

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>Yeo Bee Yin</u> “In my ministry, you don’t need to know me. You only need to know how. Knowing me will not give you an advantage in any project. Make sure you know how”.	The Star	Rujuk lampiran 1
2.	<u>Meteorological Department ordered to be at the ready to carry out cloud seeding</u> Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin said her ministry would activate the process for cloud seeding to ensure that air quality returns to normal. “We will refer to the National Disaster Management Agency (Nadma) to get the agency to inform the Defence Ministry to carry out cloud seeding. The haze affecting the country right now is due to open burning in Sumatera and Kalimantan.	New Straits Times	Klik pada tajuk berita
3.	<u>Haze: Met Dept on standby to implement cloud seeding</u> However, Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin said the operations will only be successful if there is enough presence of clouds. “I have instructed the department to activate the seeding process once there are enough clouds by having the National Disaster Management Agency inform the defence ministry to carry out the operations. “I know the situation is bad, especially in the north of Peninsular Malaysia and Sarawak.	Free Malay Today	Klik pada tajuk berita

4.	<u>Met dept on standby mode to implement cloud seeding</u> The Meteorological Department is on standby mode to implement cloud seeding operations if the haze problem that hit several states in the country gets worse. However, Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin said the operations could only be done with enough presence of clouds.	BERNAMA	Klik pada tajuk berita
5.	<u>'Buck up and find ways to stop open burning,' Malaysian minister tells Dept of Environment</u> Ms Yeo, who holds the Energy, Technology, Science, Climate Change and Environment portfolio, said she has held meetings with the Department of Environment (DoE) and told them to buck up. "Only two or three weeks ago, I realised that the DoE doesn't even have cars to conduct enforcement. That's ridiculous! And, they don't even have enough equipment.	The Straits Times	Klik pada tajuk berita
6.	<u>Malaysia's minister: 'No excuse' not to fight open burning</u> Ms Yeo, who holds the Energy, Technology, Science, Climate Change and Environment portfolio, said she has held meetings with the Department of Environment (DoE) and told them to buck up. "Only two or three weeks ago, I realised that the DoE doesn't even have cars to conduct enforcement. That is ridiculous. And they don't have enough equipment. "I am shifting resources from the ministry to DoE to perform their jobs. I told them, 'No excuse. If you don't have cars, I will borrow these for us,'" she said on Wednesday.	The New Paper	Klik pada tajuk berita
	<u>Parts of Malaysia hit by unhealthy levels of haze</u> Malaysia's Minister of Energy, Technology, Science, Climate Change and Environment Yeo		

7.	Bee Yin said she has asked the Department of Environment (DOE) to improve enforcement to put an end to open burning in the country. "Only two or three weeks ago, I realised that the DOE doesn't even have cars to conduct enforcement," she said in an interview on Wednesday. "I am shifting resources from the ministry to DOE to perform their jobs," she added. Ms Yeo said she has also asked for help from local councils and other agencies to investigate cases of open burning - traditionally used by farmers to clear land.	The Straits Times	Klik pada tajuk berita
8.	<u>Bersedia benih awan jika keadaan kritikal</u> Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin berkata, kementerian akan mengaktifkan proses pembenihan awan bagi memastikan kualiti udara kembali pulih. "Kita akan merujuk kepada Agensi Pengurusan Bencana Negara (NADMA) bagi memaklumkan kepada Kementerian Pertahanan supaya melakukan pembenihan awan.	Harian Metro	Rujuk lampiran 2
9.	<u>Tujuh lokasi catat IPU tidak sihat</u> Dalam pada itu, Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin berkata, pihaknya telah mengarahkan Jabatan Meteorologi Malaysia supaya bersiap sedia melakukan pembenihan awan sekiranya keadaan jerebu melanda negara berada dalam keadaan kritikal.	Utusan Malaysia	Rujuk lampiran 3
10.	<u>Pembenihan awan dibuat jika jerebu makin kritikal – Menteri</u> Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin berkata, kementerian akan mengaktifkan proses pembenihan awan bagi memastikan kualiti udara kembali pulih. "Kita akan merujuk kepada Agensi Pengurusan Bencana Negara (NADMA) bagi	Berita Harian	Klik pada tajuk berita

	memaklumkan kepada Kementerian Pertahanan supaya melakukan pembenihan awan. "Jerebu yang melanda negara kini disebabkan pembakaran terbuka yang berlaku di Sumatera dan Kalimantan, Indonesia selain faktor pembakaran terbuka di sekitar kawasan Johan Setia.		
11.	<u>Pembenihan awan atasi kebakaran tanah gambut di Johan Setia</u> Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin, berkata ia diharap dapat dilakukan petang ini dalam usaha memadam kebakaran tanah gambut seluas 50 hektar yang berlarutan sejak tiga hari lalu. "Saya sudah menghubungi Menteri Pertahanan (Mohamad Sabu) untuk segera menggerakkan pesawat tentera atau aset berkaitan dalam melaksanakan OPA dan berharap keadaan cuaca serta awan mengizinkan usaha ini.	Berita Harian	Klik pada tajuk berita
12.	<u>Jabatan Meteorologi siap sedia lakukan pembenihan awan</u> Jabatan Meteorologi kini dalam keadaan bersiap sedia untuk melakukan pembenihan awan sekiranya keadaan jerebu yang melanda beberapa negeri menjadi semakin buruk, kata Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar Yeo Bee Yin. Beliau berkata, bagaimanapun proses pembenihan awan itu hanya boleh dilakukan sekiranya kehadiran awan mencukupi. "Saya telah arahkan Jabatan Meteorologi supaya apabila ada cukup awan kita akan aktifkan proses pembenihan dengan merujuk kepada Agensi Pengurusan Bencana Negara (Nadma) supaya memaklumkan kepada Kementerian Pertahanan untuk melakukan proses pembenihan awan itu.	Sinar Harian	Klik pada tajuk berita

13.	<u>Matahari sumber tenaga bumi</u> Menurut Pegawai Sains Planetarium Negara, Mohd Zamri Shah Mastor, Kementerian Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, matahari juga menyinarakan cahayanya ke permukaan planet-planet lain serta bulan masing-masing di planet dalam sistem suria.	Kosmo	Rujuk lampiran 4
14.	<u>Tujuh daerah catat IPU tidak sihat</u> Pengarah Jabatan Alam Sekitar negeri, Azman Shah Ismail berkata, dua factor penyumbang utama peningkatan IPU ialah pencemaran rentas sempadan di negara jiran dan pembakaran jerami oleh pesawah di negeri ini.	Kosmo	Rujuk lampiran 5
15.	<u>JAS naik taraf sistem pengawasan kualiti udara negara</u> Jabatan Alam Sekitar (JAS) akan mengambil kira kepekatan partikel halus (Particle Matter) yang bersaiz 2.5 mikron dan ke bawah (PM2.5) bagi menaik taraf sistem pengawasan kualiti udara di Malaysia. JAS, dalam satu kenyataan hari ini berkata, penggunaan PM2.5 dalam pengiraan Indeks Pencemaran Udara (IPU) adalah sejajar dengan amalan kebanyakan negara maju.	Berita Harian	Klik pada tajuk berita
16.	<u>Kedah teruskan projek pembangunan ladang hutan</u> Mengenai projek ladang hutan di Bukit Enggang, ia sudah diluluskan Majlis Tanah Negara pada 2012 dengan kawasan itu sudah melalui penilaian impak alam sekitar (EIA) oleh Jabatan Alam Sekitar.	Berita Harian	Rujuk lampiran 6
17.	<u>Eyes firmly on the future</u> “Anticipating Successive Waves of Changes as the Fourth Industrial Revolution Accelerates” while Academy Sciences Malaysia president Prof Datuk Asma Ismail, who is also Universiti Sains	The Star	Rujuk lampiran 7

	Malaysia's vice-chancellor, presented a talk entitled "A Road Map for Malaysian Science".		
18.	<u>Measuring up the new Cabinet</u> RENEWED PURPOSE Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin With a ministry name that reads like a mile long, Malaysia's youngest female minister hopes to come up with a catchy shorter version. How does Eco Ministry sounds, YB Yeo? The nation's first climate change Minister kick-started her first month with a loud message to industry players – it's the end of the "know-who" culture and the start of the "know-how" culture. Yeo, 35, is determined to increase Malaysia's renewable energy from the current 2% to 20% by 2025 as pledged in the Pakatan Harapan manifesto.	The Star	Rujuk lampiran 8 atau klik pada tajuk berita
19.	<u>The making of Dr M's motley crew</u> There are also a handful of engineers: Federal Territory Minister Khalid Samad who has a degree in Fuel and Energy Engineering, Entrepreneur Development Minister Mohd Redzuan Yusof, Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin who has a Masters in Advanced Chemical Engineering, Cambridge University and her deputy, Isnaraissah Munirah Majilis who is an electrical engineer by training.	The Star	Rujuk lampiran 9 atau klik pada tajuk berita

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
20.	<u>Rehda: Lack of incentives for green building projects/ Lack of incentives for green projects: Rehda</u> "If we're serious about moving forward, incentives must be given. Then more contractors will design something more sustainable and green," said Fateh, urging the country to emulate Singapore where incentives have been given in the past five years. He also pointed out the undersupply of green building technology and materials, which have to be imported.	The Sun Daily	Rujuk lampiran 10 atau klik pada tajuk berita
21.	<u>Eight places in four states record unhealthy API levels</u> The number of towns and cities with unhealthy air quality has gone up as the haze worsens. At 6pm yesterday, eight locations in Penang, Perlis, Kedah and Sarawak recorded Air Pollutant Index (API) readings of more than 100.	The Star	Rujuk lampiran 10
22.	<u>61 pelatih Pulapol diserang strok haba</u> Sebanyak 61 pelatih Pusat Latihan Polis (PULAPOL) Bukit Sentosa di sini, dikejarkan ke hospital selepas diserang strok haba ketika menjalani latihan dekat sini hari ini. Difahamkan sebanyak 16 pelatih berada dalam keadaan kritikal dan dihantar ke beberapa hospital sekitar Selangor termasuk Hospital Kuala Lumpur (HKL) untuk diberi rawatan.	Utusan Malaysia	Rujuk lampiran 11
23.	<u>Potensi pendidikan STEM kepada negara</u> Zaman kini, teknologi membawa perubahan besar kepada dunia dari segi gaya hidup masyarakat sehinggalah kepada pekerjaan dan perkembangan industri.	Utusan Malaysia	Rujuk lampiran 12
24.	<u>Ilmu STEM tepati gaya hidup abad ke-21</u> Pelajar perlu bersungguh-sungguh dalam menimba ilmu pendidikan Sains, Teknologi,	Utusan Malaysia	Rujuk lampiran 13

	Kejuruteraan dan Matematik (STEM) bagi memenuhi keperluan abad ke-21.		
25.	<u>Ban on single use plastic also applies to religious items</u> The ban on single use plastic in Selangor also applies to religious items such as garlands used in Hindu ceremonies, said state executive councillor V. Ganapathi Rao. Ganapathi said he stood by the state's decision to ban plastic and urged the garland makers to follow the rules.	The Star	Rujuk lampiran 14
26.	<u>PKS perlu sedia hadapi Industri 4.0</u> Katanya, kerjasama dua hala itu mengukuhkan lagi sektor ekonomi dan perdagangan, pembinaan infrastruktur, tenaga, pembuatan, komunikasi, ekonomi digital dan kewangan. "Perdagangan antara Malaysia dan China tidak dapat berkembang tanpa kerjasama antara usahawan kedua-dua negara. Malah, lokasi Malaysia di tengah ASEAN meletakkannya sebagai lokasi strategik sebagai hab perdagangan China dengan negara jiran.	Berita Harian	Rujuk lampiran 15 atau klik pada tajuk berita
27.	<u>Bahasa Nelayu relevan RI4</u> Bahasa Melayu tidak akan terancam dengan kemaraan era Revolusi Industri Keempat (RI4) selagi penuturnya terus mendaulatkan dan berusaha melestari serta memperkayakannya. Graf berkata, sejak pertengahan tahun 2010, istilah RI4 semakin tersebar di negara ini hingga menimbulkan kebimbangan terhadap kedudukan bahasa Melayu sebagai bahasa ilmu.	Berita Harian	Rujuk lampiran 16 atau klik pada tajuk berita
28.	<u>Call for 'forceful' approach to address haze issue</u> According to the API Index on the Department of Environment's (DOE) website, Seberang Jaya has recorded a reading of 123 with with Bukit Tengah at 108.	The Sun	Rujuk lampiran 17

