

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>Let's work with rare earth metals</u> DEAR Minister Yeo Bee Yin, I read your reply to Lynas employees and can't say I am not dismayed. I write this as one of the voices in support of Lynas as your government, with specific respect to your ministry, seems unwilling to budge on any issue with regards to heavy metal processing and radiation-related activities.	News Strait Times	Klik pada tajuk berita / Rujuk Lampiran 1
2.	<u>High-tech players urged to help with electronic waste</u> Also present at the dialogue were Economic Affairs Minister Datuk Seri Azmin Ali, International Trade and Industry Minister Datuk Darell Leiking and Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin.	The Star	Klik pada tajuk berita / Rujuk Lampiran 2
3.	<u>Kerajaan akan kurangkan lagi kerenah birokrasi - PM</u> Kerajaan akan mengurangkan lagi kerenah birokrasi bagi mempercepatkan proses kelulusan bagi pelaksanaan projek di negara ini. Hadir sama, Menteri Hal Ehwal Ekonomi, Datuk Seri Mohamed Azmin Ali, Menteri Perdagangan Antarabangsa dan Industri, Datuk Darell Leiking, Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin, Menteri Pembangunan Usahawan, Datuk Seri Mohd Redzuan Md Yusof dan Pengerusi MIGHT, Tan Sri Dr Ir Ahmad Tajuddin Ali.	Berita Harian	Klik pada tajuk berita / Rujuk Lampiran 3
4.	<u>Walking the talk on sustainability</u> Energy, Science, Technology, Climate Change and Environment Minister Yeo Bee Yin, And	The Star	Rujuk Lampiran 4

	Prof Jeffrey Sachs launching the Master in Sustainable Development Management programme		
5.	<u>Cipta teknologi baharu bagi pengurusan sisa buangan</u> Malaysia perlu menghasilkan ciptaan baharu bagi pengurusan sisa buangan yang boleh menjana kekayaan, kata Perdana Menteri, Tun Dr. Mahathir Mohamad	Kosmo!	Rujuk Lampiran 5
6.	<u>Lynas perbetul maklumat tidak tepat</u> “Laporan awal penganalisis menyatakan angka-angka itu adalah anggaran kasar sahaja. Penganalisis terbabit juga merujuk deposit keselamatan Lynas yang dibayar kepada Lembaga Perlesenan Tenaga Atom Malaysia(AELB)”	Sinar Harian	Rujuk Lampiran 6
7.	<u>Terengganu Floods prompt evacuations</u> Che Adam said the Meteorological Department had forecast heavy rain until today for the whole Terengganu	The Star	Rujuk Lampiran 7
8.	<u>Mangsa banjir di Terengganu terus meningkat</u> Keadaan ini dijangka berterusan berdasarkan laporan Jabatan Meteorologi Malaysia (MetMalaysia) yang menjangkakan hujan lebat akan terus melanda beberapa kawasan di negeri ini sehingga esok.	Berita Harian	Klik pada tajuk berita
9.	<u>Amaran cuaca buruk di tiga negeri</u> Ketua Pengarah Jabatan Meteorologi Malaysia (METMalaysia), Alui Bahari, berkata keadaan itu berikutan fasa Monsun Timur Laut ketika ini, yang dijangka akan berakhir penghujung Mac.	Berita Harian	Rujuk Lampiran 8
10.	<u>Hujan lebat dijangka berterusan sehingga esok</u> Jabatan Meteorologi Malaysia (MetMalaysia) mengeluarkan amaran cuaca buruk bagi negeri Kelantan dan Terengganu dan dijangka hujan lebat berterusan sehingga esok.Ketua	Berita Harian	Klik pada tajuk berita

	Pengarah Jabatan Meteorologi Malaysia (METMalaysia), Alui Bahari, berkata negara masih lagi berada di dalam fasa Monsun Timur Laut yang dijangka akan berakhir pada penghujung bulan Mac.		
11.	<u>Highway to have charging stations</u> Present was Malaysian Green Technology Corporation (MGTC) acting chief executive officer Syed Ahmad Syed Mustafa. The project was a collaboration between PLUS, MGTC and the United Nations Industrial Development Organization.	The Star	Klik pada tajuk berita
12.	<u>In first, Malaysian researchers to conduct ovarian cancer blood test study</u> This is following an institutional investment of RM39 million by InterVenn BioSciences, a biotech company based in USA to develop the cancer early detection blood test in collaboration with CRM and Technology Park Malaysia (TPM).	Malay Mail	Klik pada tajuk berita
13.	<u>Cidekick gets RM775k seed funding from Cradle Fund</u> Local start-up Cidekick Sdn Bhd, a temporary manpower solutions provider, plans to expand nationwide and build a mobile app after receiving RM775,000 in seed funding from Cradle Fund Sdn Bhd's DEQ800 programme. Cidekick CEO and founder Philip Phua said the planned mobile app would allow both employers and temporary workers to carry out a transparent process and hasslefree engagements.	Malaysian Reserved	Klik pada tajuk berita

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
14.	<u>A new ball game for IsDB</u> The event represents the only conference at which a powerful coalition of entrepreneurs, innovators and global leaders connect to discuss the role of science, innovation and technology (STI) in achieving the United Nations' Sustainable Development Goal 11 (SDG11), namely making cities and human settlements inclusive, safe, resilient and sustainable.	News Strait Times	Klik pada tajuk berita
15.	<u>SME Corp spent RM217.33m on tech-related programmes in 2018</u> SME Corporation Malaysia (SME Corp) spent RM217.33 million to implement 28 innovation and technology- related programmes in 2018, benefiting 37,429 small and medium-sized enterprises (SMEs), said Chief Executive Officer Noor Azmi Mat Said.	The Star	Klik pada tajuk berita
16.	<u>Melaka mahu idea pemain industri</u> Beliau berkata demikian selepas program Smart Internet of Things (IoT) dan Melaka Smart City Challenge di Universiti Teknikal Malaysia Melaka (UTeM), di sini, hari ini. Penganjuran program itu antara lain bertujuan melahirkan pengaturacara dan jurutera yang mampu bersaing di peringkat antarabangsa serta dapat mendepani cabaran Revolusi Industri (IR) 4.0.	Berita Harian	Klik pada tajuk berita
17.	<u>SME Bank tingkat peranan bantu PKS</u> Setakat ini SME Bank telah menyenaraikan 21 inisiatif, termasuk langkah dalam transformasi teknologi digital serta strategi pembangunan PKS berdasarkan persekitaran ekonomi yang sentiasa berubah dan mencabar, selaras dengan keinginan kerajaan untuk Revolusi Industri 4.0.	Kosmo!	Klik pada tajuk berita

19.	<u>Looking to the future of TVET</u> Malaysian Universities are absent from this year reuters Top 75: Asia's Most Innovative Universities, Considering the 2016 list saw two local institutions making the list	The Star	Rujuk Lampiran 10
20.	<u>Green Energy from Waste</u> A staggering 30,000 tonnes is the amount of waste Malaysians produce daily on average – this figure was disclosed at The National Waste Management Conference 2018 in July.	The Star	Rujuk Lampiran 11

