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

Bil	Berita	Media	Capaian Berita Penuh
1.	**BBC report describes western Malaysian town as 'The world's rubbish bin' – holding 17-million kilogram of garbage | #AsiaNewsNetwork**	Eleven Myanmar	Klik pada tajuk berita
2.	**Plastic pollution: Malaysian town smothered by rubbish**	United News of India	Klik pada tajuk berita
3.	**[VIDEO] Lawatan Suruhanjaya Tenaga ke Kosmo!**	Kosmo	Klik pada tajuk berita
4.	**Delegasi ST melawat ibu pejabat Utusan Melayu**	Utusan Malaysia	Klik pada tajuk berita
5.	**SESB gesa pemimpin masyarakat lapor kegiatan curi elektrik**	Utusan Malaysia	Klik pada tajuk berita
6.	**'Ban import of plastic waste'**	The Sun Daily	Rujuk lampiran 1
7.	**Suruhanjaya Tenaga Lawatan Utusan**	Utusan Malaysia	Rujuk lampiran 2

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
8.	**Hot and dry days to last until April**	The Star	Rujuk lampiran 3
9.	**Garbage plant told to close down but still running at night**	The Star	Rujuk lampiran 4
10.	**'The world's rubbish bin' – 17mil kg of**	The Star	Klik pada tajuk berita

	rubbish in Jenjarom, reports BBC		
11.	Malaysia's plastic dump demands action	Asean Economist	Klik pada tajuk berita
12.	Idea dan Struktur Ekonomi berbeza di era Revolusi Industri 4.0	Astro Awani	Klik pada tajuk berita
13.	Jobs of the future: Top five emerging careers	New Straits Times	Klik pada tajuk berita
14.	**TNB in focus due to high coal prices**	The Star	Rujuk lampiran 5
15.	**Widening technology reach to all Malaysians**	New Straits Times	Rujuk lampiran 6
16.	**Cabaran pengurusan industri tenaga**	Utusan Malaysia	Rujuk lampiran 7
17.	More needs to be done to combat plastic waste: NGO	The Sun Daily	Klik pada tajuk berita

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
18.	Sepanyol rancang tutup semua loji nuklear menjelang 2035	Sinar Harian	Klik pada tajuk berita
19.	**Saintis cadang bina stesen angkasa lepas dalam asteroid**	Kosmo	Rujuk lampiran 8

LAMPIRAN 1
THE SUN (NEWS WITHOUT BORDERS): MUKA SURAT 6
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

'Ban import of plastic waste'

Rid illegal waste processsing factories, says NGO

PETALING JAYA: Half-measures such as making importers pay additional fees are not enough to address the problem of plastic waste in Malaysia.

The long-term solution is to ban the import of such waste and to close down illegal waste processing factories, according to environmental watchdog Persatuan Tindakan Alam Sekitar Kuala Langat.

Its secretary, Pua Lay Peng, said the Housing and Local Government Ministry should work with local councils to shut these factories.

Pua estimated that there were more than 40 such factories operating in the Kuala Langat area, and not 36 as reported.

In addition, she said, the Department of Environment should beef up enforcement to stop such illegal activities.

She was responding to a statement by the ministry that licence and verification fees as well as new charges for each tonne of plastic imported would be imposed soon.

Minister Zuraida Kamaruddin said the fees would contribute towards the country's income.

Pua, who lives in Kuala Langat, said the situation in the area was dire, and the people's health had been affected. "Higher fees will not solve the problem," she added.

She cited the case of plastics being burned at a recycling factory in Kampung Sungai Kandis despite it having been sealed by the DoE as an urgent reminder that the government should address the problem quickly.

She said the government should ban the import of foreign waste as China did in 2017.

LAMPIRAN 2
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 9
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

SURUHANJAYA TENAGA LAWAT UTUSAN

SERAMAI 16 pegawai daripada Suruhanjaya Tenaga (ST) mengadakan lawatan ke Ibu pejabat Utusan Melayu (M) Berhad di Jalan Chan Sow Lin, Kuala Lumpur, semalam.