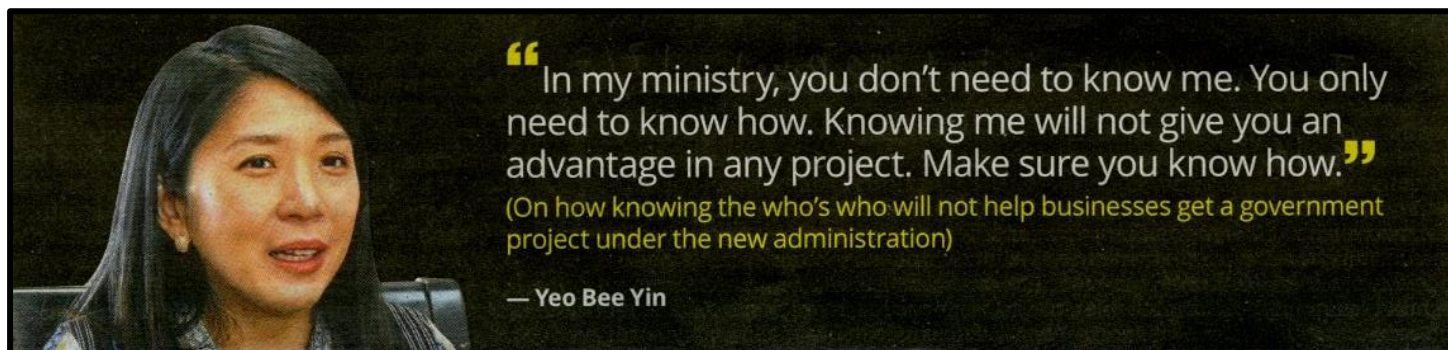
ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
29.	<u>'Blockchain the most overhyped technology'</u> <u>reuters</u> Commodity firms and banks have been diving into blockchain pilot schemes over the last two years but the new technology's application for most trading has likely been over-hyped, a report by Boston Consulting Group (BCG) said.	New Straits Times	Rujuk lampiran 18
30.	<u>Putting more eyes in the sky</u> The southernmost island province of Hainan is preparing a satellite network that is expected to enable China to conduct effective and efficient surveillance over the South China Sea.	The Star	Rujuk lampiran 19
31.	<u>Misi mencari jawapan punca matahari panas</u> Tepat pukul 3.33pagi waktu tempatan, 11 Ogos ketika rakyat Amerika Syarikat sedang nyenyak tidur, Pusat Angkasa Kennedy milik Pentadbiran Aeronautik dan Angkasa Lepas Kebangsaan (NASA) di Florida telah melancarkan kapal angkasa Parker Solar Probe untuk memulakan misinya menjelajah atmosfera matahari atau dikenali sebagai korona.	Kosmo	Rujuk lampiran 20
32.	<u>High-tech trash ban</u> Southeast Asia nations fear they are the new dumping ground for the world's trash after China banned the entry of several types of waste as part of a campaign against "foreign garbage". Thailand's ban comes weeks after regional neighbor Vietnam said it would stop issuing new licenses for waste imports and crack down on illegal shipments of paper, plastic and metal.	The Sun	Rujuk lampiran 21
33.	<u>Canada province declares wildfire emergency</u> "We are challenged with the number of fires in the province," British Columbia Forests Minister Doug Donaldson told public broadcaster CBC.	The Star	Rujuk lampiran 22

	"It's across the entire province unlike last year, where it was concentrated", he explained.		
34.	<u>Capitalism can crack climate change. But only if it takes risks</u> The struggle to combat climate change brings out the best and worst of capitalism. Decarbonisation of the economy requires alternatives for coal and cars that run on diesel, and that plays to capitalism's strengths. Innovation is what capitalism is all about, and there has been staggeringly rapid progress in developing clean alternatives to coal, oil and gas.	The Guardian	Klik pada tajuk berita
35.	<u>Three-year project will quantify benefits of Singapore's natural environment</u> An ambitious project to quantify all the benefits provided by Singapore's natural environment was launched on Thursday (Aug 16), aiming to provide a framework for developers to assess the trade-offs between development and conservation. The project will determine the economic, social and environmental benefits of the country's forests, parks, waterways, and marine habitats.	The Straits Times	Klik pada tajuk berita
36.	<u>U.S. Blockchain Firm Courts Controversy With Energy Project In Disputed Western Sahara</u> New York-based Soluna Technologies has become embroiled in the political controversy over Western Sahara, after announcing plans for a project combining renewable energy and blockchain computing in the disputed territory.	Forbes	Klik pada tajuk berita
37.	<u>Artificial intelligence beyond the superpowers</u> Much of the debate over how artificial intelligence (AI) will affect geopolitics focuses on the emerging arms race between Washington and Beijing, as well as investments by major military powers like Russia. And to be sure, breakthroughs are happening at a rapid pace in the United States and China.	The Bulletin	Klik pada tajuk berita

38.	<u>China to prosecute suspects, confiscate illegal income of scandal-hit vaccine maker</u> Chinese authorities will prosecute all suspects in a safety scandal at vaccine maker Changsheng Biotechnology Co Ltd and confiscate its illegal earnings, state broadcaster CCTV reported on Thursday. The company was accused in July of falsifying data for a rabies vaccine and manufacturing an ineffective vaccine for babies, sparking a safety scandal that has stoked widespread public anger.	Reuters	Klik pada tajuk berita
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LAMPIRAN 1
THE STAR (PAKATAN'S FIRST 100 DAYS): MUKA SURAT 18
TARIKH: 17 OGOS 2018 (JUMAAT)



LAMPIRAN 2

HARIAN METRO (SETEMPAT): MUKA SURAT 41

TARIKH: 17 OGOS 2018 (JUMAAT)

Bersedia benih awan jika keadaan kritikal

Shah Alam: Jabatan Meteorologi Malaysia (JMM) diarah bersiap sedia melakukan pembenihan awan jika keadaan jerebu yang melanda negara ketika ini berada dalam keadaan kritikal.

Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar Yeo Bee Yin berkata, kementerian akan mengaktifkan proses pembenihan awan bagi memastikan kualiti udara kembali pulih.

"Kita akan merujuk kepada Agensi Pengurusan Bencana Negara (NADMA) bagi memaklumkan kepada Kementerian Pertahanan bagi menggerakkan pesawat tentera atau aset berkaitan untuk melakukan pembenihan awan.

"Jerebu yang melanda negara kini disebabkan pembakaran terbuka di Sumatera dan Kalimantan, Indonesia selain faktor pembakaran terbuka di sekitar kawasan Johan Setia.

"Oleh itu, kita akan bersiap sedia membuat pembenihan awan namun ia bergantung kepada keadaan cuaca," katanya ketika ditemui selepas meninjau lokasi kebakaran tanah gambut di Kampung Johan Setia, Jalan Kebun di sini, semalam.



YEO (lima dari kanan) dengar penjelasan mengenai pemantauan kebakaran.

Hadir sama Ketua Pengarah Jabatan Alam Sekitar (JAS) Datuk Dr Ahmad Kamarulnajib Che Ibrahim, Pengarah Jabatan Bomba dan Penyelamat Selangor Azmi Osman serta Ahli Dewan Undangan Negeri (ADUN) Sungai Kandis Mohd Zawawi Ahmad Mughni.

Yeo berkata, bacaan Indeks Pencemaran Udara (IPU) di laman web Sistem Pengurusan Indeks Pencemaran Udara (APIMS) kini

menggunakan teknologi kadar ukuran IPU 2.5 mikrometer (PM2.5).

"Bacaan ini akan dikemas kini dan ia lebih tepat berbanding peralatan jenis PM10 yang digunakan sebelum ini," katanya.

Beliau menasihatkan orang ramai termasuk pihak sekolah mengambil langkah berjaga-jaga dengan sentiasa memantau bacaan IPU di laman web APIMS.

"Maklumat lanjut mengenai

bacaan IPU terkini di seluruh negara boleh diperoleh menerusi laman web apims.doc.gov.my atau memuat turun aplikasi MyIPU di Google Playstore dan App Store," katanya.

Sementara itu, mengulas lanjut berkaitan pembakaran terbuka di Johan Setia, Yeo berkata, rancangan pembenihan awan seperti yang dirancang dalam lawatannya kelmarin terpaksa dibatalkan.

"Ia berikutan keadaan awan ketika ini disertai dengan cuaca kering yang menyebabkan air tidak mencukupi untuk membuat pembenihan.

"Kita mengambil langkah mengorek tiga lubang yang tidak mempunyai air. Air Selangor (Pengurusan Air Selangor Sdn Bhd) sudah dimaklumkan bagi bantuan lanjut.

"Saya juga sudah memaklumkan kepada MPK (Majlis Perbandaran Klang) untuk membekalkan sekurang-kurangnya 10 lori tangki bagi memadamkan kebakaran," katanya.

Yeo berkata, tindakan mengorek lubang itu dilakukan supaya api tidak mudah merebak berikutan keadaan cuaca panas kini.

LAMPIRAN 3
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 24
TARIKH: 17 OGOS 2018 (JUMAAT)

Tujuh lokasi catat IPU tidak sihat

KUALA LUMPUR 16 Ogos - Enam kawasan di utara Semenanjung dan Mukah di Sarawak mencatatkan bacaan Indeks Pencemaran Udara (IPU) tidak sihat dengan Kargar di Perlis merekodkan bacaan tertinggi iaitu 151.

Menurut bacaan terkini IPU di laman sesawang **Jabatan Alam Sekitar** hingga 2 petang ini, Mukah mencatatkan IPU kedua tertinggi iaitu 139 manakala Alor Setar (152), Seberang Jaya (122), Sungai Petani (118), Perai (110) dan Kulim (101).

Pengarah Pusat Operasi Cuaca dan Geofizik Nasional, Dr. Mohd. Hisham Mohd Anip berkata,

keadaan jerebu di kawasan terbabit dijangka berkurangan dalam dua hari ini akibat perubahan corak tiupan angin yang dijangka berlaku malam ini.

Menurutnya, jarak penglihatan atau ketampakan akan bertambah baik berikutan perubahan arah tiupan angin.

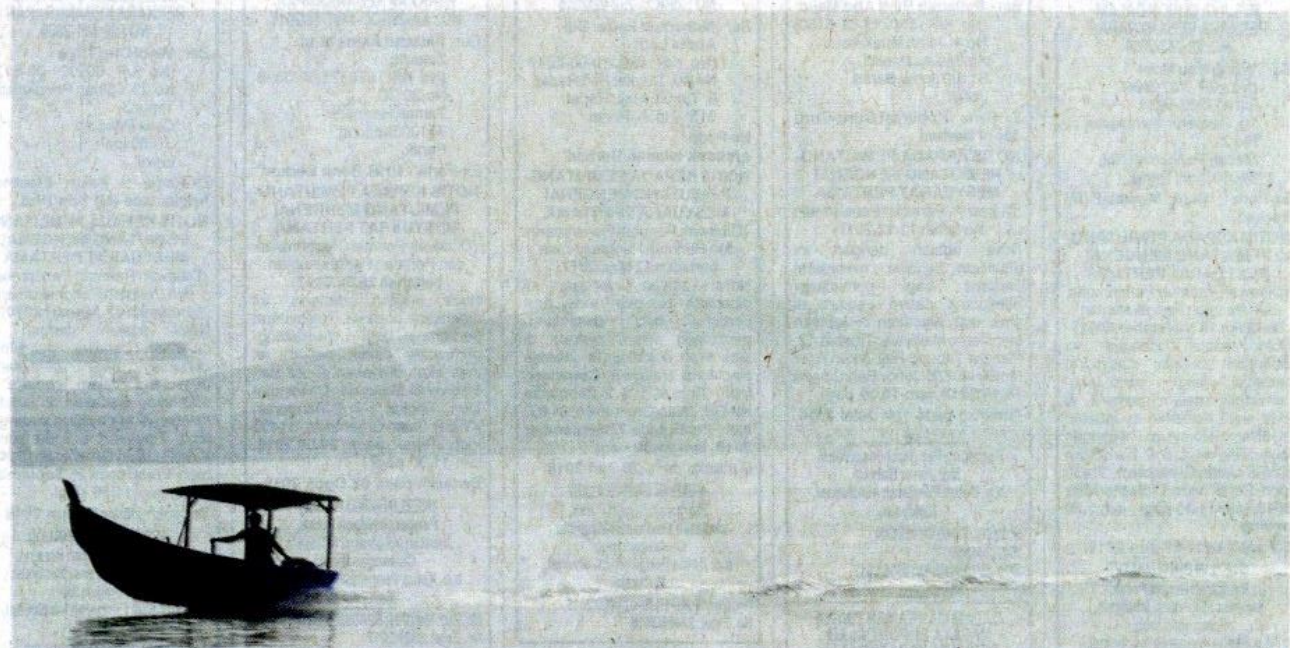
"Perubahan ini bersifat sementara dan dijangka jerebu akan kembali sekiranya masih terdapat titik panas (kawasan terbakar) di Sumatera dan Kalimantan, Indonesia.