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
21.	<u>Dutch build artificial islands to bring wildlife back</u> The islets plan is among many being worked on by the Netherlands, which is one of the most vulnerable countries in the world to climate change. Since October, the port city of Rotterdam has hosted the headquarters of an international climate commission led by former UN secretary-general Ban Ki-moon and Microsoft founder and climate activist Bill Gates.	Free Malaysia Today	Klik pada tajuk berita
22.	<u>Nasa kesan kejadian ribut di permukaan planet Musytari</u> Pentadbiran Aeronautik dan Angkasa Kebangsaan (NASA) Amerika Syarikat Berjaya merakam imej kejadian ribut misteri atau siklon di permukaan planet Musytari iaitu dekat kawasan yang dinamakan sebagai Great Red Spot baru – baru ini.	Kosmo!	Rujuk Lampiran 12
23.	<u>Polis mulakan ujian teknologi pengecaman wajah di London</u> Jabatan Polis Metropolitan di sini kini menjalankan satu ujian membabitkan perisian teknologi pengecaman wajah secara langsung di bandar Westminster sejak semalam untuk membantu menjejak penjenayah dikehendaki.	Kosmo!	Rujuk lampiran 13
24.	<u>Climate talks pass the baton</u> Fractious climate change talks in Poland showed the limits of international action to curb global warming in a polarised world, putting the onus on the individual governments, cities and communities to stop temperatures from rising.	The Star	Rujuk lampiran 14

LAMPIRAN 1
NEW STRAITS TIMES (LETTERS): MUKA SURAT 16
TARIKH: 18 DISEMBER 2018 (SELASA)

OPEN LETTER TO MINISTER ON LYNAS

LET'S WORK WITH RARE EARTH METALS

DEAR Minister Yeo Bee Yin, I read your reply to Lynas employees and can't say I am not dismayed.

I write this as one of the voices in support of Lynas as your government, with specific respect to your ministry, seems unwilling to budge on any issue with regards to heavy metal processing and radiation-related activities.

Minister, I refer you to the often repeated clarifications Lynas has done on the topic of waste management.

In it, the company has clearly stated their commitment to undertake recycling of their wastes to take advantage of the rich concentrations of highly valuable minerals present in them.

For this, Lynas has invested a good amount of its annual profits to undertake detailed research and development. In my opinion, as the energy, science, technol-

ogy, environment and climate change minister, you should be supportive of this and even partner with Lynas to speed up its efforts, while training Malaysians on the very same matter.

As you would be rightly aware, the rare earth metals processed by Lynas are important to many technologies, especially those that produce green energy. How can you, dear minister, antagonise a company that is producing the very solar panels and wind turbines you have championed?

But your point was waste management. Lynas has, for years, stated its commitment to recycle the waste, failing which it will identify and build permanent disposal sites for the wastes, failing which it will extract all wastes from Malaysia.

Another matter I would like to discuss lies in your own ministry's website. The recommendations of the Executive Commit-



The Lynas plant in Gebeng, Kuantan, is committed to undertaking recycling of its wastes. FILE PIC

tee of the Operational Assessment for Lynas (LAMP) say nothing about the immediate removal of wastes from Malaysia.

Granted, there are recommendations to remove wastes from Malaysia if sites of permanent disposal cannot be located or approved.

On environmental considerations, an Environmental Impact Assessment and a Radiological Impact Assessment are recommended to make sure LAMP procedures are in line with what is safe.

Moreover, on the release of a greater concentration of heavy metals into water streams, the report recommends research in-

to where this breach of regulation comes from.

Again, there is no immediate need to remove these wastes.

You have mentioned in your reply, dear minister, that the Lynas management is trying to stage a drama, that the use of paid advertorials and press conferences are to paint the ministry in a bad light.

In a situation where the current government is made of those who are against its business, in an era where people do not understand the company's operations and are constantly attacking it unfairly, what is Lynas to do?

It just so happens that Lynas

has the means to get its side of the story out and through whatever means possible.

I wonder what your views will be on the many coal-fired power plants in Malaysia. I remember our prime minister saying we should explore the use of coal from Sabah for energy rather than nuclear power.

May I suggest that you stop antagonising Lynas and work with it to better its process, if needed.

It is not rare-earth metals that are our enemy, it is coal and other fossil fuels.

ARVEENT KATHIRTELVAN
Chief coordinator, Liberasi

LAMPIRAN 2
THE STAR (NATION): MUKA SURAT 2
TARIKH: 18 DISEMBER 2018 (SELASA)

High-tech players urged to help with electronic waste

CYBERJAYA: When Tun Dr Mahathir Mohamad served as the fourth prime minister, one of the "must go" functions in his annual calendar was a dialogue with high-tech industry players.

After being absent for 15 years, the players welcomed Dr Mahathir back warmly yesterday.

One of the points the Prime Minister made was how technology could be used to deal with waste "left by technology".

"We know that food waste can be made into compost and it can degenerate," he said.

"But what happens to our old gadgets – handphones, refrigerators? We can't throw them in landfills or into the river and expect them to disappear.

"This issue must be dealt with seriously because while we search for advancement, we must keep the environment healthy and safe for everyone to live in," he said during the Malaysian Industry-Government Group for High Technology Consultation Dialogue 2018. It was moderated by MIGHT chairman



Tan Sri Dr Ahmad Tajuddin Ali.

Also present at the dialogue were Economic Affairs Minister Datuk Seri Azmin Ali, International Trade and Industry Minister Datuk Darell Leiking and Energy, Science, Technology, Environment and Climate

Change Minister Yeo Bee Yin.

Suggesting that the industry explored the "waste to wealth" business opportunity, Dr Mahathir said advanced technology could also be developed to resolve the "tech waste" problem.

"High-tech machines can be created to help identify this waste and separate it. If this can be done, this will help minimise disposals of such waste and we can minimise the effect on the environment," he said.

Acknowledging the importance of research in the high-tech industry, Dr Mahathir said the government would look at ways to financially support such works but did not give any specific commitment.

"Another matter that needs to be resolved is to ensure products derived from research are marketed and sold so that people can benefit from it.

"Although some products need more time to be completed, those working on it should find easy and early use for your invention," he said.

For example, the Prime Minister said India's cashless transaction policy resulted in the need for its people to own a handphone to have an e-wallet.

"A phone with many and different applications is not needed for this. Just one with limited function, with which the owner can make calls, messages and cashless transactions is sufficient.

"This is what I mean by putting easy and early use of an invention to use," he said.

Technology of the future:

Dr Mahathir being briefed on a robot that paints after launching the MIGHT Consultation Dialogue in Cyberjaya.

LAMPIRAN 3
BERITA HARIAN (SETEMPAT): MUKA SURAT 23
TARIKH: 18 DISEMBER 2018 (SELASA)



[FOTO AHMAD IRHAM MOHD NOOR / BH]

Dr Mahathir melawat pameran selepas sesi dialog dengan lebih 50 peserta industri teknologi tinggi yang dianjurkan Kumpulan Industri Kerajaan untuk Teknologi Tinggi (MIGHT) di Cyberjaya, semalam.