Delegasi yang diketuai oleh Pengarah Perancangan Strategik dan Komunikasi, Kamarul Ariffin Ibrahim serta Pengarah Operasi Industri ST, Ir. Roslee Esman disambut oleh Pengarang *Utusan Malaysia*, Datuk Zulkefli Hamzah dan Penolong Pengarang *Mingguan Malaysia*, Rozaman Ismail.

Selain untuk mengeratkan hubungan dengan Kumpulan Utusan, lawatan sulung itu juga memberi pendedahan mengenai peranan ST sebagai badan kawal selia sektor tenaga dalam industri pembekalan elektrik dan gas berpaip.

■ DELEGASI Suruhanjaya Tenaga diketuai Kamarul Ariffin Ibrahim (tujuh dari kiri) bergambar bersama Zulkefli Hamzah (enam dari kiri) semasa melawat Ibu pejabat Utusan Melayu (M) Berhad di Kuala Lumpur, semalam. –UTUSAN/ NOOREEZA HASHIM

LAMPIRAN 3
THE STAR (NATION): MUKA SURAT 10
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

Hot and dry days to last until April

Heatwave alert issued for five areas nationwide as temperatures soar

By RAZAK AHMAD
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PETALING JAYA: It is searing hot and dry, with five areas in the country already placed on heatwave alert.

And there's more "hot" news – Malaysians have to put up with this weather until April, at least.

The tail-end of the north-east monsoon next month will see less rain in most parts of the country.

The Malaysian Meteorological Department (MetMalaysia), in a report on the country's weather outlook from February to July, stated that most international climate models predicted a 65% possibility of the El Nino weather phenomenon occurring until May.

El Nino is an irregular weather phenomenon that causes sea temperatures in the equatorial Pacific Ocean to rise, bringing hot and dry weather to Malaysia.

In the peninsula, Sik (Kedah), north Seberang Perai (Penang), Kinta and Kuala Kangsar (Perak) and Alor Gajah (Melaka) recorded temperatures of between 35°C and 37°C for three days in a row.

Throughout this month, the Department of Environment said most areas in the peninsula were likely to experience dry weather with less than 150mm rainfall.

It said Selangor, Kuala Lumpur, Putrajaya, Negri Sembilan, Melaka, Johor, Perlis, south Terengganu and Pahang will get slightly less average rainfall compared with the long-term average figure.

Kuching and Samarahan in Sarawak are expected to get more rain than average, while Miri is likely to be drier.

In Sabah, most parts of the state are forecast to receive less than average rainfall.

One level up from Category 1 (heatwave alert) is Category 2, which is when temperatures rise above 37°C for three consecutive days.

When this happens, the Energy, Science, Technology, Environment and Climate Change Ministry is empowered to officially declare a heatwave in that location.

This is to enable the relevant authorities to take follow-up action such as closing schools.

When an area hits Category 3 (when the temperature hits above 40°C three days in a row, which is considered the "emergency level"), the National Disaster Management Agency will be notified and the Prime Minister can declare an emergency.

According to the MetMalaysia report, the country's weather until July will be influenced by three weather patterns – the north-east monsoon which ends in March, intermonsoon in April and south-west monsoon, which begins in May.

The start of the intermonsoon period is expected to see more thunderstorms in the west coast and interior of the peninsula, east coast of Sabah and central Sarawak.

In the meantime, the Fire and Rescue Department is on alert for more forest fires following a recent incident in Baling, Kedah.

LAMPIRAN 4
THE STAR (NATION): MUKA SURAT 10
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

Garbage plant told to close down but still running at night

By WANI MUTHIAH
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KLANG: A garbage recycling factory had supposedly ceased all operations last month but when residents still suffered breathing difficulties and throat irritation, an environmental group carried out a probe.