"Titik panas di kawasan negara jiran ini boleh membawa kepada jerebu dan dijangka ber-

laku lagi Sabtu ini," katanya ketika dihubungi *Bernama*.

Bacaan IPU 0 hingga 50 dikategorikan sebagai baik, antara 51 dan 100 (sederhana), antara 101 dan 200 (tidak sihat), antara 201 dan 300 (amat tidak sihat) dan lebih 301 (berbahaya).

Dalam pada itu, **Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin** berkata, pihaknya telah mengarahkan **Jabatan Meteorologi** supaya bersiap sedia melakukan pembenihan awan sekiranya keadaan jerebu melanda negara berada dalam keadaan kritikal.



JAMBATAN Pulau Pinang 'hilang' daripada pandangan akibat jerebu yang melanda negeri ini di Georgetown, Pulau Pinang, semalam. - UTUSAN/AZMAN ASMAYATIM

LAMPIRAN 4
KOSMO (RENCANA UTAMA): MUKA SURAT 23
TARIKH: 17 OGOS 2018 (JUMAAT)

Matahari sumber tenaga bumi

MATAHARI merupakan sebuah bintang yang paling hampir dengan bumi iaitu pada jarak 95 juta kilometer dan ia terletak di pusat sistem suria. Ia merupakan sumber tenaga yang sangat penting kepada kehidupan di Bumi.

Menurut **Pegawai Sains Planetarium Negara, Mohd. Zamri Shah Mastor**, Kementerian Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, matahari juga menyinarikan cahayanya ke permukaan planet-planet lain serta bulan masing-

masing di planet dalam sistem suria.

"Daya graviti matahari memegang planet-planet untuk kekal berada di dalam orbitnya agar tidak terkeluar daripada sistem suria kita.

"Pada jarak 95 juta kilometer atau satu unit astronomi, matahari membekalkan tenaga sebanyak 1,368 watt kepada bumi bagi setiap satu meter persegi," katanya ketika dihubungi *Kosmo!* baru-baru ini.



MOHD. ZAMRI

Tambahnya, suhu permukaan matahari boleh mencecah sehingga 5,505 darjah Celsius.

Permukaan matahari yang biasanya boleh kita lihat ketika matahari hampir terbenam dinamakan lapisan fotosfera.

Ketumpatan lapisan fotosfera matahari hanyalah 0.37 peratus daripada ketumpatan

udara di permukaan laut di Bumi.

Jelas Mohd. Zamri, di luar daripada fotosfera merupakan atmosfera matahari yang terdiri daripada lapisan kromosfera, kawasan transisi, korona dan heliosfera.

Lapisan kromosfera, kawasan transisi dan korona adalah jauh lebih panas daripada permukaan matahari dan punca-puncanya masih belum diketahui lagi.

Suhu korona dan heliosfera boleh mencecah antara lapan hingga 20 juta darjah Celsius.

LAMPIRAN 5

KOSMO (NEGARA): MUKA SURAT 19

TARIKH: 17 OGOS 2018 (JUMAAT)

Keadaan jerebu di negeri-negeri Pantai Barat Semenanjung, Sarawak makin buruk

Tujuh daerah catat IPU tidak sihat

Oleh MEGAT LUTFI MEGAT RAHIM, NOOR HASLIZA NUSI dan JULIA ISMAIL

KUALA LUMPUR – Keadaan jerebu yang melanda beberapa negeri di Pantai Barat Semenanjung dan Sarawak semakin buruk apabila tujuh daerah mencatatkan Indeks Pencemaran Udara (IPU) tidak sihat dengan Alor Setar, Kedah merekodkan bacaan tertinggi iaitu 152 semalam.

Menurut laman web Indeks Pencemaran Udara Malaysia (APIMS), kawasan yang mencatatkan bacaan tidak sihat itu antaranya Kangar, Perlis (151), Sungai Petani (118) dan Kulim, Kedah (101), Seberang Jaya, Pulau Pinang (122), Pelabuhan Klang, Selangor (107) serta Mukah, Sarawak (140).

Bacaan IPU 0 hingga 50 dikategorikan sebagai baik, 51 dan 100 (sederhana), 101 dan 200 (tidak sihat), 201 hingga 200 (amat tidak sihat) dan lebih 301 (berbahaya).

Pengarah Pusat Operasi Cuaca dan Geofizik Nasional, Dr. Mohd. Hisham Mohd. Anip berkata, keadaan jerebu di kawasan terbabit dijangka berkurangan dalam tempoh dua hari ini akibat perubahan corak tiupan angin yang berlaku malam tadi.

Bagaimanapun, katanya, perubahan itu bersifat sementara dan jerebu akan kembali sekiranya masih terdapat titik panas (kawasan terbakar) di Sumatera dan Kalimantan, Indonesia.

Dalam pada itu, Ketua Pengarah Jabatan Bomba dan Penyelamat Malaysia (JBPM), Mohamad Hamdan Wahid berkata, pihaknya mengambil inisiatif menggunakan dron untuk memantau kawasan 'tompok panas' yang wujud akibat pembakaran terbuka di seluruh negara bagi membendung masalah jerebu.

Beliau berkata, pihaknya juga mengenal pasti beberapa kawasanompok panas di seluruh negara



PEMANDANGAN bangunan Kompleks Tun Abdul Razak (Komtar), George Town kelihatan 'hilang' (anak panah) akibat jerebu dengan IPU dicatatkan pada skala tidak sihat semalam.

INFO Indeks Pencemaran Udara (IPU)

Kangar, Perlis	- 139
Alor Setar, Kedah	- 146
Sungai Petani, Kedah	- 107
Seberang Jaya, Pulau Pinang	- 102
Pelabuhan Klang, Selangor	- 107
Mukah, Sarawak	- 135

(Setakat pukul 5.50 petang)

Skala IPU

0 hingga 50 (baik),
51 dan 100 (sederhana),
101 dan 200 (tidak sihat),
201 hingga 200 (amat tidak sihat)
Lebih 301 (berbahaya)

Sumber: Jabatan Alam Sekitar

yang dikesan berlaku pembakaran terbuka antaranya di Selangor membabitkan Sepang, Batu Arang dan Bestari Jaya serta Bukit Bendera, Pulau Pinang.

"Ketika ini terdapat satu kes pembakaran terbuka berlaku di Johan Setia, Kuala Langat membabitkan ladang berkeluasan 1.35 hektar," katanya.

Di George Town, penduduk dinasihatkan supaya mengurang-

kan aktiviti luar berikutan keadaan jerebu yang melanda negeri ini sejak Selasa lalu.

Pengerusi Jawatankuasa Kebajikan, Masyarakat Penyayang dan Alam Sekitar negeri, Phee Boon Poh berkata, IPU setakat pukul 3 petang semalam menunjukkan bacaan IPU sederhana dan tidak sihat di empat kawasan di negeri ini iaitu Minden (96) dan Balik Pulau (93) manakala Seberang Jaya (120) serta Perai (109).

"Kita meminta penduduk memakai topeng mulut semasa berada di luar bangunan termasuk minum banyak air. Kerajaan negeri juga telah menyediakan 20,000 helai topeng muka kepada semua wakil rakyat untuk diedarkan kepada penduduk," katanya.

Di Kangar, IPU yang melebihi bacaan 100 dicatatkan di seluruh Perlis sejak Sabtu lalu.

Pengarah Jabatan Alam Sekitar negeri, Azman Shah Ismail berkata, dua faktor penyumbang utama peningkatan IPU ialah pencemaran rentas sempadan di negara jiran dan pembakaran jerami oleh pesawah di negeri ini.

LAMPIRAN 6
BERITA HARIAN (WILAYAH): MUKA SURAT 66
TARIKH: 17 OGOS 2018 (JUMAAT)

Kedah teruskan projek pembangunan ladang hutan

➔ Kerajaan terdahulu lulus dasar bagi tampung bekalan kayu industri

Oleh Suzalina Halid
suzalina@nstp.com.my

Alor Setar

Kerajaan negeri akan meneruskan projek pembangunan ladang hutan berikutan dasar mengenai penubuhannya sudah diluluskan pentadbiran sebelum ini.

Menteri Besar, Datuk Seri Mukhriz Mahathir, berkata kerajaan terdahulu melalui Majlis Tanah Negara meluluskan dasar pembangunan ladang hutan di negara ini bagi menampung bekalan kayu untuk industri.

Katanya, sebarang desakan untuk menghentikan pembangunan ladang hutan termasuk di negeri itu harus diperhalusi di peringkat Pusat.

"Kerajaan negeri mewarisi sepenuhnya apa keputusan yang dibuat Majlis Tanah Negara sebelum ini kerana kita baharu saja tiga bulan mentadbir, sudah tentu kami tidak terbabit dalam kelulusan projek ladang hutan.

"Namun menjadi tanggungjawab kami mengatasi masalah yang timbul kerana di Kedah ia membabitkan kawasan hutan

pengeluaran sudah tentu ia memberi kesan alam sekitar.

"Jadi pertimbangan supaya tidak sepatutnya diwujudkan ladang hutan, saya ingin mencadangkan supaya ia boleh diperhalusi di peringkat kebangsaan," katanya ketika menjawab soalan tambahan Mohd Isa Shafie (PAS-Belantek) pada sidang Dewan Undangan Negeri (DUN) semalam.

Minta kerajaan kaji semula
Mohd Isa meminta kerajaan negeri mengkaji semula pelaksanaan projek ladang hutan di Bukit Enggang, Sik bagi melindungi ekologi Kedah termasuk risiko bencana alam.

Mukhriz berkata, projek ladang hutan yang dibangunkan membabitkan proses penebangan hutan sebelum ditanam

semula pokok bagi tujuan sama untuk membekalkan kayu-kayan kepada industri.

Mengenai projek ladang hutan di Bukit Enggang, ia sudah diluluskan Majlis Tanah Negara pada 2012 dengan kawasan itu sudah melalui penilaian impak alam sekitar (EIA) oleh **Jabatan Alam Sekitar (JAS)**.

Katanya, projek seluas 1,000 hektar itu sudah selesai menjalani proses pengusahasilan dan kini dalam proses penanaman semula pokok dari spesies batai.

"Saya tidak nampak cara apa lagi selain meneruskan projek tanaman semula di Bukit Enggang kerana jika dibiarkan begitu saja maka apa yang dihasratkan dari awal dulu (membekalkan kayu-kayan) tak akan jadi kenyataan," katanya.

LAMPIRAN 7

THE STAR (BUSINESS): MUKA SURAT 14

TARIKH: 17 OGOS 2018 (JUMAAT)

By RUBY LIM
rubylim@thestar.com.my

Eyes firmly on the future

Science conference highlights importance of knowledge sharing

THE World Engineering, Science and Technology Congress (Estcon) 2018 came to a successful conclusion at the Kuala Lumpur Convention Centre on Wednesday.

Themed "Science, Technology and Humanities: Reinventing the Future", the biennial congress focused on the Fourth Industrial Revolution (IR 4.0), addressing the latest trends and challenges in embracing the IR 4.0.

Estcon continues to be one of the largest congresses in the world, serving as an avenue for knowledge-sharing, intellectual discourse and networking on areas of scientific and humanities research.

"The role of intellectuals and academics is crucial for humanity to excel in the IR 4.0.

"The public needs to be both educated and technologically aware to support the efforts of research and innovation.

"Education is one of the most important investments a country can make for its people and its future," said Higher Education director-general Datin Dr Siti Hamisah Tapsir, representing Education Minister Datuk Dr Maszlee Malik.

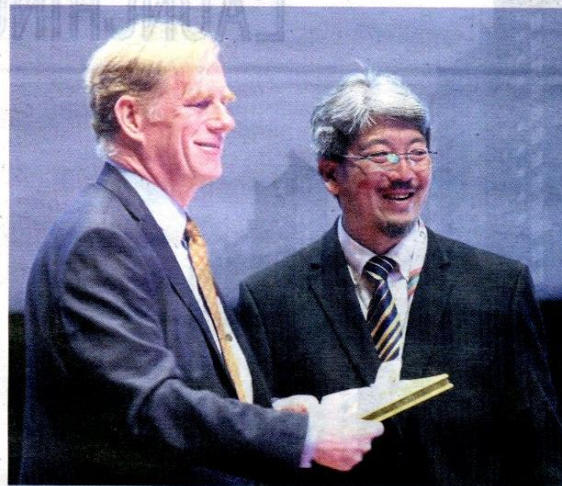
Dr Siti Hamisah pointed out that according to The National Council for Scientific and Research Department, Malaysia needs around 500,000 scientist and engineers by 2020 but there are only 70,000 registered engineers, which is 17% of the total expected figure.

"These are staggering numbers for us at the Education Ministry. Therefore, it is paramount that our nation look towards more programmes and platforms to build interest in technology and engineering in order to rebound from our current position," she emphasised.

