stop the import of plastic waste to our shores. Illegal factories will pop up once again if plastics from abroad keep flowing in.

The ministry and government must engage with their counterparts in developed nations and strongly reproach them on this irresponsible and unscrupulous act. For years, they have deceitfully held on to a moral high ground of being paragons of recycling and the environment. At the same time, perched high on their mound of plastic, they preached and admonished developing nations on the wanton use, disposal and



recycling of plastics.

Our government must take this problem of export of single-use and low grade plastic from developed to developing nations up to the international stage. Some of the plastic which they take great pains to clean and put in recycle bins do not end up being recycled. They end up in low tech recycling factories in developing nations which can hardly cope with their own plastic waste.

If these developed nations justify their export of plastic to developing nations by claiming it creates jobs, it must be pointed out that the jobs created are mainly low paying manual work and done in low tech factories. The exported plastics are

low grade or low value plastics because the high grade ones are kept and recycled in their own countries.

The imported plastic that does not or cannot be recycled gets burnt, buried in landfills or in rivers and onto the oceans. These developed nations must recycle all their own plastic and not get off scot free. They have the finances and technology and must not shirk off their responsibility just because it is more convenient and cheaper to do it in developing countries.

But if there is a mutual agreement between developed and developing countries on plastic recycling, developed nations must provide grants, cheap loans, train-

ing, know-how and advanced technology to build factories to handle and recycle plastic more efficiently in a cleaner and better environment.

Naturally, this vital issue cannot be placed solely on the shoulders of the government. Local environmental NGOs must similarly engage and reveal to their peer organisations in developed nations of this inexcusable export of plastic.

This is a global problem and locally here, we must also minimise the use of plastic and recycle as much as possible.

KOO WEE HON
Petaling Jaya

LAMPIRAN 11

THE SUN (SUNBIZ): MUKA SURAT 13
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Government settles interest due on 1MDB Energy bond

PETALING JAYA: The government has made the coupon payment amounting to US\$50.31 million (RM208.80 million) due yesterday as part of a settlement agreement with International Petroleum Investment Co (IPIC), due for the US\$1.75 billion 1MDB Energy (Langat) Ltd (1MELL) bond.

According to a table of 1Malaysia Development Bhd (1MDB) debt commitments released, US\$52.41 million is due on Nov 11, for the 1MELL bond under the settlement agreement, and a RM143.75 million payment on Nov 29, for a government-guaranteed RM5 billion Islamic medium-term note.

The Finance Ministry said Malaysia is committed to meeting its debt commitments.

This year alone, the Malaysian government has paid RM1.11 billion for bonds issued by 1MDB, excluding the payment made yesterday.

LAMPIRAN 12
NEW STRAITS TIMES (NEWS/ NATION): MUKA SURAT 14
TARIKH: 19 OKTOBER 2018 (JUMAAT)

FIFTH PILLAR OF 11MP

BETTER WEATHER FORECASTING SYSTEM

This will address lack of pre-emptive steps in mitigating impact of disasters

AHMAD FAIRUZ OTHMAN
 KUALA LUMPUR
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AN integrated weather and flood forecasting system, and review of standard operating procedures to deal with natural disasters, will be set in motion in the remaining two years of the 11th Malaysia Plan.

These efforts would address a lack of pre-emptive steps in mitigating the impact of severe floods, dry periods and heat waves in recent years.

The 11th Malaysia Plan Mid-

Term Review said natural disasters due to climate change called for a need for better weather forecasting to boost the country's preparedness in facing disasters.

"An integrated weather and flood forecasting and early-warning system is being developed. The early warning system for tsunami and earthquake will be enhanced.

"These systems will enable dissemination of information in a more systematic and timely manner to disaster-related agencies and affected people.

"A seasonal climate forecasting system will also be established to generate long-term weather forecasts for one to six months," said the report.

It noted that Malaysia experienced extreme weather patterns in the past decade, and this led to major floods in 2010, 2012, 2014 and last year.

The impact of the 2016 El Nino resulted in prolonged dry periods and heat waves, it said.

"Incomplete information and lack of knowledge on disaster risks have hampered efforts to identify the vulnerability of the nation against disasters.

"In this regard, less emphasis has been given to pre-disaster measures as compared with post-disaster, even though measures to increase resilience and protect development gains are more important."

It said the government would increase its capacity in disaster responses, and would continue to conduct tabletop exercises and field training exercises on flood, landslide, earthquake and tsuna-

mi via simulations with national, regional and international responders.

"In addition, standard operating procedures for natural disaster management

— namely drought, earthquake, flood, haze and tsunami— will be reviewed to improve response measures for disasters."

Disaster risk profiling will be conducted to identify disaster-prone areas, while coastal and inland flood inundation maps,

predicted seasonal dry spells and precipitation maps were also on the cards.

The measures to combat climate change and reduce disaster risks were listed under the three priorities in "Enhancing Environ-

mental Sustainability through Green Growth", which is the fifth pillar in the 11th Malaysia Plan Mid-Term Review.