Pertubuhan Pelindungan Khazanah Alam Malaysia's Selangor chairman Damien Thanam Divean claimed the factory in Kg Sungai Kandis, Shah Alam, was burning trash, mostly plastic, and emitting smoke believed to be toxic at night.

Damien Thanam said after it was ordered closed, he made regular visits to the factory during the day only to find that it was not operating.

But residents still complained of breathing difficulties and a lingering foul smell in the air.

"So, I visited the factory at night for several days this week and found that the operations were in full force late at night.

"I have informed the Department of Environment and hope the culprits will be charged in court soon," he said.

When contacted, Sungai Kandis assemblyman Zawawi Ahmad Mughni said he would look into the matter and speak to the village headman.

LAMPIRAN 5
THE STAR (STARBIZ): MUKA SURAT 1
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

TNB in focus due to high coal prices

Govt to decide on imbalance cost pass-through mechanism

By DANIEL KHOO
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PETALING JAYA: The profitability of Tenaga Nasional Bhd (TNB) hinges on what the government decides on the imbalance cost pass-through (ICPT) mechanism in the next tariff review.

So far, the government has approved the implementation of the ICPT for the period of Jan 1-June 30, 2019, and the next electricity tariff setting is slated soon.

The ICPT, which was introduced in 2014 under the Barisan Nasional administration, allows for adjustments to be made in consumers' electricity bills every six months, depending on the price of coal.

However, concerns are now arising that the money remaining in the Kumpulan Wang Industri Elektrik (KWIE) fund may not be enough to subsidise electricity bills in the event that coal prices continue to stay above the US$75-per-tonne reference price.

The KWIE fund was established when the ICPT was introduced in 2014.

Coal prices, which had touched a high of almost US$120 per tonne in the middle of last year, have now moved down from that level and are now at US$95.65 per tonne. The price is still well above the US$75-per-tonne reference price that was set by the government then.

Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin said in a recent interview with a business publication that there was still enough money in the fund for the first-half of the year.

Yeo also noted in the interview, which was done in early December, that the country was suffering from unpredictable coal prices. She, however, did not answer conclusively if the Pakatan Harapan government would still allow the electricity tariff to be dictated by the ICPT mechanism.

TNB's share price has been under pressure of late on concerns of how energy reforms would affect it, moving forward.

Its shares closed at RM13.06 yesterday, near its 19-month low.

According to earlier reports, Yeo is slated to announce power-sector market reforms to increase competition across the value chain, especially in the distribution and retail segments, in the second quarter of this year.

The market structure reform will take 24 months, starting from mid-2019, Yeo was quoted as saying in a radio interview last month.

Whether or not it will involve the revamp or abolishment of the ICPT mechanism is still not known at this point in time, but analysts have said it would appear that the government's heightened focus on renewable energy would help pave the way for possibly lower rates in the longer term.

CGSCIMB said in a Jan 17 note that it saw the upcoming market structure reform and cancellation of four independent power producer (IPP) contracts last year as measures to bring down the electricity tariff.

"To recap, the RM1.26bil savings from the IPP cancellations would likely translate into 0.37 sen/kWh savings in the electricity tariff. Under the incentive-based regulation period two (RP2, 2018-2020), 68.5% of the 39.45 sen/kWh average base tariff goes to the single buyer generation, where 31% is used to pay capacity cost," the research house said.

"The focus on renewable energy will not only provide sustainable energy, but also stable (no fluctuation versus fossil fuel) or even lower generation cost in the long run, in our view. These are in line with the current government's initiatives to increase industry efficiency and reduce electricity costs, which in turn benefits the end-user," it added.

A UOB Kay Hian Research report, quoting Yeo, said the Malaysia Energy Supply Industry (MESI) 2.0's main goal is to achieve affordable tariffs for its citizens, and decentralise and liberalise the electricity supply industry.

"In essence, we expect the government to remain committed in carrying out energy reforms, and this bodes well for TNB. We expect a MESI 2.0 blueprint to be announced/launched some time towards the end of March," UOB Kay Hian said in its report.