She added that the approach used in teaching and learning must align with the needs of IR 4.0 in order to enhance the nation's education.

"It is essential to establish the curriculum while taking into consideration the design principles of this era of digitalisation.

"Smartboards and tablets are



Dr Wood (left) receiving a souvenir from Prof Dr Mohamed Ibrahim after delivering his keynote address. — Photos: AZMAN GHANI/The Star

used as learning aids in futuristic countries. Aside from tools, we also see a revolution in student analytics whereby educators are able to evaluate students' performance through big data and cyber-system automation.

"As we march into IR 4.0, the major change in teaching technology and analytics is bringing us towards an age where learning becomes more personal and accessible to all," she said.

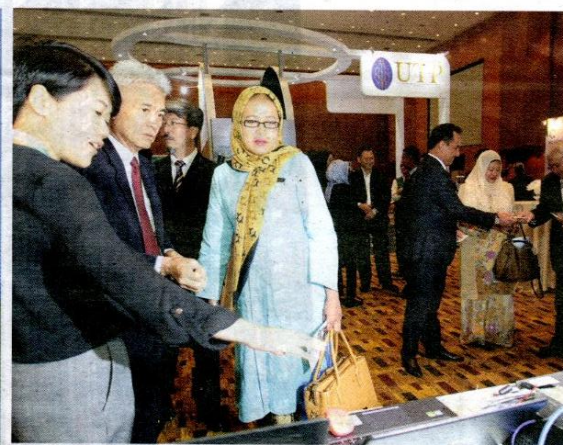
Universiti Teknologi Petronas (UTP) vice-chancellor Prof Dr Mohamed Ibrahim Abdul Mutalib, who was also Estcon 2018 organising chairman, emphasised that there is a lot to consider on the concept of Education 4.0 suitable especially for the future generation of students.

"Students have changed. Digital natives walking on the road of disruptive technologies are likely to find online educational tools with artificial intelligence highly appealing," he added.

The event also saw the signing of an agreement between four Malaysian government-linked universities and five Indonesian institutions of higher learning aimed at forging stronger ties between the government-linked institutions of neighbouring countries.

Over 1,000 visitors from over 40 countries comprising academics, researchers, scientists, engineers, interest groups and industry experts converged at the two-day congress.

The congress featured four keynote speakers who shared insights



Dr Siti Hamisah Tapsir visiting the booth after launching Estcon 2018 at the Kuala Lumpur Convention Centre.

on reinventing the future in line with IR 4.0.

London Futurists chair and futurist consultancy Delta Wisdom principal Dr David Wood spoke on "Anticipating Successive Waves of Changes as the Fourth Industrial Revolution Accelerates" while Academy of Sciences Malaysia president Prof Datuk Dr Asma Ismail, who is also Universiti Sains Malaysia vice-chancellor, presented a talk entitled "A Road Map for Malaysian Science".

Talking about the "Standards for Industry 4.0/Smart Manufacturing Challenges and Opportunities" was Sirim Bhd president and group chief executive Prof Dr Ahmad Fadzil Mohamad Hani.

Another notable speaker was social entrepreneur and Grameen Bank founder Prof Muhammad Yunus Nobel Laureate.

Industry-focused conferences

covering sectors such as oil and gas, engineering, energy, information sciences, and advanced materials were also held during the two-day event.

Additionally, the congress included forum sessions with 20 plenary speakers and 30 forum panellists to discuss on the advent of IR 4.0 which will change the nature of higher education and how it affects future students.

The Innovation Pitching programme also allowed innovators and inventors to pitch new technologies to potential investors for commercialisation.

ESTCON 2018 was organised by UTP with support from the Education Ministry, Energy, Science, Technology, Environment and Climate Change Ministry, Academy of Sciences Malaysia, Sirim Bhd and Yayasan Universiti Teknologi Petronas.

LAMPIRAN 8

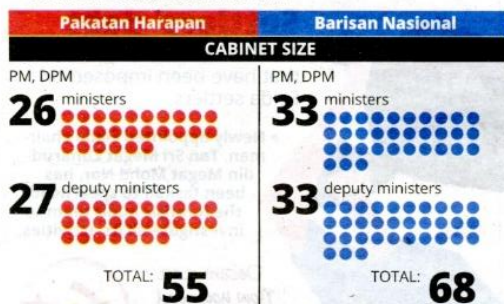
THE STAR (PAKATAN'S FIRST 100 DAYS): MUKA SURAT 4

TARIKH: 17 OGOS 2018 (JUMAAT)

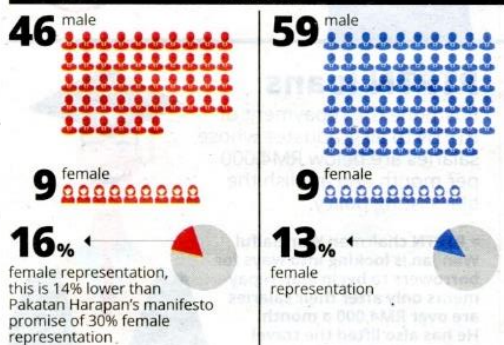
Measuring up the new Cabinet

Here is how the ministers and deputies stack up according to age, gender and party affiliation.

Cabinet breakdown



GENDER



AGE



*Age calculated as of second Cabinet reshuffle in June 2016

PARTY BREAKDOWN



Missing states: Kelantan & Terengganu

The current Cabinet does not have ministers from Kelantan and Terengganu as there are no Pakatan Harapan MPs from these two states. However, Terengganu PAS commissioner Datuk Hussain Awang from Terengganu and Universiti Teknologi Mara Academy of Contemporary Islamic Studies lecturer Asmak Husin from Kelantan were sworn in as senators in the Dewan Negara.

Ministers to watch

NEW & POWERFUL

Economic Affairs Minister Datuk Seri Azmin Ali

Government-linked companies that will be placed under his Ministry include Ekuiti Nasional Bhd, Bank Pembangunan Malaysia Bhd, Perbadanan Nasional Bhd, Felcra Bhd, Felda Global Ventures Holdings Bhd and Johor Petroleum Development Corp. Azmin continues to wield political clout in the Pakatan Harapan hierarchy as his portfolio will also control the powerful Economic Planning Unit and Federal Land Development Authority. Analysts claim the move to increase Azmin's influence and curb Datuk Seri Anwar Ibrahim's powers in PKR.



MALAYSIA'S NUMBER 2

Women, Family and Community Development Minister Datuk Seri Dr Wan Azizah Wan Ismail

Dr Wan Azizah had a rocky start after her Ministry came under fire over a couple of issues, namely Pakatan Harapan's failure to achieve 30% women representation in Cabinet and its soft approach in banning child marriage.

Following her husband Datuk Seri Anwar Ibrahim's win as the PKR president, speculation has been rife whether she will remain as Deputy Prime Minister for the full five-year term.

However, she has made it clear that she has no intention to relinquish her position as the Deputy Prime Minister nor her Pandan MP post.

Despite her reassurances, her political image as being Anwar's seat warmer has many observers adopting a "wait-and-see" attitude.



ON A STEEP LEARNING CURVE

Education Minister Dr Maszlee Malik

Dr Maszlee Malik's appointment as Education Minister had a controversial start as the portfolio was initially taken by Dr Mahathir. The former International Islamic University Malaysia lecturer continues to court controversy, be it over testy or trivial issues. From claims of being an alleged supporter of controversial preacher Zakir Naik to undermining Bahasa Malaysia as a national language by recognising UEC to the Ministry's new black shoes ruling for schools, Dr Maszlee has a tricky role ahead in advancing the nation's education system to be a fair, progressive and inclusive one.



RENEWED PURPOSE

Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin

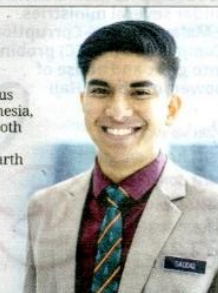
With a ministry name that reads like a mile long, Malaysia's youngest female minister hopes to come up with a catchy shorter version. How does Eco Ministry sounds, YB Yeo? The nation's first climate change Minister kick-started her first month with a loud message to industry players - it's the end of the "know-who" culture and the start of the "know-how" culture. Yeo, 35, is determined to increase Malaysia's renewable energy from the current 2% to 20% by 2025 as pledged in the Pakatan Harapan manifesto. Reducing Malaysia's dependence on coal-fired power plants would also see the development of an energy industry centred around renewable sources.



YOUNG & DASHING

Youth and Sports Minister Syed Saddiq Syed Abdul Rahman

Despite being a political newbie, Syed Saddiq quickly gained celebrity status with his good looks and charming personality, both in Malaysia and in Indonesia, where he had his first overseas working visit. Syed Saddiq's age - at 26 - is both his strength and weakness. His youthful brand of politics, "Just call me Bro Saddiq", instead of the usual YB (Yang Berhormat) salutation and down-to-earth personality where he was seen clearing litter at the Bukit Jalil Stadium endeared him to the public. Nevertheless, his maturity and experience in handling the Ministry begs scrutiny. His young team was thrown into the limelight after his press officer Numan Afli Saadan was forced to resign following criticisms of lesbian, gay, bisexual and transgender (LGBT) activism. But Syed Saddiq won points for sticking to the promise to abolish National Service and the National Civic Bureau (BTN).



LAMPIRAN 9

THE STAR (PAKATAN'S FIRST 100 DAYS): MUKA SURAT 5

TARIKH: 17 OGOS 2018 (JUMAAT)

The making of Dr M's motley crew

Pakatan's first
100
days

UrbanDictionary.com's definition of motley crew as "An odd and often mismatched assortment of people, a group of friends or teammates who don't seem like they'd work well together, but somehow they do" aptly describes the new Cabinet.

By RAZAK AHMAD

A QUESTION on the minds of many Malaysians after Tun Dr Mahathir Mohamad was sworn in as the country's seventh Prime Minister on May 10 was what his line-up of Ministers would look like. After all, voters who carried the Pakatan Harapan government to power at the 14th general election on May 9 were eager for change and had high expectations.

And for the new Government to implement its promises, it needed to form a new Cabinet as quickly as possible.

As things turned out, it took nearly two months for Dr Mahathir to get his full Cabinet line-up up and running. Getting the best qualified people to fill the ministerial portfolios while ensuring that the Cabinet fairly reflected the balance of power among the four Pakatan Harapan parties proved to be a time-consuming process.

The day after he was sworn in as Prime Minister and with Datuk Seri Dr Wan Azizah Wan Ismail as his deputy, Dr Mahathir named 10 core ministries. These were Finance, Home, Education, Defence, Rural Development, Foreign Affairs, Public Works, Transport, Economy and lastly, Multimedia, Science and Technology.

These core ministries, explained Dr Mahathir, would make up his initial Cabinet with additional ministries to be added on later.

The following day on May 12, Dr Mahathir named his first batch of Cabinet Ministers.

Many were expecting him to unveil the names of at least 10 ministers. Instead, he unveiled only three – Bersatu president Tan Sri Muhyiddin Yassin as Home Minister, DAP secretary-general Lim Guan Eng as Finance Minister and Parti Amanah Negara president Mohamad Sabu as Defence Minister.

As for the rest of the line-up, he said that needed "a bit more time".

"We can't say 'abracadabra' and everything will happen. It takes time. We have to study these people, their qualifications and fitness for each ministry," he said.

After the announcement, Lim was asked by a journalist from China what he would do differently, being the first ethnic Chinese to be named Finance Minister after 44 years. (The last ethnic Chinese Finance Minister was Tun Tan Siew Sin who held the portfolio from 1959 to 1974.)

Lim's now famous reply:

"I'm sorry, I don't consider myself as Chinese, I am a Malaysian. I do not know that it has been 44 years, thank you for counting for me. As I said we are all Malaysians here and our focus will be to help Malaysians."

There was little surprise over Muhyiddin's appointment as Home Minister; the former Deputy Prime Minister is a veteran administrator at state and federal levels.

Muhyiddin has served as Johor Menteri Besar and in various ministerial positions: Youth and Sports; Domestic Trade and Consumer Affairs; Agriculture and Agro-Based Industry; International Trade and Industry and Education.

In a statement issued on his first day after clocking in as Home Minister, Muhyiddin said the people were now more knowledgeable and aware

of their rights.

"The rakyat want to see the changes which they are hoping for taking place today, not tomorrow. Our job is to expedite those changes," he said.

Of the three initial ministers named, the biggest surprise was the appointment of Mohamad Sabu as Defence Minister.

Shortly after Mohamad was named, digitally altered images of the Parti Amanah Negara president began to spread online.

One depicted him as the Hollywood movie character Rambo, underscoring how some people were still getting used to his appointment to such a "macho" Cabinet post.

The affable Mohamad Sabu took it in his stride, acknowledging he was known to have a sense of humour and liked to joke, but also made it clear his new job was no laughing matter.