Kerajaan akan kurangkan lagi kerenah birokrasi: PM

➔ Proses kelulusan bagi pelaksanaan projek dipercepat

Oleh Mahanum Abdul Aziz
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Kerajaan akan mengurangkan lagi kerenah birokrasi bagi mempercepatkan proses kelulusan bagi pelaksanaan projek di negara ini.

Perdana Menteri, Tun Dr Mahathir Mohamad, berkata kerajaan akan berusaha men-

gurkan jumlah kelulusan yang diperlukan.

Kerajaan, katanya, sentiasa meningkatkan kepantasan kerja membabitkan sesuatu kelulusan, namun orang awam tidak tahu, kelulusan perlu diperoleh membabitkan pelbagai pihak berkuasa yang mana menjadikan proses kelulusan lambat.

"Contohnya, bagi mendapatkan kelulusan projek di Pulau Langkawi, anda perlu mendapat kelulusan daripada Kerajaan Persekutuan, Kerajaan Negeri, Lembaga Pembangunan Langkawi (LADA) dan pejabat daerah.

Prosedur panjang

"Prosedur birokrasi kekal panjang dan membosankan. Justeru, kita akan mengurangkannya supaya selepas menghantar (permohonan) mungkin hanya

memerlukan dua atau tiga kelulusan daripada pihak berkuasa yang berbeza," katanya.

Beliau berkata demikian pada sesi dialog dengan lebih 50 peserta industri teknologi tinggi yang dianjurkan Kumpulan Industri Kerajaan untuk Teknologi Tinggi (MIGHT) di Cyberjaya, semalam.

Hadir sama, Menteri Hal Ehwal Ekonomi, Datuk Seri Mohamed Azmin Ali, Menteri Perdagangan Antarabangsa dan Industri, Datuk Darell Leiking, Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin, Menteri Pembangunan Usahawan, Datuk Seri Mohd Redzuan Md Yusof dan Pengerusi MIGHT, Tan Sri Dr Ir Ahmad Tajuddin Ali.

Perdana Menteri meluahkan kira-kira sejam berin-

teraksi dengan peserta industri dan melawat ruang pameran MIGHT Technomart yang mempamerkan kepelbagaian inovasi dan teknologi oleh syarikat berteknologi tinggi tempatan.

Ikut kehendak pengguna

Mengenai pembangunan teknologi, Dr Mahathir berkata, peserta industri perlu memastikan teknologi yang dibangunkan memenuhi kehendak sebenar pengguna.

Contohnya, membangunkan telefon pintar dengan aplikasi terhad tetapi memenuhi keperluan asas pengguna, katanya.

Beliau juga mencadangkan pembangunan teknologi bagi memantapkan lagi pengurusan sampah yang mana pengasingan sampah dapat dilakukan dengan lebih cekap lagi.

LAMPIRAN 4

THE STAR (CSR): MUKA SURAT 2 & 3

TARIKH: 18 DISEMBER 2018 (SELASA)

Walking the talk on sustainability

SINCE aligning itself with the 17 United Nations Sustainable Development Goals (UNSDGs), Sunway has been a strong advocate of the cause, implementing supportive steps across all its projects in Malaysia.

Sunway Group founder and chairman Tan Sri Dr Jeffrey Cheah recognises the hardship that comes with the lack of quality education and hazards that present themselves when the environment is not cared for. He shared his views at a UBS conference in Singapore in May, saying, "My views on sustainability were shaped by my formative years growing up in Pusing – a small town in Perak. I witnessed at first hand the impact of poverty on families and how it closed off avenues for advancement, particularly in education, for them."

"Pusing was largely a tin mining town. You could not fail to notice the ugly scars on the landscape left by disused mining pools. Poverty and environmental degeneration are not abstract concepts to me, but part of my personal experience. They helped form my conviction that education provided the optimum route out of poverty and we need to help heal a bleeding Mother Earth."

"In short, without recognising it, the concept of sustainable development was inculcated in me. When the time came, these formative childhood memories guided me in my entrepreneurial career and philanthropic endeavours."

He is determined to better the quality of life in Malaysia by realising UNSDGs under the Sunway name. As a matter of fact, all of Sunway's public-listed companies are listed on the FTSE4Good Bursa Malaysia Index for demonstrating good environmental, social and governance practices.

Raising the new generation

Based on Dr Cheah's firm convictions, it is only natural for much of Sunway's operational focus to be deeply rooted in Goal 4 of the UNSDGs – quality education – through the Jeffrey Cheah Foundation (JCF).

Sunway is committed to ensuring inclusive, equitable and quality education, as well as promoting lifelong learning opportunities for all, particularly among those in need.

Since 2005, Sunway has disbursed more than RM400mil in the form of scholarships and grants through the JCF, which is owned and governed by a distinguished board of trustees, with Sultan Sharafuddin Idris Shah of Selangor as its royal patron.

"I have always believed that education should never be a for-profit business. As soon as I was able to, we established the JCF, to which I gifted all my equity in perpetuity to Sunway's educational institutions. The gift was valued at RM720mil then, and the value has since grown to more than RM1bil.

"Thousands of deserving students have benefited from this initiative. It is my personal goal to award more than RM1bil in my lifetime," says Dr Cheah.

Giving the youth a boost

Sunway recognises the importance of receiving quality education from a young age. Last month, it launched its back-to-school programme, aimed at helping more than 3,700 underserved students across the nation.

These beneficiaries are students who are from B40 families, at risk, stateless or from orphanages. The students come from 11 schools in Johor, seven schools in Penang, three schools in Selangor and 38



Women, Family and Community Development deputy minister Hannah Yeoh (eighth from left) and Tan Sri Dr Jeffrey Cheah (ninth from left) with the Jeffrey Cheah Foundation (JCF) board of trustees and students who received scholarship awards at the JCF Scholarships and Awards ceremony 2018.

Management with a global mind

Sunway has since provided school supplies for 600 students of SK Puchong Perdana and 157 students of Sekolah Bimbingan Jalinan Kasih.

Besides monetary aid, Sunway carries out other efforts to provide quality education to people from all academic backgrounds.

JCF owns and governs all 16 of Sunway's educational institutions and entities such as Sunway University, Jeffrey Cheah School of Medicine and Health Sciences at Monash University Malaysia, Sunway College and Sunway International School. It is currently Malaysia's largest education-focused social enterprise.

To further fulfil its aim of making quality education available to Malaysian students, Sunway



(From left) Tan Sri Dr Jeffrey Cheah, Energy, Science, Technology, Climate Change and Environment Minister Yeo Bee Yin, and Prof Jeffrey Sachs launching the Master in Sustainable Development Management programme.

Education Group has partnered with Harvard University, University of California, Berkeley (UC Berkeley), University of Cambridge and University of Oxford, and soon, Massachusetts Institute of Technology. The Jeffrey Sachs Center on

Sustainable Development (JSC) at Sunway University advances Sunway's goals to realise UNSDGs by promoting green development and social progress through research and education.

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Sunway Education Group also launched the Master in Sustainable Development Management under JSC in October. This programme aims to equip people from multidisciplinary backgrounds to become adept at management and problem-solving using analytics and systems thinking guided by global concerns.