UOB Kay Hian said market reform initiatives may free up to about 50% or RM2bil-RM2.5bil of TNB's working capital requirements, and more importantly, lift its ICPT risk should the government decide to underwrite the fuel cost directly.

"This paves the way for potentially higher dividend payouts, we opine. In addition, TNB does not mark up coal prices and as such, there is minimal earnings downside from this novation exercise," UOB Kay Hian said, maintaining its "buy" rating on the stock with a target price of RM15.80.

LAMPIRAN 6
NEW STRAITS TIMES (BUSINESS / NEWS): MUKA SURAT 22
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

VIEW POINT

MADANI SAHARI

FINDING SOLUTIONS

Widening technology reach to all Malaysians

"As Internet speed and area of coverage increase, issues that can be solved by simple connectivity will naturally remove many barriers to technology access.

IN previous articles, this column discussed the approaches to overcome barriers to technology penetration and adoption, particularly from the perspective of technology anxiety with respect to business investments and learning curves.

While this anxiety can be addressed through human capital development and technology adoption programmes, the bigger challenge is to manage the geography of technological access points across the physical landscape of the country.

As Internet speed and area of coverage increase, issues that can be solved by simple connectivity will naturally remove many barriers to technology access.

However, the future landscape foreseen through trends in Industry 4.0 expects cyber-physical systems to play a dominant role in the economy — which means the management of geolocational physical infrastructure has to be viewed holistically.

In general, the challenges are twofold — presenting itself in both logistical and socio-economic dilemmas.

Firstly, the variety of distance and topology requires custom solutions to the setting up of physical equipment, leading to increased investment cost and consequential risks to returns.

Second and more pertinent, is that the prescription of technological solution becomes more challenging when accessing areas with smaller population. As technological sophistication increases, it tends to cater to a higher degree of specialisation — and becomes complicated when local economies tend to be diverse in business needs and talent requirements.

Obviously, there is no magic bullet to quell all issues, and for me, challenges make life more interesting.

It is important to start moving towards a solution for this geographical dilemma — by reducing risk through setting up more access points for common use. If we can assist in establishing physical technological access points in strategic locations, and at the same time start with technologies that are common to the localities within reach, we have at least addressed half the problem, and we can meet the needs of Malaysians half way.

It is for this reason the Malaysia Automotive, Robotics and IoT Institute (MARii) is launching its MARii Satellite programme. Just like how the physical presence of orbiting satellites in space work in unison with its command centre on earth, MARii Satellites are physical setups, placed in strategic locations sensitive to the economic needs of the localities that surround them.

MARii will be launching its first ever Satellite in Kota Kinabalu, Sabah, this weekend. It is a six-story facility that will house advanced product and process design, and training facilities that are specifically developed to allow increased technological adoption, in fields not limited to the automotive sector alone.

Furthermore, several programmes with schools, universities and local industries in Sabah have been initiated to enhance access to processes that optimise the creativity, innovation and implementation in science, engineering and technology for the benefits of education, business and research.

The unique feature of the Satellite concept is that apart from allowing technology access to the local population, it is also designed to harness the talents (and potential) talents already existing within such localities.

It is a centre of discussion, project implementation, creative design and training that harnesses the expertise and local experience of those within its immediate ecosystem.

In the future, the MARii Satellite programme will be expanded to reach all corners of the nation. They will also be strategically located within partnering universities, industry players and government infrastructure to maximise talent use, optimise facility and infrastructure utilisation, as well as harnessing technological adoption that will work in sync and in connectivity with all the other established MARii satellite facilities, our headquarters and centres of competencies.

This new approach will create the required value addition and widen our expertise network, which in future can be cross-referenced across the numerous Satellites so that the expert and facilities pool can be shared and optimised to accelerate the technological adoption across the entire national economic landscape.

The writer is the chief executive officer of Malaysia Automotive, Robotics and IoT Institute.