"Those who know me well will know how to differentiate which one is a joke and which one is serious," he said.

Many hailed the announcement on the first three ministers but others were less enthusiastic.

PKR vice-president Rafizi Ramli promptly expressed unhappiness over the matter.

News reports quoted him saying that Dr Mahathir had "bulldozed" through the appointments without PKR's consent.

Rafizi's outburst did not go down well with everyone. Former Bersih 2.0 Datuk Ambiga Sreenevasan, in a tweet, politely requested that Rafizi stop his "nonsense".

Fellow PKR vice-president Wong Chen jumped to Rafizi's defence, saying that it was perplexing that PKR, as the single largest party in Pakatan, had not been offered any Cabinet positions yet. Dr Mahathir addressed the concerns about the appointments in a special televised announcement the following day on May 13.

He explained that while he could not "distribute the number of seats according to the percentage of each party in his 10-person Cabinet", all Pakatan Harapan component parties would be fairly represented in the full Cabinet, and it would be based on the number of seats won by each party.

Despite his explanation, speculation continued on whether the delay in naming the full line-up was a symptom of a bigger problem – internal strife and dissent within PH.

In a May 14 analysis on political risk in Malaysia, BMI Research reckoned that the slow pace in naming the remaining members of the Cabinet signalled potential difficulties in policy-making for the new government.

Noting that the slow naming is not an encouraging start, BMI Research said it still expected Dr Mahathir to be able to balance disagreements within PH to push forward with policy, although this would take time.

Finally, on May 18 was also when the Prime Minister announced nine more Cabinet ministers, while the third and last batch of ministers was finally sworn in on July 2, bringing the total number of ministers to 26, with 23 deputy ministers.

What makes this Cabinet so interesting is the quality of the members. It does look like Dr Mahathir took his time to choose some of the brightest and best trained minds for his Cabinet.

Top of the pecking order, the new

Cabinet has the rare distinction of having doctors as the Prime Minister and Deputy Prime Minister. Deputy Entrepreneur Development Minister is also doctor, Dr Mohd Hatta Md Ramli. Health Minister Dr Dzulkefly Ahmad has a strong science and medical background with a doctorate in toxicology from St. Mary's Hospital Medical School, Imperial College, while his deputy Gopeng MP Dr Lee Boon Chye is a cardiologist.

It is already well-known ex-Penang Chief Minister Lim has a degree in economics and is a professional accountant, qualifications that come in handy in his post as Finance Minister and the investigation into the convoluted 1MDB financial scandal.

Then there is Deputy International Trade and Industry Minister Ong Kian Ming, an Asean and Fulbright scholar who has a degree in Economics from London School of Economics and a Master's in Economics from Cambridge University.

Dr Xavier Jayakumar, who is Water, Land and Natural Resources Minister, trained and practised as a dentist. His fellow party member R. Sivarasa who is Deputy Rural Development Minister has a first class degree in genetics before becoming a Rhodes Scholar to pursue law in Oxford University.

There are indeed lawyers a-plenty in the Cabinet; at least a dozen, including Works Minister Baru Bian, International Trade and Industry Minister Durrell Leiking, Communications and Multimedia Minister Gobind Singh Deo and Tourism and Culture Minister Datuk Mohamadaddin Ketapi.

Then there are the scholars and political science graduates: Datuk Dr Mujahid Yusof, Minister in the Prime Minister's Department (Religious Affairs), who has a degree in Arabic Language and Literature, from Al-Azhar University, Egypt; Masters in Human Resource Development, Universiti Putra Malaysia and a doctorate in Islamic Political Science, Universiti Malaysia.

Education Minister Dr Maszlee Malik who is a multi-linguist has a doctorate in Political Science from Durham University and taught at the International Islamic University Malaysia.

There are also a handful of engineers: Federal Territory Minister Khalid Samad who has a degree in Fuel and Energy Engineering, Entrepreneur Development Minister Mohd Redzuan Yusof, Energy, Technology, Science, Climate Change and Environment Minister Yeo Bee Yin who has a Masters in Advanced Chemical Engineering, Cambridge University and her deputy, Isnaraissah Munirah Majilis who is an electrical engineer by training.

Perhaps one of the most interesting aspects of this Cabinet is it includes people who have been jailed or detained. Khalid was detained for nine months under the Internal Security Act under Operation Lalang in 1987. So too Lim Guan Eng and Mohamad Sabu. The two were detained Kamunting for 18 months. That was where their friendship began and remains strong till today.

This Cabinet is indeed full of surprises, strong on talent but weak on experience. Its greatest test is its ability to put aside differences, party politics and one-upmanship and pull together as a team to steer this ship called Malaysia through rough seas to safe harbour.

LAMPIRAN 10
THE SUN (SUNBIZ): MUKA SURAT 12
TARIKH: 17 OGOS 2018 (JUMAAT)

Lack of incentives for green projects: Rehda

> Property developers face financial risks for such developments, says immediate past president

BY **EE ANN NEE**
sunbiz@thesundaily.com

CYBERJAYA: The Real Estate and Housing Developers' Association Malaysia (Rehda) highlighted that there is a lack of incentives to encourage developers to embark on green building development, in particular financial incentives, which do not mitigate the high upfront cost of green buildings.

Its immediate past president Datuk Seri Fateh Iskandar (pix) said developers face financial risks, including 15%-20% higher capital upfront or initial costs, for green buildings. Extra costs involved include new technology and innovative technology methods or techniques, green rating assessment fees, design fees, professional fees, procurement of new technology or materials as well as longer planning period.

"However in the long run, when you look at maintaining the building and property, you will have a considerable amount of savings," Fateh said in his



keynote at the Sustainable Housing Futures Conference here yesterday.

He said developers also face demand risk, where developers construct and supply products in accordance to buyers' demands and preferences, however do not receive direct benefits from the energy-efficient investment. Instead, developers bear the extra cost of the new technologies involved. This is later passed on to house buyers in the form of higher selling price.

"If we're serious about moving forward, incentives must be given. Then more

contractors will design something more sustainable and green," said Fateh, urging the country to emulate Singapore where incentives have been given in the past five years.

He also pointed out the undersupply of green building technology and materials, which have to be imported.

"In Singapore, when multinational tenants want to rent a green building, you have to pay 20%-30% higher premium from the normal office rental. Unfortunately in Malaysia, this does not happen. Whether we build a standard building, MSC-status building or green building, the rental is the same. We have to educate our tenants," said Fateh.

There is also a lack of enforcement, including the lack of legislative framework for green technology and lack of building codes and regulations.

"Tweak or relegislate certain framework for green technology. We've many building codes and regulations, but none for green technology," said Fateh.

He said one of Rehda's flagship initiatives on the green front is GreenRE, a building rating tool launched in 2013 that provides certification of environmentally responsible and resource-efficient building in the residential and non-residential sectors, in addition to advice on sustainable property design and construction.

LAMPIRAN 11

THE STAR (NATION): MUKA SURAT 3

TARIKH: 17 OGOS 2018 (JUMAAT)

Eight places in four states record unhealthy API levels

By **RAZAK AHMAD**
razak@thestar.com.my

PETALING JAYA: The number of towns and cities with unhealthy air quality has gone up as the haze worsens.

At 6pm yesterday, eight locations in Penang, Perlis, Kedah and Sarawak recorded Air Pollutant Index (API) readings of more than 100.

They were led by Kangar with an API of 141, followed by Alor Setar (140), Mukah (139) and Seberang Jaya (117).

Sibu had an API of 112, while Sungai Petani and Seberang Perai both recorded an API of 107.

Balik Pulau, meanwhile, had an API of 105, according to the Air Pollutant Index of Malaysia.

The number of areas with

unhealthy air quality rose yesterday from six at noon to eight as at 6pm.

Air quality is classified as good when the API is 50 and below, and moderate when the API reading is between 51 and 100.

An API of between 101 and 200 means the air quality is considered unhealthy.

A reading of 201-300 means that the air quality is very unhealthy, and an API of more than 300 is hazardous.

Temperatures in several parts of the country have been rising due to the current southwest monsoon, which started in the third week of May.

The hot and dry weather during this time contributes to the spread of forest fires and open burning, which causes the haze.



Parched land:

Firemen fighting wildfires in the Daro sub-district in central Sarawak where 500 acres of land have been ravaged. — Photo courtesy of Bomba

LAMPIRAN 12
UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 24
TARIKH: 17 OGOS 2018 (JUMAAT)

61 pelatih Pulapol diserang strok haba

KUALA LUMPUR 16 Ogos - Sebanyak 61 pelatih Pusat Latihan Polis (Pulapol) Bukit Sentosa, Rawang dekat sini diserang strok haba ketika menjalani latihan dekat sini hari ini.

Difahamkan sebanyak 16 pelatih berada dalam keadaan kritikal dan dihantar ke beberapa hospital sekitar Selangor termasuk Hospital Kuala Lumpur (HKL) untuk diberi rawatan.

Sumber berkata, ketika kejadian kesemua pelatih sedang melakukan latihan yang memerlukan mereka

berada di dalam sebuah bas.

"Akibat kepanasan, sebanyak 12 daripada 16 pelatih yang kritikal telah mengalami sawan dan pengsan.

"16 pelatih ditempatkan di zon merah (kritikal), seorang di zon kuning (sederhana) dan 44 di zon hijau (ringan)," katanya.

Menurut sumber lagi, daripada 16 pelatih terbabit, tiga kes dirujuk ke Hospital Sungai Buloh, tiga kes ke HKL, dua kes ke Hospital Selayang, dua kes ke Hospital Tengku Ampuan Rahiman, enam kes masih di Pulapol untuk diru-

juk ke hospital.

"Enam kes sedang diuruskan oleh pasukan perubatan keceemasan daerah, satu kes kuning dan sebanyak 44 kes di zon hijau.

"Kesemua di zon hijau telah di tempatkan dalam bangunan berhawa dingin sebagai langkah berjaga-jaga," ujarinya.

Sementara itu, Ketua Polis Daerah Hulu Selangor, Superintenden Lim Bak Phai ketika dihubungi berkata, pihaknya tidak menerima laporan mengenai perkara tersebut.

LAMPIRAN 13
UTUSAN MALAYSIA (FORUM): MUKA SURAT 10
TARIKH: 17 OGOS 2018 (JUMAAT)

Potensi pendidikan STEM kepada negara

SAUDARA PENGARANG,

ZAMAN kini, teknologi membawa perubahan besar kepada dunia dari segi gaya hidup masyarakat sehinggalah kepada pekerjaan dan perkembangan industri.

Sektor pendidikan turut tidak terlepas daripada tekanan perubahan ini. Pendidikan STEM, akronim bagi Sains, Teknologi, Kejuruteraan (*Engineering*) dan Matematik perlu lebih giat diusahakan di negara kita agar terus relevan dengan kehendak zaman.

Topik Revolusi Industri 4.0 dan *Artificial Intelligence* (AI)

sedang hangat diperbincangkan di peringkat global. Hampir semua sektor kerja kemungkinan akan diambilalih oleh robot dan teknologi pada masa hadapan.

Oleh itu, kita mesti lebih bijak daripada robot untuk mengawalinya. Di samping itu, pendidikan STEM adalah salah satu usaha bagi menghasilkan lebih ramai generasi pencipta, bukan hanya menjadi pengguna teknologi.

Selain menyediakan tenaga pekerja dalam bidang berkaitan bagi memacu ekonomi dan kemajuan negara, pendidikan STEM turut melahirkan pelajar

yang mampu berfikir secara kritis, mahir berkomunikasi, boleh bekerjasama dan menyelesaikan masalah.

Kemahiran ini bukan sahaja berguna dalam dunia pekerjaan era industri 4.0 tetapi juga dalam aspek kehidupan seperti aktiviti sosial, kecerdasan emosi dan pembelajaran.

Sistem pendidikan hari ini, bukan sahaja di Malaysia malah di peringkat global, dikatakan berorientasi kepada peperiksaan semata-mata dan tidak fokus terhadap pelajar untuk menyelesaikan masalah dunia sebenar.

Kesannya, kebanyakan pelajar 'terkejut' apabila berdepan dengan realiti kehidupan sebenar selepas tamat pengajian. Namun, pelajar yang mengikuti aliran STEM tidak dihadkan untuk memilih kerjaya dalam satu-satu bidang sahaja.

Dengan kemahiran dan pengetahuan yang mereka miliki, graduan STEM boleh mengaplikasikannya dalam apa jua bidang termasuk dunia seni dan kreatif mahupun menjadi usahawan, seterusnya mencipta peluang pekerjaan sendiri.