The other two priorities were on "Strengthening Governance" and "Conserving Natural Resources".

Other measures were a revision of designs of dams, barrages, flood-mitigation structures and water and sewerage treatment plants; exploration of alternative sources of water, such as recycled water, groundwater, lake and reservoirs under the National Water Balance Management System; a new energy demand-side management master plan to reduce greenhouse gas emission; a Green Technology Master Plan focused on six key sectors; a 30 per cent household waste recycling target by 2020; and, tree-planting programmes covering a 1,640ha area to rehabilitate degraded forests.

A seasonal climate forecasting system will also be established to generate long-term weather forecasts for one to six months in advance.

LAMPIRAN 13
SINAR HARIAN (WACANA SINAR): MUKA SURAT 15
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Shah Alam terkesan dengan gempa

SHAH Alam merupakan antara kawasan terkesan sekiranya berlaku gempa kuat di Sumatera dan sekitarnya.

Pakar gempa bumi dan tsunami, Datuk Dr Mohd Rosaidi Che Abas berkata, kekuatan tanah bergoncang di sekitar Shah Alam disebabkan gempa adalah pada skala enam.

"Ya sebelum ini kita tidak tahu, tetapi hakikatnya Shah Alam dan kawasan ke arah pantai antara kawasan terkesan. Perkara itu terjadi selepas gempa kuat melanda Aceh pada 26 Disember 2014.

Sebelum Aceh, tiada gempa

direkodkan di Semenanjung melangkaui Tasik Kenyir pada 23 Februari 2016. Itu pun disebabkan oleh empangan.

Gempa 9.3 magnitud di Aceh juga telah menyebabkan berlaku gempa beberapa tempat di Semenanjung seperti Bukit Tinggi, Jerantut dan Termerloh di Pahang, Kuala Pilah, Negeri Sembilan dan Manjung, Perak.

Ahli geologi sedang meneliti kenapa perkara itu berlaku selepas gempa Aceh. Pada saya, ia adalah disebabkan tekanan terhadap garis sesar sedia ada bertukar menjadi aktif.

Gempa bumi berlaku disebabkan



Ya sebelum ini kita tidak tahu, tetapi hakikatnya Shah Alam dan kawasan ke arah pantai antara kawasan terkesan."

- Rosaidi

kan tekanan kepingan tektonik yang sentiasa bergerak sama ada menjauhi ataupun menjurus. Sebenarnya bumi ini hidup. Tektonik yang bertembung itulah menyebabkan berlakunya kejadian gempa.

Malaysia mengambil tindakan



agresif membangunkan sistem gempa dan tsunami serta prosedur operasi standard (SOP) di bawah Agensi Pengurusan Bencana (Nadma).

Agensi pelaksana mengambil tindakan dengan mengadakan latihan

amaran tsunami di beberapa tempat berisiko antaranya, Lahad Datu, Ranau dan Kudat, Sabah.

Semua orang di kawasan itu didedahkan dengan perkara yang patut dilakukan sekiranya berlakunya kejadian ini.

Kita berpendapat Kudat adalah salah satu tempat berisiko tinggi untuk berlakunya tsunami. Justeru, kita berjaya mewujudkan Pelan Tindakan Kecemasan Tsunami. Bagaimanapun latihan amaran gempa masih belum dilaksanakan namun saya yakin kerajaan akan melakukannya," katanya.

LAMPIRAN 14
THE STAR (NATION): MUKA SURAT 6
TARIKH: 19 OKTOBER 2018 (JUMAAT)

'Make green growth a priority'

'We must focus on making sustainable development a mainstream goal'

PETALING JAYA: More emphasis will be given to environmentally-friendly sustainable development to ensure that a sustainable national development is successful.

The emphasis on green growth is one of the key aims in the mid-term review of the 11th Malaysia Plan.

Measures include formulating an Environmental Protection Act, cutting greenhouse gas emissions intensity to Gross Domestic Product by 45% relative to the level in 2005, and targeting 8,885MW of renewable energy installed capacity.

Other measures outlined included a target of 30% recycling rate for household waste, and development of an integrated weather and flood forecasting.

Environmental Protection

Society of Malaysia president Nithi Nesadurai said that it is high time for Malaysia to move beyond using just green growth as the means for enhancing environmental sustainability.

"The effort should also focus on making sustainable development a mainstream subject, including other concerns on ecological footprint analysis, climate change and disaster risk management.

"Then we also need a mechanism on implementation that looks into every activity of the federal government, as well as all levels of the state governments and local authorities.

"In effect, programmes conducted by every ministry should be evaluated from the criteria of what effect will this have on our ecologi-

cal footprint and greenhouse gas emissions.

"Otherwise, the environment will prevent us from achieving the development we aspire through extreme weather events, floods and droughts," he said when contacted here yesterday.

Nithi noted that currently, the planet is in a state of 'ecological overshoot' which was attributed to high consumption, loss of nature and waste generation.

"Humankind is consuming the resources of 1.7 planets.