LAMPIRAN 7
UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 24
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

Cabaran pengurusan industri tenaga

SENARIO industri tenaga global sedang dan bakal melalui fasa perubahan yang memerlukan input daripada pelbagai pihak. Cabaran dari aspek pengurusan sumber dan sisa, penyelidikan punca tenaga boleh baharu dan keperluan yang tidak pernah susut terhadap modal insan berkemahiran perlu ditangani oleh semua pemain industri.

Antaranya perkongsian pengalaman dan kepakaran yang dimiliki oleh pengamal industri adalah amat bermanfaat bagi pembangunan pelajar institusi pengajian tinggi. Baru-baru ini pengurus aset di syarikat multinasional, Exxon Mobil Exploration and Production Malaysia Inc. (EMEPMI), **Hazizi Hassan** meluangkan masa berkongsi ilmu dan kepakaran dalam bidang pengurusan tenaga bersama pelajar jurusan bioteknologi dan sains pengurusan alam sekitar.

HAZIZI HASSAN membentangkan topik berkaitan isu pengangkutan.

> "Program yang menjadi jambatan di antara dunia akademik dan industri sebegini haruslah digalakkan, dan diadakan dengan kerap di institusi pengajian tinggi tempatan bagi memberikan input berguna kepada para pelajar. Ini sekaligus bakal meningkatkan kebolehpasaran mereka di dunia pekerjaan nanti."

Program berbentuk forum dwihala yang diadakan di Institut Sains Biologi, Fakulti Sains Universiti Malaya (UM) itu dinamakan *Energy Outlook* dihadiri oleh lebih 40 orang pelajar. Selain penerangan khusus mengenai bidang pengurusan tenaga, peserta turut didedahkan dengan keperluan modal insan yang sentiasa tersedia secara am dalam bidang berkaitan sains, teknologi, kejuruteraan, dan matematik (STEM).

Menurut Hazizi, pihaknya sentiasa mengintai peluang untuk berkongsi maklumat dengan para penyelidik dan pelajar institusi pengajian tinggi terutama berkaitan cabaran dan peluang yang boleh diambil oleh setiap individu yang dalam industri berkenaan .

"Kami sentiasa berminat untuk menyumbang kepada ekosistem masyarakat yang prihatin terhadap sains dan teknologi," katanya.

Sementara itu seorang peserta, **Myra Radzmi** berasa bertuah kerana berpeluang berinteraksi secara langsung dengan seorang pakar dari industri yang arif mengenai cabaran yang dihadapi buat masa ini.

"Saya amat teruja dengan pengisian forum ini terutama apabila melibatkan isu kesan alam sekitar akibat penerokaan minyak dan gas asli. Kami juga didedahkan dengan perspektif pemain industri mengenai keperluan tenaga pada masa hadapan," kata pelajar jurusan Bioteknologi dan Sains Pengurusan Alam Sekitar UM itu.

KEPERLUAN industri pengurusan tenaga kini semakin mendesak. - GAMBAR HIASAN

Bagi pensyarah kanan institut berkenaan, **Dr. Zul Ilham Zulkiflee Lubes**, sektor tenaga telah disenaraikan sebagai sasaran ketujuh dalam gagasan Matlamat Pembangunan Lestari (SDG) anjuran Pertubuhan Bangsa-Bangsa Bersatu (PBB) dan penganjur forum.

"Ini merupakan penanda aras pembangunan global yang jelas dan sepatutnya dilaksana oleh semua pihak di seluruh dunia. Antara usaha yang seharusnya menjadi keutamaan termasuk akses kepada tenaga yang mampu milik, jaringan tenaga boleh baharu yang luas dan kecekapan tenaga," ujarnya yang juga penganjur program.

Kesemua ini merupakan kepentingan global masa kini dan perlu dibangunkan dengan pesat dalam masa terdekat sejajar dengan peningkatan populasi dunia.

Keperluan terhadap tenaga adalah universal dan cabaran masa kini dan akan datang adalah untuk membangunkan sumber baharu dengan kaedah yang selamat dan bertanggungjawab.