Prof Woo Wing Thy, director of the JSC and president of Jeffrey Cheah Institute on Southeast Asia, elaborates, "The programme aims to empower individuals and organisations to develop innovative solutions towards achieving the Sustainable Development Goals in actionable ways in their specific sectors or areas of work."

The first batch intake is full for this programme. Classes will commence in January next year.

Joining hands in innovation

Aside from building a community of sustainability, Sunway is keen on creating entrepreneurs who will carry on its vision that is aligned with UNSDGs. It teamed up with KK Fund to set up a venture capital fund (Sun SEA Capital) with plans to spend up to US\$50mil (RM208mil) on digital start-ups in Malaysia, Thailand, Singapore, Indonesia, the Philippines, Vietnam and Hong Kong.

Sunway also launched Sunway Innovation Labs (iLabs) and

Sunway iLabs Makerspace to promote entrepreneurship among ambitious students who aim to lead the future with new innovations.

Partnering with Google, IBM, Hitachi Sunway Information Systems, Xperanti IoT and General Electric, the Sunway iLabs Makerspace is equipped to help students and entrepreneurs with a collaborative space and tools for innovation.

At the launch of Sunway iLabs, three new international collaborations were announced. These collaborations are with the European Commission-funded South East Asia Social Innovation Network, UC Berkeley and Silicon Valley accelerator A3 Global Collider.

Sunway's partnership with the

European Commission will fund the Sunway Social Innovation Support Unit to extend assistance to social innovators while its partnership with UC Berkeley will help it develop entrepreneurship programmes.

The A3 Global Collider partnership will fund and nurture start-ups for regionalisation and internationalisation. It is anticipated that the partnership will provide students and entrepreneurs with additional sources of capital, mentorship and links to international markets.

At the event, the Higher Education Ministry director-general Datin Paduka Dr Siti Hamisah Tapsir commented Sunway iLabs' commitment to advance the higher education industry by encouraging the

development of entrepreneurship and innovation skills.

"Sunway iLabs' initiatives and the launch of the Sunway iLabs Makerspace facility ensures the availability of future talent by equipping students with the necessary skill sets and preparing them for the Fourth Industrial Revolution as aligned with the Higher Education Ministry's commitment to equip students holistically to enable their success in the 21st century," said Dr Siti Hamisah.

The state-of-the-art space has all the right tools for innovation such as 3D printing machines, laser cutters and electronic gadgets.

■ For more information, visit www.sunwayforgood.com



Sunway iLabs Makerspace promotes entrepreneurship among students who aim to lead the future with new innovations.



(Standing in the middle) SK Puchong Perdana principal Nor Azian Ashar (second from left), Seri Serdang Community Centre special officer of welfare Sulaiman Ibrahim (centre) and Sunway Group brand marketing and communications CSR and events assistant general manager Bernard Paul (second from right).

LAMPIRAN 5
KOSMO! (NEGARA): MUKA SURAT 12
TARIKH: 18 DISEMBER 2018 (SELASA)

Cipta teknologi baharu bagi pengurusan sisa buangan

CYBERJAYA - Malaysia perlu menghasilkan ciptaan baharu bagi pengurusan sisa buangan yang boleh menjana kekayaan, kata Perdana Menteri, Tun Dr. Mahathir Mohamad.

Beliau berkata, pada hari ini terdapat banyak ciptaan dalam teknologi yang amat memberi kesan dan membawa banyak manfaat kepada penduduk di seluruh dunia.

Kata Dr. Mahathir, sebagai contoh setiap tahun orang membeli telefon bimbit yang baharu dan membuang yang lama, dan ini akhirnya memberi kesan buruk kepada alam sekitar.

"Pengurusan sisa adalah sesuatu yang harus diambil kira oleh teknologi supaya kita dapat mengasingkan sisa dengan berkesan dan menggunakan semula sisa tersebut.

"Oleh itu, bagaimana untuk menangani sisa adalah sesuatu yang perlu dikaji," kata beliau pada dialog Kumpulan Industri-Kerajaan Malaysia bagi Teknologi Tinggi (MIGHT) 2018, yang dipengerusikan oleh pengerusi MIGHT Tan Sri Dr. Ir Ahmad Tajuddin Ali di sini semalam.

Dialog itu dihadiri oleh 50 pemain industri berteknologi tinggi. Semasa sesi

tersebut, Dr. Mahathir menjawab beberapa soalan dari para pemain industri antaranya ialah memastikan hasil penyelidikan diubah menjadi perniagaan yang menjana kekayaan.

Perdana Menteri berkata, teknologi mikrochip adalah juga sesuatu yang harus diberi tumpuan oleh rakyat Malaysia memandangkan kebanyakan produk teknologi tinggi yang baharu menggunakan mikrochip. - Bernama

DR. MAHATHIR (tiga dari kiri) melihat produk yang dipamerkan ketika hadir pada dialog MIGHT di Cyberjaya semalam.



LAMPIRAN 6
SINAR HARIAN (SENTRAL): MUKA SURAT 20
TARIKH: 18 DISEMBER 2018 (SELASA)

Lynas perbetul maklumat tidak tepat

KUANTAN - Lynas Malaysia menjelaskan maklumat tidak tepat dilaporkan di media.

Pengarah Urusannya, Datuk Mashal Ahmad berkata, laporan itu memetik anggaran bagi kos eksport sisa (residue) Water Leach Purification (WLP) dari Lynas Malaysia berdasarkan salah tafsir terhadap pandangan seorang penganalisis.

"Laporan asal penganalisis menyatakan angka-angka itu adalah anggaran kasar sahaja. Penganalisis terbabit juga merujuk deposit keselamatan Lynas yang dibayar kepada Lembaga Pelesenan Tenaga Atom Malaysia (AELB) (bukan insurans) yang, sebagai salah satu tujuannya, untuk penubuhan kemudahan deposit tetap," katanya.

Penganalisis berpendapat bahawa deposit ini akan digunakan untuk bayar sebahagian kos eksport WLP apabila dasar kemudahan deposit tetap tidak diperlukan.

Seperti kebanyakan organisasi komersil, Lynas kerap meneliti kemungkinan keadaan kewangan untuk senario perniagaan dan kontinjensi berbeza.

"Pentaksiran didasarkan pada pelbagai anggapan dan tidak disokong anggaran pembiayaan (cost estimates) disahkan.

"Oleh itu, Lynas tidak berada dalam kedudukan untuk memberi panduan mengenai potensi kos berkaitan dengan pengeksport WLP.

"Anggaran kos disebutkan kelihatan jauh lebih rendah dari penilaian permulaan kos dibuat Lynas," katanya.

AELB mengeluarkan tiga lesen operasi berturut-turut kepada Lynas Malaysia - Lesen Operasi Sementara (3 September 2012 - 2 September 2014) dan dua Lesen Peringkat Operasi Penuh (3 September 2014 - 2 September 2016 dan 3 September 2016 - 2 September 2019).

"Ketiga-tiga lesen ini perlukan Lynas Malaysia jalankan R&D atas penggunaan selamat sisa WLP dijana, yang mana Lynas Malaysia akan Pilih tapak dan membina PDF untuk menyimpan sisa WLP. Hanya jika kedua-dua pilihan ini gagal, Lynas perlu eksport WLP dari Malaysia.