NUR ZAFIRAH ZAPRI
Universiti Malaya

LAMPIRAN 14
UTUSAN MALAYSIA (UTUSAN KOTA): MUKA SURAT 27
TARIKH: 17 OGOS 2018 (JUMAAT)



DR. ISMADI MD. BADARUDIN (depan, tengah) bersama **Jasmi Abu Samah** (depan, tiga dari kiri), **Prof. Madya Dr. Mohd. Rasdi Zaini** (depan, tiga dari kanan) bersama peserta program Karnival STEM 2018 di Auditorium UiTM, Kampus Jasin, Melaka, baru-baru ini.

Ilmu STEM tepati gaya hidup abad ke-21

JASIN 16 Ogos - Pelajar perlu ber-sungguh-sungguh dalam menimba ilmu pendidikan Sains, Teknologi, Kejuruteraan dan Matematik (STEM) bagi memenuhi keperluan abad ke-21.

Timbalan Rektor Hal Ehwal Akademik (HEA) Universiti Teknologi Mara (UiTM) Melaka, Prof. Madya Dr. Ismadi Md. Badarudin berkata, selain penguasaan dalam bidang itu, para pelajar juga diharap dapat mengaplikasikan ilmu pengetahuan itu tanpa mengabaikan nilai-nilai yang diterapkan oleh agama.

"Negara memerlukan tenaga kerja yang berkemahiran STEM bagi memacu ekonomi berasaskan inovasi. Justeru peranan sekolah dan universiti penting dalam melahirkan modal insan

berorientasikan STEM.

"Gerakan STEM Kebangsaan sentiasa memberi sokongan serta dorongan agar pendidikan STEM di negara ini diperkasa demi mencapai agenda kerajaan iaitu Dasar 60 (Sains dan Teknologi):40 (Sains Sosial)," katanya.

Beliau berkata demikian ketika berucap menutup program Karnival STEM peringkat negeri Melaka 2018 di Auditorium UiTM Kampus Jasin di sini, baru-baru ini.

Yang turut hadir, Ketua Sektor Pembangunan Kemanusiaan Jabatan Pendidikan negeri, Jasmi Abu Samah dan Penolong Rektor UiTM Cawangan Melaka Kampus Jasin, Prof. Madya Dr. Mohd. Rasdi Zaini.

Sementara itu, Jasmi memberitahu, kepentingan bidang ilmu

STEM tidak dapat disangkal lagi terutamanya dalam mengharungi perkembangan teknologi kehidupan pada abad ke-21.

"Bagi mencapai objektif untuk mempromosikan Dasar Pendidikan STEM Negara, kita sebenarnya sedang menyiapkan generasi muda pada hari ini untuk berdepan dengan Revolusi Industri 4.0 yang memerlukan kepakaran dalam bidang STEM.

"Adalah menjadi tanggungjawab bagi semua lapisan pendidik bermula daripada prasekolah sehingga ke peringkat universiti untuk menanam minat murid-murid menceburi bidang STEM dan menukar stigma bahawa mata pelajaran yang berteraskan STEM sebagai 'mimpi ngeri' bagi pelajar," ujarnya.

LAMPIRAN 15
THE STAR (NATION): MUKA SURAT 20
TARIKH: 17 OGOS 2018 (JUMAAT)

Ban on single use plastic also applies to religious items

THE ban on single use plastic in Selangor also applies to religious items such as garlands used in Hindu ceremonies, said state executive councillor V. Ganapathi Rao.

Ganapathi said he stood by the state's decision to ban plastic and urged the garland makers to follow the rules.

Traditionally, the garlands were prepared using natural fibres and not plastic strings or ropes.

Many garland makers now use natural fibres without any issue, so there would be no excuse for the few who refused to comply and they would not get his support, said Ganapathi.

Garlands are also burned during certain ceremonies and those tied with plastic strings can release unhealthy gases which can cause health problems such as breathing difficulties.

> Wildlife authorities in Tamil Nadu, India have removed 110 monkeys and 120 snakes from urban areas in just one week, *Makkal Osai* reported. Authorities started the campaign following numerous complaints in three densely populated districts –Chennai, Kanchipuram and Tiruvallur.

Incidences of wild animals entering populated South Indian areas have been attributed to loss of natural habitat due to human activities.

LAMPIRAN 16
BERITA HARIAN (BISNES): MUKA SURAT 59
TARIKH: 17 OGOS 2018 (JUMAAT)

PKS perlu sedia hadapi Industri 4.0

➔ Usahawan
kena bergerak
seiring
perubahan
pesat teknologi

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zahrin@nstp.com.my

Perusahaan kecil dan sederhana (PKS) tempatan perlu melengkapkan diri dengan pengetahuan menyeluruh mengenai Industri 4.0, kata Timbalan Menteri Pembangunan Usahawan, Dr Mohd Hatta Ramli.

Beliau berkata, PKS dilihat masih ketinggalan untuk berhadapan dengan perubahan pesat yang dipacu inovasi teknologi khususnya bagi mencapai standard Industri 4.0 dan perlu mengejar beberapa negara seperti China yang sudah ke hadapan dalam penggunaan automasi serta teknologi maju.

"Kementerian sentiasa bersedia dan menyokong PKS dalam penggunaan teknologi maju untuk perniagaan mereka.

"Kita juga mempunyai inovasi serta penyelidikan dan pembangunan yang hebat dan boleh digunakan untuk menghadapi Industri 4.0," katanya selepas melancarkan pameran Smart Manufacturing



[FOTO MOHD YUSNI ARIFFIN/BH]

Mohd Hatta (empat dari kiri) melawat gerai selepas melancarkan pameran Smart Manufacturing 2018 (SMEX 2018) anjuran Kementerian Perdagangan China di Kuala Lumpur, semalam.

2018 (SMEX 2018) anjuran Kementerian Perdagangan China di Kuala Lumpur, semalam.

SMEX 2018 menghimpunkan 100 syarikat dari China dan 44 syarikat dari Malaysia yang terabit dalam enam sektor seperti tenaga, jentera, industri automasi, komponen dan logistik.

Jalin kerjasama

Pameran empat hari bermula kelmarin hingga Ahad ini menyasarkan menarik minat usahawan tempatan menjalankan kerjasama

dengan syarikat dari China.

Mohd Hatta berkata, hubungan dua hala antara Malaysia dan China telah berkembang pesat dan China menjadi rakan perdagangan terbesar Malaysia selama lapan tahun berturut-turut, dengan jumlah perdagangan dua hala hampir AS\$100 billion.

Katanya, kerjasama dua hala itu mengukuhkan lagi sektor ekonomi dan perdagangan, pembinaan infrastruktur, tenaga, pembuatan, komunikasi, ekonomi digital dan kewangan.



Kementerian sentiasa bersedia dan menyokong PKS dalam penggunaan teknologi maju untuk perniagaan mereka"

Dr Mohd Hatta Ramli,
Timbalan Menteri Pembangunan Usahawan

"Perdagangan antara Malaysia dan China tidak dapat berkembang tanpa kerjasama antara usahawan kedua-dua negara. Malah, lokasi Malaysia di tengah ASEAN meletakkannya sebagai lokasi strategik sebagai hab perdagangan China dengan negara jiran.

"Ta boleh dijadikan platform penggalak dan membuka jalan kerjasama perniagaan. Kementerian sangat berbesar hati jika PKS tempatan dapat mengambil peluang sebegini dan usahawan China menjalankan pelaburan di sini," katanya.

Timbalan Ketua Pengarah Biro Pembangunan Perdagangan Kementerian Perdagangan China, He Peng pula berkata China adalah destinasi eksport kedua terbesar Malaysia dan sumber terbesar importnya.

Katanya, setakat April lalu, jumlah perdagangan antara Malaysia dan China meningkat 18.1 peratus kepada AS\$24.34 bilion.

Eksport Malaysia ke China pula katanya melonjak 20.1 peratus kepada AS\$10.64 bilion manakala import Malaysia dari China juga naik 16.6 peratus kepada AS\$13.7 bilion.

"Kami berharap dapat meneruskan dan meningkatkan lagi jumlah perdagangan antara kedua negara. Pameran SMEX 2018 juga salah satu platform hubungan kerjasama dan perdagangan yang lebih baik di kalangan usahawan," katanya.

LAMPIRAN 17 BERITA HARIAN (SEMINAR UPM): MUKA SURAT 20 TARIKH: 17 OGOS 2018 (JUMAAT)



Penutur bahasa Melayu di Asia Tenggara perlu memastikan kedudukan bahasa itu menjadi lebih penting sejajar dengan usaha menjadikannya

relevan sebagai bahasa wacana RI4"

Arndt Graf,
Ketua Pengajian Asia Tenggara, Universiti Goethe, Frankfurt



Bahasa Melayu perlu dijadikan sebagai bahasa pengantar kepada pembangunan sains dan teknologi dalam

tamadun di alam Melayu"

Mohd Yusof Othman,
Pengerah Institut Islam Hadhari, UKM

Bahasa Melayu relevan RI4

➔ Masyarakat penutur perlu mantap sahsiah, peribadi, jati diri seiring kemajuan sains dan teknologi

Oleh Hafizah Iszahanid
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■ Serdang

Bahasa Melayu tidak akan terancam dengan kemaraan era Revolusi Industri Keempat (RI4) selagi penuturnya terus mendaulatkan dan berusaha melestarikan serta memperkayakannya.

Ketua Pengajian Asia Tenggara, Universiti Goethe, Frankfurt, Prof Dr Arndt Graf, berkata beliau optimis bahasa Melayu akan kekal relevan dan menjadi

lebih penting dalam era RI4.

Graf berkata, sejak pertengahan 2010, istilah RI4 semakin tersebar di negara ini hingga menimbulkan kebimbangan terhadap kedudukan bahasa Melayu sebagai bahasa ilmu.

Bahasa wacana

"Kebimbangan ini bukan hanya terjadi di negara ini, sebaliknya ia juga diperkatakan di Indonesia dan Thailand hingga menimbulkan pertanyaan adakah semestinya bahasa wacana mengenai RI4 dikendalikan dalam bahasa Inggeris.

"Bagaimana pula dengan kedudukan bahasa bukan Inggeris, adakah ia akan terus wujud," katanya ketika menyampaikan Ucapan Semata Semata Seminar Mendaulatkan Bahasa Melayu: Bahasa Melayu Meniti Era Revolusi Industri Keempat di Universiti Putra Malaysia (UPM) di sini, semalam.

Yang turut hadir, Naib Canselor UPM, Prof Datin Paduka Dr Aini Ideris dan Pengerah Institut Islam Hadhari, Universiti Kebangsaan Malaysia (UKM), Prof Datuk Dr Mohd Yusof Othman.

Graf berkata, apa yang dihebahkan di media mengenai penggunaan bahasa Inggeris sebagai bahasa wacana, RI4 hanya dibuat untuk tujuan pemasaran antarabangsa.

"Apa yang sebenarnya berlaku adalah wacana RI4 di Eropah dibangunkan sepenuhnya dalam bahasa bukan Inggeris, iaitu bahasa Jerman, Sepanyol dan Itali.

Perkaya istilah sains dan teknologi

"Penutur bahasa Melayu di Asia Tenggara, khususnya Malaysia, Indonesia dan Brunei Darussalam perlu memastikan kedudukan bahasa itu menjadi lebih penting sejajar dengan usaha menjadikannya relevan sebagai bahasa wacana RI4," katanya.

Beliau berkata, hal itu boleh dicapai dengan memperkaya istilah sains dan teknologi, menambah khazanah ilmu berbahasa Melayu melalui penerbitan makalah jurnal serta buku yang sesuai dengan era industri, selain mengajar semua mata pelajaran di maktab, kolej dan universiti dalam bahasa Melayu.

"Pendeknya bahasa Melayu wajib dijadikan bahasa wacana untuk RI4 di negara ini," katanya.

Untuk rekod, RI4 atau revolusi perindustrian keempat secara umumnya membabitkan Internet of Things (IoT) dalam setiap aspek kehidupan harian.

Ia dinamakan RI4 berdasarkan revolusi pertama yang membabitkan penggunaan mesin berkuasa wap, revolusi elektrik dan teknologi maklumat.

Sementara itu, Mohd Yusof berkata, kepentingan memartabatkan bahasa Melayu bukan hanya untuk mendepani RI4, bahkan untuk memastikan sahsiah, keperibadian, jati diri dan nilai masyarakat penuturnya dimantapkan seiring dengan kemajuan sains dan teknologi.

"Pembangunan sains dan teknologi dalam peradaban Barat bersifat sekular serta terpisah daripada sistem nilai budaya dan agama.

"Justeru, bahasa Melayu perlu dijadikan bahasa pengantar kepada pembangunan sains dan teknologi dalam tamadun di alam Melayu," katanya.

'Mampu jadi bahasa pengantar sains, teknologi'

Serdang: Pandangan yang tidak meyakini bahasa Melayu sebagai bahasa ilmu dan pengantar sains serta teknologi tidak berasas kerana banyak buku mengenai bidang berkenaan diterbitkan dalam bahasa berkenaan sejak 1980-an.