Beliau berkata, program sebegini yang menjadi jambatan di antara dunia akademik dan industri harus digalakkan dan diadakan dengan kerap di institusi pengajian tinggi tempatan bagi memberikan input berguna kepada para pelajar.

"Ini sekali gus bakal meningkatkan kebolehpasaran mereka dalam dunia pekerjaan nanti," katanya.

Maklumat lanjut mengenai program itu boleh didapati melalui Dr. Zul Ilham Zulkiflee Lubes di *ilham@um.edu.my*.

SEBAHAGIAN peserta khusyuk mendengar penerangan.

LAMPIRAN 8
KOSMO (DUNIA): MUKA SURAT 41
TARIKH: 14 FEBRUARI 2019 (KHAMIS)

Saintis cadang bina stesen angkasa lepas dalam asteroid

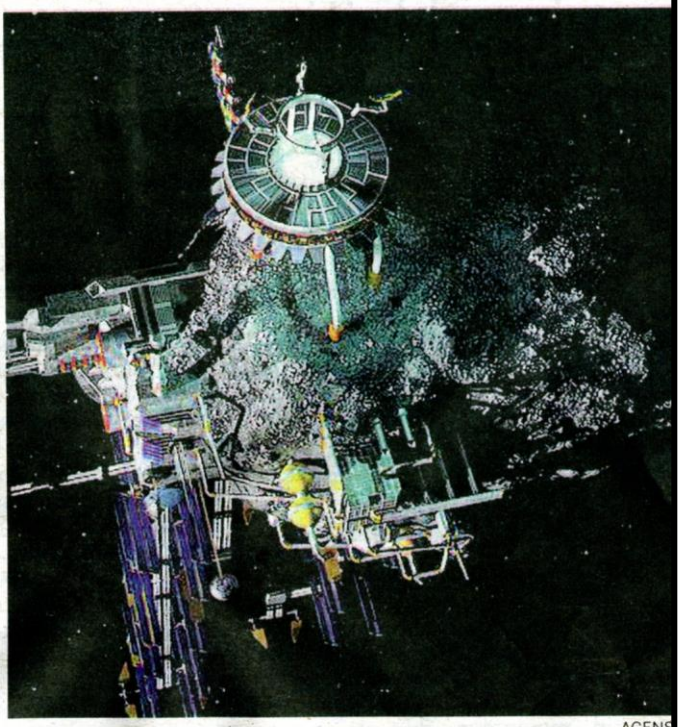
VIENNA, Austria – Sekumpulan saintis menyatakan cadangan untuk membina sebuah stesen angkasa lepas dalam asteroid dan menggunakan kelebihan itu untuk melombong mineral berharga daripada batu angkasa.

Doktor Thomas Maindl daripada Universiti Vienna di sini menyatakan ada dua manfaat utama daripada rancangan itu iaitu membolehkan aktiviti lombong dilakukan dan mengelakkan kerosakan stesen angkasa akibat radiasi.

"Jika kita menemui asteroid yang cukup stabil, mungkin kita tidak memerlukan dinding aluminium atau sebagainya. Mungkin boleh menggunakan keseluruhan asteroid sebagai stesen angkasa lepas," katanya kepada majalah *New Scientist*.

Kumpulan saintis itu menyatakan ia mungkin boleh dilakukan dengan berasaskan kaedah matematik iaitu menempatkan stesen angkasa lepas berbentuk silinder di dalam batu berukuran beberapa ratus meter lebar.

Bagaimanapun, beberapa saintis lain mendakwa kekurangan maklumat mengenai kandungan fizikal asteroid untuk menjamin kejayaan pembinaan sebuah stesen angkasa di dalam asteroid. Mereka bimbang asteroid itu boleh retak dan pecah. – Agensi



AGENS

ILUSTRASI artis menunjukkan stesen angkasa lepas di dalam asteroid.