"Selaras syarat-syarat lesen dinyatakan, surat ditandatangani Pengerusi Eksekutif Perbadanan Lynas pada 23 Februari 2012, menyatakan secara terperinci iaitu 'Lynas Corporation Australia akan beri usaha penuh untuk mengeluarkan sisa dihasilkan Lynas Advance Material Loji di Gebeng, Kuantan semasa tempoh Lesen Operasi Sementara dari Malaysia jika perlu,' katanya.

Surat berkaitan adalah pilihan ketiga untuk pengurusan sisa WLP Lynas Malaysia disenaraikan dan ia hanya berkaitan dengan sisa dijana semasa tempoh dua tahun Lesen Operasi Sementara.

LAMPIRAN 7

THE STAR (NATION): MUKA SURAT 15
TARIKH: 18 DISEMBER 2018 (SELASA)

Terengganu floods prompt evacuations

Heavy rainfall expected to
continue statewide till today

KUALA TERENGGANU: Incessant heavy rain since yesterday caused floods in the Kuala Terengganu, Kuala Nerus and Marang districts.

The authorities had begun evacuation in the worst affected areas, according to Terengganu Civil Defence Force director Lt-Col Che Adam A. Rahman.

"Rainfall of heavy intensity was recorded at the reading stations in Kuala Terengganu, Kuala Nerus and Marang, exceeding 100mm over a three-hour period and, in certain areas, over 200mm over a six-hour period.

"Usually, 200mm of rainfall is recorded over a month during the monsoon season," Che Adam told reporters.

The Kuala Terengganu city centre

was also flooded, especially in the areas around Jalan Sultan Omar and Jalan Kamarudin, and residential areas in Taman Sri Intan, Jalan Tekukur and Taman Dahlia.

Che Adam said the Meteorological Department had forecast heavy rain until today for the whole of Terengganu.

Meanwhile, the Drainage and Irrigation Department reported that Sungai Telemong in Kuala Ping, Hulu Terengganu, and Sungai Chalok in Setiu had breached the alert level at 10am.

"The schedule of tides released by the National Hydrographic Centre indicates that massive tides are likely to occur between Thursday and Dec 28," its statement read. — Bernama



Keeping dry: Resident Nur Airisa Salleh and her daughter use a boat to navigate the floodwaters in Kampung Marang Marang. — Bernama



No quacking matter: Ducks perching on slabs of wood after their cage was submerged in water in Kampung Rhu Muda, Marang. — Bernama

LAMPIRAN 8
BERITA HARIAN (BANJIR): MUKA SURAT 20
TARIKH: 18 DISEMBER 2018 (SELASA)

Amaran cuaca buruk di tiga negeri

Kuala Lumpur: Jabatan Meteorologi Malaysia (MetMalaysia) mengeluarkan amaran cuaca buruk dan hujan lebat berterusan bagi Kelantan, Terengganu serta barat Sarawak, hari ini.

Ketua Pengarah Jabatan Meteorologi Malaysia (METMalaysia), Alui Bahari, berkata keadaan itu berikutan fasa Monsun Timur Laut ketika ini, yang dijangka akan berakhir pada penghujung Mac depan.

"Beberapa siri hujan lebat dijangka berlaku terutamanya di negeri di timur Semenanjung serta di barat Sarawak.

"Hujan lebat dijangka berterusan di Kelantan membabitkan kawasan jajahan Tumpat, Pasir Mas, Kota Bharu, Jeli, Tanah Merah, Bachok, Machang, Pasir Puteh dan Kuala Krai, manakala Terengganu di Besut, Setiu, Kuala Nerus, Hulu Terengganu, Kuala Terengganu, Marang dan Dungun.

"Amaran peringkat waspada turut dikeluarkan bagi kawasan di Gua Musang, Kelantan dan di Kemaman, Terengganu yang dijangka berterusan hingga esok (hari ini).

"Selain itu, MetMalaysia juga mengeluarkan amaran angin kencang berkelajuan 40 kilometer/sejam (km/j) hingga 50 km/j dengan ombak mencapai 3.5 meter di perairan Kelantan, Terengganu dan Pahang," katanya menerusi satu kenyataan.

Selain itu, Alui berkata, beberapa kawasan turut mengalami ribut petir, hujan lebat dan angin kencang malam semalam, antaranya di Bentong, Temerloh, Maran dan Bera di Pahang; Sabak Bernam, Kuala Selangor, Klang, Kuala Langat, Hulu Langat dan Sepang di Selangor dan Wilayah Persekutuan Putrajaya.

Selain itu, Jelevu, Seremban, Kuala Pilah, Jempol dan Tampin di Negeri Sembilan dan Tangkak, Segamat, Muar, Batu Pahat serta Pontian di Johor.

LAMPIRAN 9
BERITA HARIAN (BISNES): MUKA SURAT 25
TARIKH: 18 DISEMBER 2018 (SELASA)



Lakaran artis loji WTE
di Jeram, Selangor.

Worldwide Holdings bangukan teknologi WTE, bina loji bernilai RM1b

➔ Perkenalkan teknologi dan kaedah moden pengurusan sampah sistematik

Oleh Nurhayati Abillah
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Worldwide Holdings Bhd (Worldwide Holdings), peneraju utama sekitar hidmatan pengurusan alam sekitar meneruskan komitmennya dalam memainkan peranan untuk memperkenalkan teknologi dan kaedah moden pengurusan sampah yang bersistematik di negara ini khususnya di Selangor. Selari dengan matlamat itu, Worldwide Holdings yang juga anak syarikat Kerajaan Selangor kini melaksanakan pembangunan sistem pelupusan dan rawatan sisa pepejal menyeluruh menggunakan teknologi 'Waste-To-Energy' (WTE) atau sisa buangan pepe-

jal kepada bekalan tenaga bagi memenuhi keperluan semasa.

Melalui kaedah ini, ia dapat menjana tenaga baharu daripada sisa buangan dan mengurangkan penggunaan tapak pelupusan sampah, sekali gus mengelak berlakunya pencemaran terhadap alam sekitar.

Teknologi berkenaan akan memproses sisa pepejal dan mengubahnya kepada haba, stim serta tenaga elektrik.

Ketua Pegawai Operasi (Alam Sekitar) Worldwide Holdings, Zamri Abdul Rahman, berkata WTE akan menjadi sebahagian daripada Pusat Pengurusan Sisa Pepejal Bersepadu (ISWMC), iaitu satu kaedah pengurusan sisa yang holistik untuk rawatan sisa pepejal.

"Selain loji WTE, antara kemudahan lain ISWMC termasuk loji pengkomposan serta pusat penyelidikan dan pembangunan.

"Worldwide Holdings membangunkan teknologi baharu untuk menangani masalah berkenaan bagi menggantikan tapak pelupusan sampah yang menggunakan kaedah tradisional kepada satu sistem lebih maju dan terkini.

"Usaha itu adalah tepat pada masanya yang mana kita perlu memiliki loji insinerator sisa

yang mampu menampung penambahan bahan buangan semakin meningkat berikutan populasi penduduk yang semakin meningkat," katanya ketika ditemui, baru-baru ini.