Pensyarah Jabatan Kimia dan Kejuruteraan Proses, Universiti Kebangsaan Malaysia (UKM), Prof Datuk Dr Ir Wan Ramli Wan Daud, berkata kebanyakan universiti awam (UA) juga menggunakan bahasa Melayu sebagai bahasa pengantar.

"Bagaimanapun, usaha memartabatkan bahasa Melayu yang dibuat sejak merdeka terutama dalam bidang pendidikan, tiba-tiba dihentikan dan digantikan dengan bahasa Inggeris tanpa berpandukan sebarang kajian," katanya.

Beliau berkata demikian dalam forum sempena Seminar Mendaulatkan Bahasa Melayu: Bahasa Melayu Meniti Era Revolusi Industri Keempat di Universiti Putra Malaysia (UPM) di sini, semalam.

Forum dikendalikan Ketua Pegawai Eksekutif Perbadanan Kota

Buku, Sayed Munawar Sayed Mustar itu, disertai bekas Naib Canselor Universiti Malaysia, Datuk Prof Emeritus Dr Hashim Yaacob dan Ketua Pengerah Institut Kefahaman Islam Malaysia (IKIM), Datuk Prof Dr Azizah Baharuddin.

PPSMI diperkenalkan

Wan Ramli berkata, keadaan itu lebih mencabar apabila dasar Pembelajaran dan Pengajaran Sains dan Matematik dalam bahasa Inggeris (PPSMI) diperkenalkan pada 2003.

"Bagaimanapun kajian yang dibuat Universiti Pendidikan Sultan Idris (UPSI) pada 2008 dan kajian antarabangsa seperti *Trends in International Mathematics and Science Study (TIMSS)* pada 2007 menjelaskan kemerosotan peratus penguasaan subjek Sains dan Matematik selepas PPSMI dilaksanakan," katanya.

Beliau berkata, kajian itu tidak diterima sepenuhnya, sebaliknya Program Dwibahasa (DLP) pula diperkenalkan.

"Kita negara merdeka yang se-

patutnya menggunakan bahasa sendiri," katanya.

Sementara itu, Hashim berkata, bahasa Melayu kekal relevan dan penting, justeru, usaha untuk meningkatkan martabatnya perlu dibuat dengan menambah penerbitan sains dan teknologi dalam bahasa Melayu.

Majlis perasmian penutup seminar anjuran Kementerian Pendidikan dengan kerjasama UPM dan Dewan Bahasa dan Pustaka (DBP), disempurnakan Timbalan Menteri Pendidikan, Teo Nie Ching.

LAMPIRAN 18
THE SUN (NEW'S WITHOUT BORDERS): MUKA SURAT 4
TARIKH: 17 OGOS 2018 (JUMAAT)

Call for 'forceful' approach to address haze issue

BY **EDMUND LEE**
newsdesk@thesundaily.my

GEORGE TOWN: An environmental activist has called on the government to take a "forceful" approach in tackling the recurring haze situation.

The Malaysian Nature Society's (MNS) Penang branch adviser Kanda Kumar told *theSun* that Putrajaya needs to tackle this serious air pollution issue which

affects the country yearly.

He said if the haze was caused by open burning in Kalimantan, Indonesia, then the minister in charge of the environmental portfolio should immediately discuss the matter with their counterpart and to ultimately ensure that the perpetrators involved are brought to book.

He was commenting on the haze in Penang which has reached an unhealthy level as the Air Pollutant

Index (API) on the mainland has exceeded 100 as of noon yesterday.

According to the API index on the Department of Environment's (DOE) website, Seberang Jaya has recorded a reading of 123 with Bukit Tengah at 108.

On the island, it is close to the unhealthy level with a reading of 98, which is considered moderate.

An API reading of between 0 and 50 is considered good, 51 to 100 is moderate, 101 to 200 is unhealthy,

201 to 300 is very unhealthy; and 301 and above is hazardous.

Meanwhile, four locations recorded an unhealthy reading on the Air Pollutant Index (API) as of 6pm yesterday, while 20 other areas recorded moderate readings.

The two worst hit areas were Mukah in Sarawak and Alor Star, with API readings of 134 and 145 respectively.

This was followed by two more locations which recorded an

unhealthy API which were Kangar (137) and Klang (110).

Locations in Klang Valley and other states except for generally recorded moderate API readings.

This was followed by Bukit Rambai, Malacca (60), Bandaraya Melaka (71), Shah Alam (74) and Petaling Jaya (71) and Nilai, Negri Sembilan (80).

All the readings were taken at 6pm from the Environment Department's website.

LAMPIRAN 19
NEW STRAITS TIMES (BUSINESS): MUKA SURAT B7
TARIKH: 17 OGOS 2018 (JUMAAT)

BCG REPORT

'Blockchain the most overhyped technology'

LONDON: Commodity firms and banks have been diving into blockchain pilot schemes over the last two years but the new technology's application for most trading has likely been overhyped, according to a report by Boston Consulting Group (BCG).

Blockchain is viewed by some as a solution to inefficiencies, improving transparency and reducing to the risk of fraud. But BCG believes its potential has been exaggerated.

A high-tech ledger, blockchain uses a shared database that updates in real-time and can process and settle transactions in

minutes without the need for third-party verification.

"There are so many pilot schemes but none have become real production scale systems yet. One of the problems is that it's not designed for physical trades. The fundamental issue: how do you track a physical entity in a virtual world? It's two worlds colliding," said BCG report co-author Antti Belt.

Among the obstacles to scaling up the technology include reconciling terminologies and whether the switch to a blockchain platform is financially justifiable.

"The industry is very old and

everyone uses a different language. How do you define quality, shipment schedules ... a lot of reconciliation is currently needed for both sides," said Belt.

Furthermore, it is uncertain to what degree traders will want to adopt a technology that will erode already razor-thin profit margins.

BCG said that as the platforms take shape, it would be "bad news" for merchant traders as the price inefficiencies and unequal dissemination of information that they rely on to make profits would disappear.

"The use of blockchain solu-

tions would improve transparency... It would also create a more efficient and liquid market, moving commodity trading away from bilateral deals struck between two parties to transactions on electronic platforms matching buyers and sellers."

Co-author Steven Kok said interest in the wider adoption of blockchain technology would start where the primary driver is certifying the source of the asset rather than efficiency.

"Simply put, blockchain may not be the right answer for all players," the report concluded.

Reuters

LAMPIRAN 20
THE STAR (WORLD): MUKA SURAT 29
TARIKH: 17 OGOS 2018 (JUMAAT)

Putting more eyes in the sky

Satellites to conduct surveillance over South China Sea

BEIJING: The southernmost island province of Hainan is preparing a satellite network that is expected to enable China to conduct effective and efficient surveillance over the South China Sea.

Design work for the Hainan Earth-Observation Satellite Constellation, a project headed by the Sanya Institute of Remote Sensing in Hainan and sponsored by the provincial government, has begun at the institute and by its contractors.

The first in the constellation, a Hainan 1 optical satellite, is scheduled to be launched in the second half of 2019, according to a statement from the institute.

The statement said the constellation will have 10 satellites that will be launched in four stages by the end of 2021.

First, three Hainan 1 optical satellites are scheduled to enter orbit in 2019. The following year, three Hainan 1 satellites and two Sanya 1 multispectral remote-sensing satellites will be launched. In 2021, two Sansha 1 synthetic aperture radar satellites are expected to be sent into space.

At a meeting in Sanya on Tuesday, Chinese space experts reviewed and approved technical plans for the first four Hainan 1 satellites.



Liftoff: A Long March-4C rocket taking off from the Xichang launch centre carrying the Queqiao ('Magpie Bridge') satellite. — AFP

According to the institute, each Hainan 1 will weigh 50kg, and will operate in a low-Earth orbit 500 km above Earth and move at 7.9km per second.

Yang Tianliang, director of the institute and chief designer of the constellation, said in a phone interview that Hainan 1 satellites will carry cameras and identification technology.

"The combination of cameras and automatic identification systems will allow us not only to monitor ships lawfully sailing in the South China Sea, but also to detect and track illegally operating ones," Yang said.

Automatic identification systems can receive and process signals concerning positioning data, courses of vessels as well as speed readings

sent by a moving ship. The technology is often mounted on ships and satellites and assists vessel operators in understanding maritime traffic situations while also helping maritime authorities to track and monitor vessel movements.

Yang said Hainan administers hundreds of islands and reefs in the South China Sea, so it requires the assistance of a space-based platform to monitor these territories and surrounding waters.

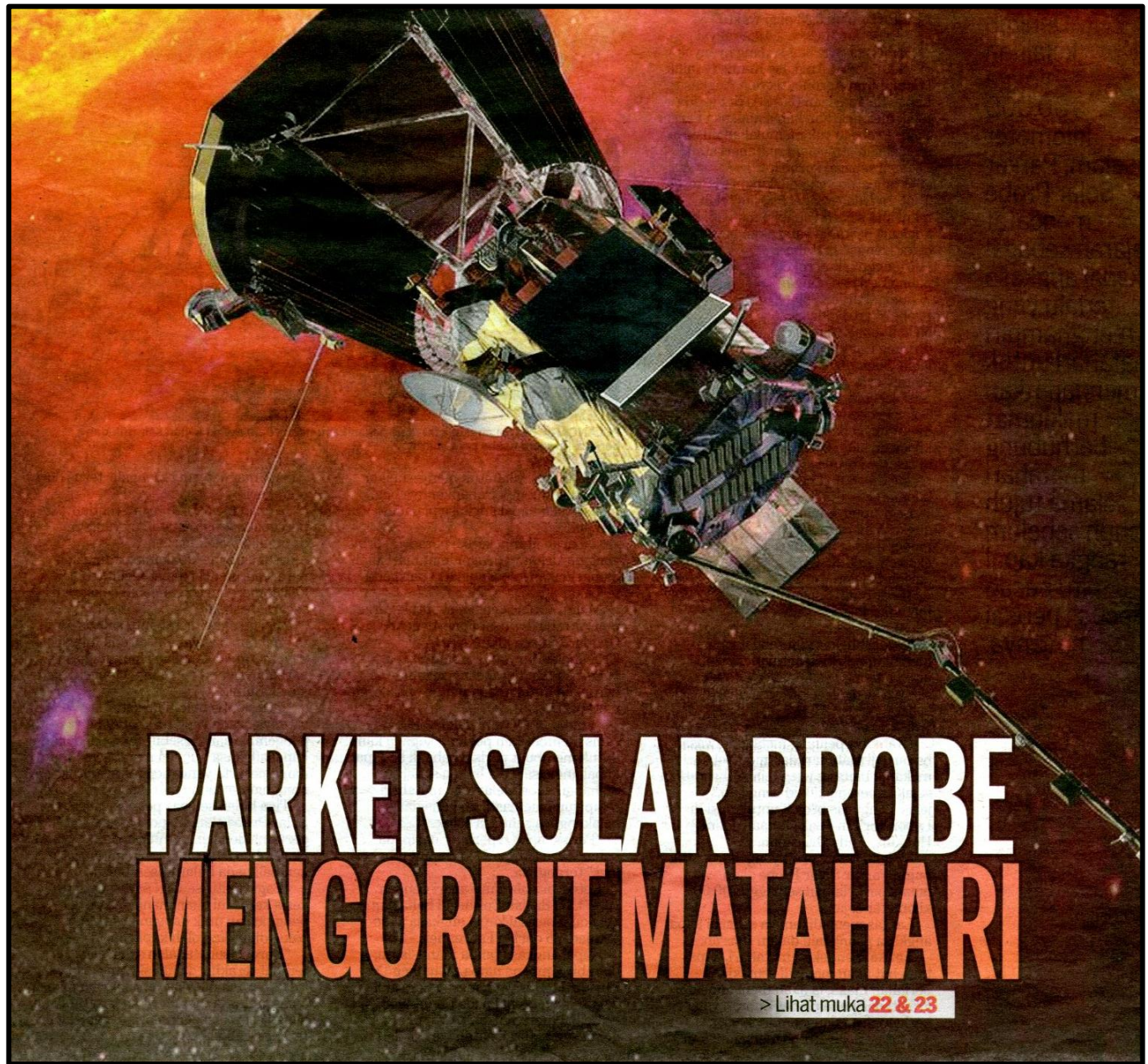
He also noted that once the satellite network becomes fully operational by 2021, it will be able to cover the entire South China Sea and will be very helpful in a wide range of sectors, such as marine transportation, fisheries, island management and maritime search and rescue.

Gao Enyu, a manager from Hainan MinoSpace Technology Co., was quoted by China News Service as saying on Tuesday that researchers optimized Hainan 1's cameras to make them suitable for monitoring large expanses of waters.