"At the same time, increasing greenhouse gas emissions worldwide make achieving the target of keeping global warming to below 1.5°C extremely challenging.

"Continuing in these pathways will have grim consequences for

all, and Malaysia will not be spared unless the global community comes together to address these challenges," he added.

He argued that the 11th Malaysian Plan was too "federal government-centric even as we are aware there is a limit to what the federal government can actually do by itself".

"Adequate funding should be provided to state governments to contribute towards forest conservation and help them address climate change issues.

"The federal government should also support and encourage investments in green growth initiatives to facilitate a shift from the traditional economic growth activities at the state level," he added.

LAMPIRAN 15 NEW STRAITS TIMES (WORLD): MUKA SURAT 69 TARIKH: 19 OKTOBER 2018 (JUMAAT)

CLIMATE CHANGE

'Carbon emissions to rise this year'

PARIS: Energy sector carbon dioxide emissions will rise this year after hitting record levels the year before, dimming prospects for meeting Paris climate treaty goals, the head of the International Energy Agency (IEA) said on Wednesday.

The energy sector accounts for 80 per cent of global carbon emissions, with most of the rest caused by deforestation and agriculture, so its performance is key to efforts to rein in rising world temperatures.

"I'm sorry, I have very bad news for you," IEA executive director Fatih Birol told guests at a diplomatic function hosted by the Polish embassy here.

"Emissions this year will increase once again, and we're going to have the COP meeting when global emissions reach a record high," he said, referring to the December United Nations' climate summit in Poland.

After remaining flat for three years, total global carbon emissions last year rose by 1.4 per cent.

The meeting in Poland is tasked with finalising the "operating manual" for the 195-nation Paris Agreement, which enters into force in 2020 and calls for capping global warming at "well below" 2°C, and at 1.5°C if possible.

"The chances of meeting such ambitious targets, in my view, are becoming weaker and weaker every year, every month," Birol told invitees, including former French prime minister Laurent Fabius, who shepherded the 2015 treaty to a successful conclusion, and Poland's junior minister Michal Kurtyka, who will preside over the December summit.

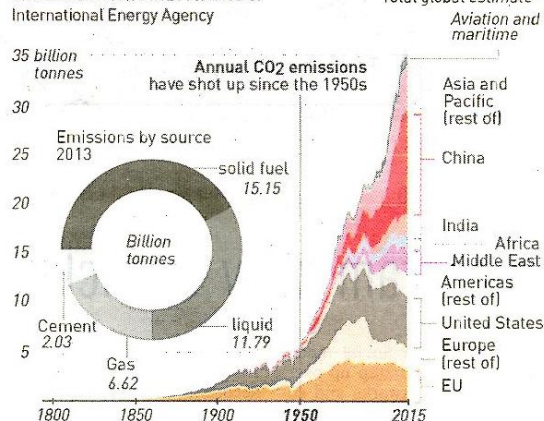
With 1°C of warming so far, Earth has seen a crescendo of deadly extreme weather, including heatwaves, droughts, floods and storm surges made worse by rising seas.

Even taking into account voluntary national pledges to slash carbon emissions caused by burning fossil fuels, the planet is on track to warm by an unlivable 3°C to 4°C by century's end. **AFP**

RISING CARBON DIOXIDE

Emissions will rise in 2018: head of International Energy Agency

Total global estimate*



*Higher than sum of national totals due to statistical differences

Source: CDIAC/Our World in Data/europa.eu

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After remaining flat for three years, total global CO2 emissions in 2017 rose by 1.4 percent

LAMPIRAN 16
KOSMO (DUNIA): MUKA SURAT 46
TARIKH: 19 OKTOBER 2018 (JUMAAT)

Robot beri penjelasan kepada Ahli Parlimen Britain

LONDON – Ahli-ahli Parlimen Britain mencipta sejarah baharu selepas mereka meminta pandangan buat kali pertama daripada robot pada Selasa lalu.

Robot bernama Pepper itu berucap di depan Jawatankuasa Pemilihan Pendidikan Britain mengenai peningkatan penggunaan kepintaran buatan (AI) dan bagaimana sekolah-sekolah Britain perlu memberi respons.

Ini merupakan kali pertama bagi objek bukan manusia dijemput untuk berucap dan memberi penjelasan di Parlimen British sejak penubuhannya 700 tahun dahulu.

Pepper yang berucap menggunakan loghat Amerika merupakan robot humanoid yang dibina dan dibangunkan oleh Universiti Middlesex.

Pengerusi Jawatankuasa Pemilihan Pendidikan yang juga ahli Parlimen Tory, Robert Halfon menjemput mesin tersebut selepas teruja ketika lawatannya ke universiti itu sebelum ini.

Ahli-ahli Parlimen secara jelas membaca satu skrip soalan disediakan dan robot berkenaan diprogramkan untuk menjawab semua soalan tersebut. – Agensi



PEPPER (tengah) memberi penjelasan kepada Jawatankuasa Pemilihan Pendidikan di Parlimen Britain di London pada Selasa lalu.

AGENSI