Mengulas mengenai loji kemudahan WTE itu, Zamri berkata, pembangunan berkenaan membabitkan kos dianggarkan bernilai RM1 bilion dan dibina di kawasan seluas kira-kira 80.94 hektar (200 ekar) di Jeram, Selangor.

"Worldwide Holdings bekerjasama dengan Western Power Clean Energy Sdn Bhd (Western Power Clean Energy), iaitu syarikat usaha sama antara China Western Power Engineering & Construction Co Ltd dengan China Western Power International.

Piawalan tertinggi Kesatuan Eropah

"Pembangunan loji itu merangkumi dua fasa yang mana bagi fasa pertama ia membabitkan kos pembangunan berjumlah RM500 juta dan dibiayai Worldwide Holdings.

"Fasa pertama loji berkenaan akan siap untuk operasi komersial menjelang 2022, manakala fasa kedua disasarkan siap pada 2024," katanya.

Dengan kapasiti sampah sebanyak 1,200 tan sehari, fasa

pertama kemudahan itu bakal menghasilkan antara 20 hingga 24 megawatt (MW) tenaga hijau dan mampu membekalkan tenaga bagi 25,000 isi rumah di kawasan sekitar Jeram.

Beliau berkata, pemilihan usaha sama dengan Western Power Clean Energy berikutan konglomerat berkenaan mempunyai trek rekod yang baik.

"Mereka memiliki kepakaran dan pengalaman antara lain dalam bidang tenaga baharu dan industri perlindungan alam sekitar, reka bentuk serta pembuatan loji kuasa bersih (clean power)," katanya.

Western Power Clean Energy sudah menjalankan projek serta memiliki barisan pelanggan merangkumi 30 wilayah, daerah perbandaran dan wilayah autonomi di China, serta lebih daripada 50 wilayah serta negara seluruh dunia termasuk England, Jepun, India, Turki, Sudan, Guatemala, Kazakhstan, Amerika Syarikat, Thailand, Nigeria, Brazil dan Vietnam.

Sebagai rakan strategik, Western Power Clean Energy akan bekerjasama serta membimbing Worldwide Holdings dalam pelaksanaan WTE termasuk pembangunan projek serta operasi

dan penyelenggaraan kemudahan itu.

Mengulas lanjut, Zamri berkata, sebaik siap kemudahan WTE berkenaan, ia juga bakal menjadi kemudahan WTE terbesar dan paling moden di Malaysia.

Projek itu juga dijangka akan mengurangkan penggunaan tanah bagi tapak pelupusan, selain menyokong aspirasi kerajaan untuk meningkatkan penjaan tenaga boleh diperbaharui sehingga 20 peratus menjelang 2025.

Janakuasa WTE yang dibangunkan oleh Worldwide Holdings menangani semua aspek isu alam sekitar melalui teknik rawatan moden dan berteknologi tinggi dalam mematuhi piawaian Kesatuan Eropah (EU).

Teknologi yang diguna pakai mempunyai rekod prestasi cemerlang menggunakan ciri sisa pepejal yang sama di Malaysia. Sisa pepejal digunakan sebagai bahan bakar untuk memanaskan relau bagi menjana stim yang membolehkan turbin menghasilkan tenaga elektrik.

Setakat ini, Worldwide Holdings menguruskan kira-kira 6,000 tan sisa buangan domestik sehari di Selangor di enam tapak pelupusan di negeri ini.

LAMPIRAN 10

THE STAR (POST GRADUATE): MUKA SURAT 6

TARIKH: 18 DISEMBER 2018 (SELASA)



Looking to the future of TVET

MALAYSIAN universities are absent from this year's Reuters Top 75: Asia's Most Innovative Universities, considering the 2016 list saw two local institutions making the list.

The list ranks research-based universities in Asia through a methodology that reflects their successful pioneering efforts in various fields.

Effective innovation, while difficult to quantify, can be measured empirically by said methodology, measuring criteria such as number of applied patents granted and a patent citation score that identifies continuous utility and relevance of the patents.

Malaysia has five research institutions based in universities that contribute to the nation's innovation, research and development initiative.

The 11th Malaysia Plan highlights the need for innovative measures as a solution to create

viable alternative energy sources to reduce the dependency of Malaysian industries on oil and gas as well as curb the immense, growing carbon footprint that the demand for palm oil has created.

The Government has forwarded initiatives for private institutions to collaborate with academia to solve sustainability issues, but Reuters' list does not reflect the success of these collaborative efforts.

With the gap between industries and academia, there is a serious lack of demand for innovation in Malaysia. However, the national plan also details a feasible grassroots solution to handling this problem – improvement of vocational education.

Technical and Vocational Education in Training (TVET) schools are institutions for students who are aware of their strengths and weaknesses and

have a clear view of career pathways they can pursue.

The training system has been re-engineered to produce a highly skilled workforce for Malaysia's job market. The reformation of the system is also meant to reduce unemployment rates and improve the sociocultural climate in the country.

Innovation itself requires the collaborative efforts and research from a multitude of disciplines, meaning various industries must coordinate attempts and resources to achieve some form of cooperation across the board.

A major factor contributing to the gap between the industry and academia is each of the various fields' desire to excel in its own right, putting aside possibilities of joint potential growth for field-specific distinctions.

The reformation of TVET schools aims to overcome these fences by acknowledging that

innovation in one field sparks a ripple effect across industries and recognising the need for collaborative efforts.

In fact, the most impactful advances recently have been borne of intersections of two or more fields.

By instilling awareness in the upcoming generation of researchers and innovators that each field is codependent and not self-sufficient, Malaysia may be able to see an upward trend in innovation that is not only effective but also continuous and consistent in the years to come.

While there is no immediate fix to improve innovation in the country, especially in bridging the gap between industry and academia, measures must be taken to expedite the process to meet the increasingly dire need for alternative solutions, especially ones concerning environmental protection and preservation.

Existing industrial policies focused on avaricious gains from narrow capabilities need to be open to alternative methods. Understanding that this upheaval – for there is no other word for a process of this magnitude – is not easy but is attainable, is crucial in starting the long, slow walk towards progress.

The good news is that these problems are an existing foundation for long-term research and development activities to encourage holistic innovation.

Whether the Government's goals are met depends on how willing industry and academia are to pool efforts into not only attaining short-term gains and maintaining economic standing, but also in finding innovative footholds in the future to move forward into the relatively unknown world of independence from non-renewable resources.

LAMPIRAN 11

THE STAR (ECOWATCH): MUKA SURAT 11

TARIKH: 18 DISEMBER 2018 (SELASA)

GREEN ENERGY FROM WASTE

By YVONNE NATHAN
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A STAGGERING 30,000 tonnes is the amount of waste Malaysians produce daily on average – this figure was disclosed at the National Waste Management Conference 2018 in July.

Worse, only 5% of the 30,000 tonnes are recycled.

That means the remaining 95% of waste or 10.4mil tonnes a year make its way to landfills across the country.

Selangor alone contributes 7,000 tonnes daily to these saturated disposal areas that are quickly piling up as sources of land and air pollution.

Enter the proposal for a Waste-To-Energy (WTE) treatment system by Worldwide Holdings Berhad, a subsidiary of the Selangor government.

For this RM500mil WTE project, Worldwide Holdings is partnering with Western Power Clean Energy Sdn Bhd, a subsidiary of China Western Power Industrial Co.

A joint development agreement was signed on Dec 10 for a WTE facility to be built adjacent to the Jeram sanitary landfill in Kapar, Selangor.

Operational by 2022

"The Waste-To-Energy concept is a waste management technology that is able to convert solid waste into energy in the form of electrical power," explained Worldwide Group chief executive officer Datin Paduka Norazlina Zakaria.

There are two phases to the project with an estimated cost of RM1bil in total. The first phase with Western Power Clean Energy is expected to be operational by 2022.

"The first phase will have waste capacity of 1,000 tonnes per day, which will produce between 20MW to 25MW of green energy enough to power 25,000 households within the vicinity of the plant," she said.

According to Worldwide Holdings chief operating officer (environment) Zamri Abdul Rahman, the amount of waste in Selangor increases at a higher yearly rate of 4-5%, compared to 2.5% national increase. He pegs this on urbanisation and population hikes.

"About 20ha of land is used up as landfill in a year," he said, adding Worldwide Holdings embarked on plans for the development to save land consumption in Selangor.

Feasibility studies comparing landfills and WTE were done, with results showing that WTEs have a longer lifespan than landfills.

"95% of WTE in the world uses the type of technology we are planning to use which complies with EU standards of regulation," said Zamri.

However, Worldwide Holdings has yet to decide if it will continue with the second phase, set to be completed by 2024, with Western Power Clean Energy.

How it works

Four major components form the WTE's functions.

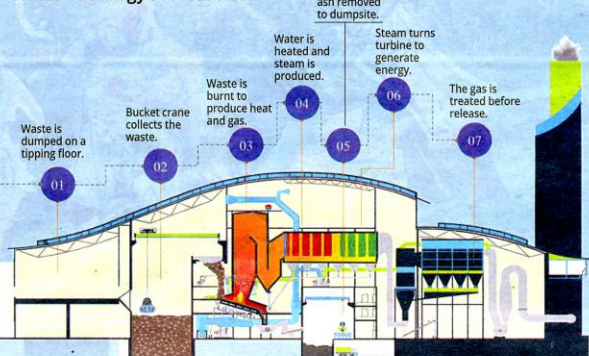
It works as an indoor storage facility for solid waste, enclosed incinerator, steam-powered energy generator and a gas filtration system.

Dealing specifically with munic-



Waste to energy conversion aside, the public should do their part by reducing rubbish as well as recycling, says Worldwide Holdings chief operating officer (environment) Zamri Abdul Rahman.

Waste To Energy Process Flow



An artist impression of Worldwide Holdings' waste-to-energy facility in Jeram, Selangor.

ipal solid waste or domestic rubbish, the waste will be deposited in a lined bunker.

As domestic waste is high in moisture content, it will be stored for three to seven days and rotated repeatedly to ensure it is evenly scattered as microorganisms facilitate the fermentation of organic waste so it can be burned easily.

Leachate from moisture produced by the stored waste will then be filtered out to the Jeram sanitary landfill's leachate treatment plant.

Waste will then be carried to the negative pressure incinerator using a bucket crane, said Zamri.

"Negative pressure means instead of air going out, air from the bunker where we store waste will be pumped into the burner and used for combustion to reduce the discharge of bad odours," he added, stressing that no air will be released from the incinerator during the combustion process.

The burner reaches high temperatures of more than 850°C to incinerate the waste entirely.

Meanwhile water is heated using the high temperatures of the incinerator to produce steam, which is then transferred to steam turbines that generate thermal energy.

Ashes to ashes

"Two types of ashes form during the burning process. The first is bottom ash which is non-toxic ash usually created by wood and such materials. The harmless bottom ash will be sent to the landfill. Some countries use bottom ash for road construction or making low quality bricks, a possibility we will look into."

"The harder part to treat is fly ash. It contains hazardous materials and particles such as sulphur dioxide and nitrogen oxide. We'll use activated carbon and slake lime to neutralise these acidic components," said Zamri.

The process also involves a scrubbing system and burning at the highest temperature so that all toxins and pollutants are destroyed.

"Like other parts of the world, we will neutralise the fly ash then encapsulate it in cement and carry out leaching tests before it is deposited in the landfill," he said.

Perhaps the most important step is how gas from the combustion unit is treated.

"There is also the matter of the toxic fumes dioxin and furan, normally associated with the burning of plastic."

"These will also be taken care of

using an activated carbon injection system into the gas before it enters a bag filter, which captures the dioxin, furan and mercury," he said.

Zamri said Worldwide Holdings will secure skills-based training through their partnership with Western Power Clean Energy.

Essentially the transfer of technology and knowledge will provide Worldwide Holdings with the tools to carry out their duties consistently.

Worldwide Holdings has also assured the state government and Department of Environment (DoE) that it will have an online display for the public to monitor emission levels in real-time and ensure that the operator meets the standards set.

The big picture

The WTE project is part of a broader and more complete approach, namely Worldwide Holdings' Integrated Solid Waste Management Centre in Jeram.

The centre is touted as a multi-faceted approach that includes everything from an anaerobic digester, to a research and development centre.

Consistent with the holistic plan, Zamri said waste separation has a

key function as the WTE plant works in tandem with the centre.

Non-combustible material such as metal and concrete recovered from the incinerator will be sent to the centre's material recovery facility for construction and demolition waste, while organic waste from restaurants and hotels will be directed to the centre's composting plant.

However, despite technological advancement, old-fashioned recycling and waste separation is still a necessary practice, with the public playing a vital role, said Zamri.

Once the first and second phases are up and running, the centre is expected to generate 60MW of electricity daily, which can power up to 60,000 households a day.

The Integrated Solid Waste Management Centre now handles waste from six municipalities in central areas of Selangor, and Zamri said future plans would involve setting up at least two more of such centre, believing that three WTE facilities would be required to sufficiently cope with Selangor's waste.

"We are also planning a centre at our other landfill in Tanjung Dua Belas in Kuala Langat that caters to waste from the Kuala Langat, Sepang, Kajang and Putrajaya areas."

"We also proposed another in the north, near the Selayang and Hulu Selangor – our target is to achieve all this by 2025."

"I think it is doable with the federal government's manifesto to bring renewable energy from currently around 3% to 20% by year 2025."

"With these, we hope Selangor will no longer have giant landfills that handle a few thousand tonnes of waste, with all the waste instead going to integrated centres," said Zamri.

He cited Singapore which does not have landfills on the island, only WTE plants.

Whether WTE is the solution to our problems or just a temporary patch, time alone can tell.

The only certainty is a need for change and the urgency of handling the problem before it gets out of hand.

And right now a holistic strategy at least sounds like a possible step in the right direction.

LAMPIRAN 12
KOSMO! (DUNIA): MUKA SURAT 41
TARIKH: 18 DISEMBER 2018 (SELASA)

NASA kesan kejadian ribut di permukaan planet Musytari

WASHINGTON –

Pentadbiran Aeronautik dan Angkasa Kebangsaan (NASA) Amerika Syarikat berjaya merakam imej kejadian ribut misteri atau siklon di permukaan planet Musytari iaitu dekat kawasan yang dinamakan sebagai Great Red Spot baru-baru ini.

Insiden luar biasa itu sempat dirakam oleh kamera

kapal angkasa *Juno* ketika melakukan penerokaan mengumpul maklumat berhubung ruang udara, awan, gelombang magnetik, angin selain mengkaji bagaimana struktur planet tersebut dibentuk.

Dua saintis iaitu Gerald Eichstadt dan Sean Doran kemudian menyusun semula imej yang dirakam kamera *Juno* dan mendapati ada satu

fenomena ribut kecil bergerak melalui kawasan Great Red Spot.

"Satu gangguan atmosfera baru melintasi Great Red Spot dan membawa jerebu jingga di planet tersebut. Ia berjaya dirakamkan oleh kapal angkasa *Juno*," menurut laporan NASA.

Juno akan mengelilingi planet Musytari setiap 53 hari untuk mengumpul data dengan melakukan 'terjunan' dari pola ke pola dan bergerak sepanjang 207,287 kilometer sejam.
– Agensi



NASA

RANGKUMAN gambar menunjukkan ribut kecil melintasi Great Red Spot di planet Musytari baru-baru ini.

LAMPIRAN 13
KOSMO! (DUNIA): MUKA SURAT 40
TARIKH: 18 DISEMBER 2018 (SELASA)

Polis mulakan ujian teknologi pengecaman wajah di London

LONDON – Jabatan Polis Metropolitan di sini kini menjalankan satu ujian membabitkan perisian teknologi pengecaman wajah secara langsung di bandar Westminster sejak semalam untuk membantu menjejak penjenayah dikehendaki.

Ujian membabitkan seunit peranti mudah alih yang dilengkapi kamera dan perisian teknologi pemantauan di kawasan sekitar Soho, Piccadilly Circus dan Dataran Leicester secara terbuka.

Maklumat mengenai teknologi sokongan penguatkuasaan itu juga akan diedarkan kepada orang ramai di sekitar bandar raya itu, menurut polis.

Jabatan itu menyatakan, ujian akan berlangsung selama lapan jam pada setiap hari dan semua wajah dalam pangkalan data yang akan digunakan adalah milik orang yang dikehendaki polis serta mahkamah.

Bagaimanapun, polis tetap memberi pengecualian kepada orang awam yang enggan wajah mereka diimbis alat peranti tersebut.

Ketua strategik teknologi itu di Jabatan Polis Metropolitan, Ivan Balhatchet menyatakan pihak polis akan menjalankan sekurang-kurangnya 10 ujian percubaan menjelang bulan depan. – Agensi



AGENSI

ILUSTRASI artis menunjukkan imbasan sistem pengecaman wajah yang sedang diuji polis di London.



AGENSI

IMEJ menunjukkan salah satu kamera pengecaman wajah di Lapangan Terbang Heathrow di London, Britain.

LAMPIRAN 14
THE STAR (WORLD): MUKA SURAT 27
TARIKH: 18 DISEMBER 2018 (SELASA)

Climate talks pass the baton

Meeting shows limits of international action in curbing global warming

KATOWICE: Fractious climate change talks in Poland showed the limits of international action to curb global warming in a polarised world, putting the onus on individual governments, cities and communities to stop temperatures from rising.

Nearly 200 countries at the United Nations talks in Katowice, in the coal mining region of Silesia, saved the landmark 2015 Paris Agreement from disintegration on Saturday by agreeing on a package of guidelines for its implementation.

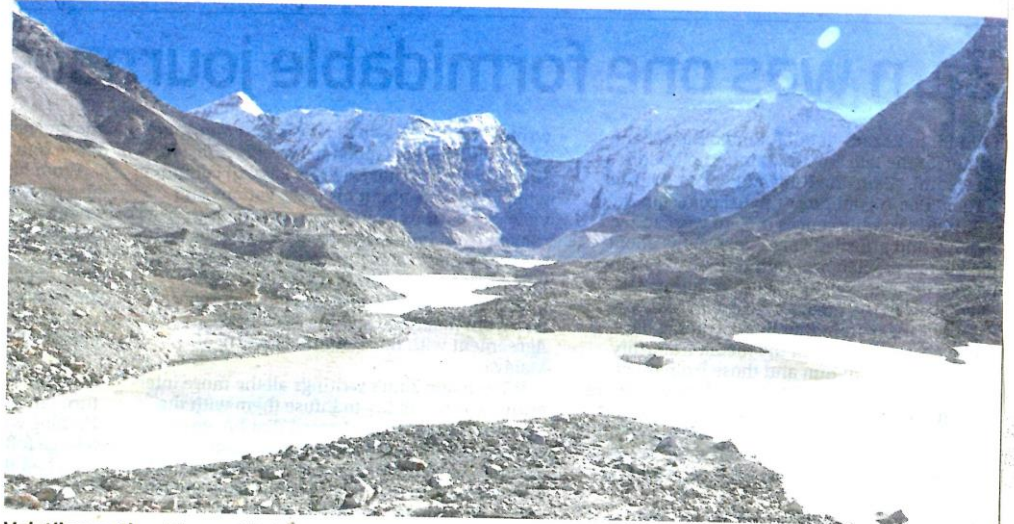
But it deferred rules on carbon credits – a spur to business – and lacked any firm commitment to strengthen countries' emissions cut targets by 2020, when the agreement comes into force.

As such, it left the parties a long way from the Paris deal's goal of keeping global warming below 2°C, let alone the cap of 1.5°C needed to avert more extreme weather, rising sea levels and the loss of plant and animal species.

The world is heading for a 3-5°C rise in temperatures this century, the United Nations World Meteorological Organization has said.

The Paris Agreement is based on individual commitments and expectations for the Polish talks to produce much more than rules for how those would be measured had always been low, as the unity built in Paris had been shattered by a wave of governments placing national agendas before collective action.

Only a handful of country leaders were present in Katowice and the



Volatile weather: The world is headed towards a 3-5°C rise in temperatures this century, according to the UN World Meteorological Organization. — AFP

UN Secretary-General had to fly back to the meeting to urge progress.

"Political will is missing," said Alden Meyer, director of non-profit science advocacy group Union of Concerned Scientists, as the conference staggered towards a finish delayed for more than 24 hours by last-minute wrangling over parts of the text.

"But it provides the hooks for governments, cities, businesses and civil society to do the work to get (to the Paris Agreement goals)," he said.

For conference president Michal

Kurtyka, it was a job well done.

"Mission accomplished," he wrote on Twitter. "Our children will look back at our legacy and recognise that we took the right decisions at important junctures like the one we face today."

For nations already suffering from climate change the agreement, which did not make clear how pledged funding would be provided, was only just better than nothing.

Simon Stiell, Environment Minister of Grenada in the Caribbean, said it "is barely scratching the surface of

what we really require".

Investors said it would take more action at the government level to persuade them to pump in the amount of money needed.

"Those countries ... who push ahead with ambitious, long-term climate policies will be the ones to reap the investment and economic advantages of doing so," said Stephanie Pfeifer, Chief Executive of Institutional Investors' Group on Climate Change, noting that the low-carbon transition was already underway. — Reuters