He added that the satellite is capable of detecting and identifying all midsize and large vessels.

Gao's company is in charge of the research and development of some of Hainan 1's equipment. — China Daily/Asia News Network

LAMPIRAN 21
KOSMO (RENCANA UTAMA): MUKA SURAT 21
TARIKH: 17 OGOS 2018 (JUMAAT)



LAMPIRAN 21 (SAMBUNGAN)
KOSMO (RENCANA UTAMA): MUKA SURAT 22
TARIKH: 17 OGOS 2018 (JUMAAT)

RENCANA
UTAMA

KAPAL angkasa seberat 635 kilogram
ini akan bergerak dengan kelajuan
700,000 kilometer sejam.

Misi mencari jawapan punca matahari panas

Dengan
kelajuan
sehingga
700,000
kilometer
sejam, Parker
Solar Probe
mencatat
sejarah sebagai
kapal angkasa
terlaju yang
menghampiri
matahari untuk
mendapatkan
maklumat
berhubung
matahari
selama tujuh
tahun sebelum
rangka kapal
itu pecah
kecuali perisai
habanya.

TEPAT pukul 3.33 pagi waktu
tempatan, 11 Ogos ketika rakyat
Amerika Syarikat sedang nyenyak
tidur, Pusat Angkasa Kennedy milik
Pentadbiran Aeronautik dan Angkasa
Lepas Kebangsaan (NASA) di Florida
telah melancarkan kapal angkasa Parker
Solar Probe untuk memulakan misinya
menjelajah atmosfera matahari atau
dikenali sebagai korona.

Pelancaran yang dilakukan di Stesen
Tentera Udara Cape, Florida telah
mencipta sejarah apabila menjadi kapal
angkasa pertama yang akan berada
dekat dengan matahari.

Menggunakan roket
paling berkuasa tinggi
di dunia, Parker Solar
Probe akan dilancarkan
55 kali tenaga dan
terbang tujuh kali
lebih dekat dengan
matahari berbanding
misi sebelum ini, Parker
Solar Probe yang
mempunyai berat 635
kilogram akan berlegar
di sekitar korona
pada jarak 6.16 juta
kilometer.

Begitupun, kapal
angkasa ini terpaksa
menempuh suhu panas
ekstrem sekitar 1,370
darjah Celsius.

Jarak Bumi dengan
matahari ialah 95 juta
kilometer.

"Kapal angkasa ini sangat ringan
memandangkan ia perlu mengambil
jumlah tenaga yang banyak untuk
sampai ke orbit sekitar matahari.

Graviti Zuhrah

"Kami berpeluang melihat kawasan
baharu di matahari dan mempelajari
mekanik bintang yang telah dihasratkan
sejak beberapa dekad yang lalu,"
jelas pengurus projek untuk misi di
Laboratorium Fizik Gunaan Johns
Hopkins, Andy Driesman.

Melalui ruang orbit yang berbentuk
bujur, Parker Solar Probe akan
mencapai kelajuan sehingga 700,000
kilometer sejam.

Lantas menjadikannya sebagai kapal
angkasa paling laju dalam sejarah.

Ketika mendekati matahari, kapal
tersebut akan menjadi semakin
perlahan maka, ia akan menggunakan
graviti daripada planet Zuhrah yang
berhampiran dengan matahari.

Parker Solar Probe menggunakan



PARKER



SZABO



PELANCARAN kapal angkasa ini merupakan kemuncak enam dekad kajian saintifik dan
berjuta-juta jam usaha para saintis.

graviti di Zuhrah untuk menyesuaikan
lajuan dan memperlahkannya bagi
meletakkan kapal angkasa pada lintasan
terbaik.

Cabaran utama ketika berada di orbit
yang berdekatan dengan matahari ialah
mengekal kapal angkasa daripada
terbakar.

Menurut ahli sains misi untuk Parker
Solar Probe di Pusat Penerbangan
Goddard Space Flight NASA di
Greenbelt, Maryland, Adam Szabo,
NASA sudah merancang selama
berdekad untuk menghantar misi ke
matahari.

"Kemajuan terkini dalam bidang
sains memberikan peluang kepada kami
untuk membuat perisai haba di hadapan
kapal angkasa yang bukan sahaja
menahan haba melampau matahari
tetapi juga memastikan bahagian
belakangnya sentiasa sejuk.

"Perisai haba diperbuat daripada

bahan busa komposit karbon setebal 4.5
inci," terangnya.

Ketika simulasi matahari dengan
suhu 1,371 darjah Celsius di bahagian
belakang perisai kapal angkasa akan
menjadi 85 darjah Fahrenheit.

Kapal angkasa tanpa manusia itu,
diambil sempena nama mendiang Dr.
Eugene Parker yang merupakan ahli
fizik solar terkenal pada tahun 1958.

Beliau meramalkan kewujudan

angin suria, aliran zarah bercas dan

medan magnet yang mengalir terus dari
matahari.

Ia akan melakukan pemerhatian
percepatan angin matahari yang
diramalkan oleh Parker.

Usaha ini merupakan pertama kali
para saintis suria dapat melihat objek
kajian mereka dengan lebih dekat dan
secara peribadi.

Misi ini akan membantu saintis untuk
memahami bagaimana korona fungsi
bagi meramal kejadian ribut angkasa
berbahaya yang boleh mengganggu grid
kuasa Bumi.

Para saintis bukanlah satu-
satunya orang yang terlibat dalam
pengembangan tersebut tetapi di dalam
kapal angkasa itu juga membawa 1.1 juta
nama peserta yang mendaftar untuk
menghantar nama mereka ke matahari.

Tiga bulan selepas pelancaran, Parker
Solar Probe akan mencapai kedekatan
pertama dengan matahari pada
November 2018 dan menghantar data
kembali pada bulan Disember.

"Bagi saintis seperti saya, ganjaran
kerja keras ini akan menjadi satu set
pengukuran unik dengan hasil yang
bakal diberikan oleh kapal ini.

"Korona solar adalah salah satu
tempat terakhir dalam sistem suria yang
tidak pernah dilawati oleh kapal angkasa
lepas lantas ia memberikan keseronokan
kepada saya sebagai seorang penjelajah,"
terang Szabo.

LAMPIRAN 21 (SAMBUNGAN)

KOSMO (RENCANA UTAMA): MUKA SURAT 23

TARIKH: 17 OGOS 2018 (JUMAAT)

Projek Parker Solar Probe menelan kos AS\$1.5 bilion (RM6.1 bilion) dan menggunakan tiga tahap roket ketika pelancaran yang akan membawanya ke planet Zuhrah dalam masa enam minggu dan bakal tiba pada bulan September ini.

Pada 1 November 2018 Parker Solar Probe akan mengorbit matahari buat pertama kali untuk melintasi korona sebanyak 24 kali.

Tujuh tahun

Para saintis berharap, misi ini dapat membantu mereka menguraikan bagaimana korona menjadi panas dan bagaimana matahari menghasilkan fenomena seperti angin matahari dan suar suria yang mempunyai kesan yang serius terhadap perjalanan angkasa, satelit dan juga kehidupan di Bumi.



ZURBUCHEN

Ketika Parker Solar Probe mengumpul data, kapal angkasa tidak dapat berkomunikasi dengan Bumi.

Sebaliknya, ia akan memberi tumpuan kepada sebanyak mungkin pemerhatian

kemudian kapal tersebut akan menghantar kembali maklumat besar secara berkumpulan.

Misi Parker Solar Probe yang mengambil masa selama tujuh tahun akan berakhir pada tahun 2025.

Lambat laun, bahan api kapal angkasa lepas itu akan habis dan ia tidak lagi berdaya untuk bertahan.

Secara perlahan-lahan rangka kapal itu akan pecah sehingga tiada apa yang tersisa kecuali perisai haba.

"Mudah-mudahan ia akan bertahan dalam tempoh masa yang panjang iaitu antara satu hingga dua dekad akan datang," tutur Driesman.

Sementara itu, **Pentadbir Bersekutu Direktorat Misi Sains NASA, Thomas Zurbuchen** berkata, misi tersebut benar-benar menandakan lawatan pertama manusia ke bintang yang mempunyai implikasi bukan sahaja kepada Bumi tetapi seluruh alam semesta.

"Pelancaran kapal angkasa ini merupakan kemuncak enam dekad kajian saintifik dan berjuta-juta jam usaha," katanya.

Penjelajahan Ke Matahari

Misi baharu NASA menjalankan kajian di matahari telah dilancarkan pada Ogos 2018

Parker Solar Probe kapal angkasa tanpa pemandu

Misi

- ▶ Pertama kali terbang ke atmosfera yang dipanggil sebagai korona
- ▶ Menjelajahi aliran tenaga dan memahami pemanasan di korona, meneroka pecutan angin solar serta merakam imej struktur solar

Sistem perlindungan

- Dilengkapi dengan pelindung komposit karbon sekecil 11.5 sentimeter
- Boleh bertahan dengan suhu 1,400 darjah Celsius di sekitar permukaan matahari
- Membenarkan kapal ini beroperasi pada suhu bilik

Sistem penyejukan

- Melindungi sayap daripada kesan pembakaran ketika kapal angkasa bergerak mengelilingi matahari

Pelancaran: 11 Ogos dari Pusat Angkasa Lepas Kennedy, Florida, Amerika Syarikat

Berada di permukaan matahari selama tujuh tahun

Dilancarkan pada Ogos 2018

Matahari

Merkuri

Zuhrah

Bumi

Dekat dengan matahari (6.3 juta kilometer) Disember 2024

Sumber: NASA

Terbang buat pertama kali mendekati matahari pada November 2018

Magnetometer

Antena

Sayap pelbagai suria menyimpan paras kuasa panel dari pada suhu turun naik

Kelajuan: 700,000 kilometer sejam

Penjang: Tiga meter

Berisi: 625 kilogram

Teleskop untuk merakam gambar di sekitar korona dan dalam heliosfera

Korona matahari yang tidak stabil akan menghasilkan:

- Ribut solar
- Suar
- Letupan medan magnet dan plasma

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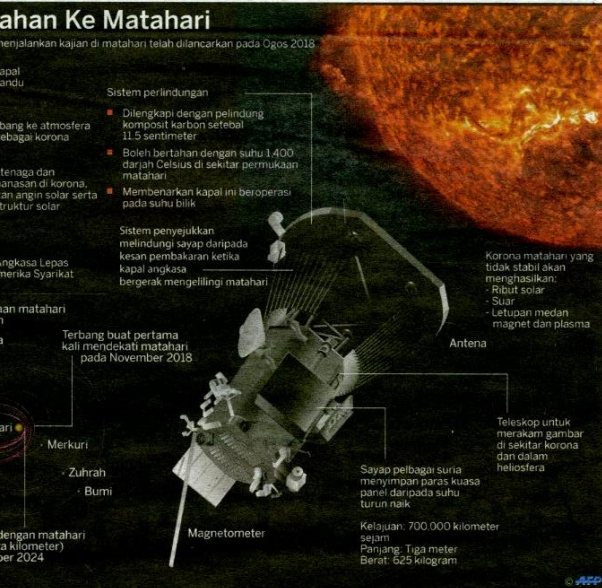
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PARKER Solar Probe akan menggunakan graviti planet Zuhrah untuk berada dekat dengan matahari.

PADA 11 Ogos lalu Parker Solar Probe telah dilancarkan ke angkasa lepas.

INFO

Parker Solar Probe

- Dilancarkan ke angkasa pada 11 Ogos 2018
- Mempunyai berat 635 kilogram
- Kelajuan 700,000 kilometer sejam
- Nama diambil sempena mendiang Dr. Eugene Parker yang merupakan ahli fizik solar terkenal pada tahun 1958
- Menjalankan misi tujuh tahun di permukaan matahari.



LAMPIRAN 22

THE SUN (NEWS WITHOUT BORDERS): MUKA SURAT 17
TARIKH: 17 OGOS 2018 (JUMAAT)



LAMPIRAN 23
THE STAR (WORLD): MUKA SURAT 28
TARIKH: 17 OGOS 2018 (JUMAAT)

Canada province declares wildfire emergency

OTTAWA: British Columbia declared a province-wide state of emergency as Canada's military joined firefighters in trying to douse 556 wildfires burning across the craggy region.

The province's public safety minister Mike Farnworth said on Wednesday that the measure – which allows for officials to take “every action necessary” to protect the public – would be in effect for 14 days.

It is only the second time in more than a decade that it has been used, after a record fire season last year that blackened vast tracts of forest and prompted record numbers of residents to evacuate.

“Public safety is always our first priority and, as wildfire activity is expected to increase, this is a progressive step in our wildfire response to make sure British Columbia has access to any and all resources necessary,” Farnworth said in a statement.

As of Tuesday, there were 566 wildfires burning in British Columbia, and 77 evacuation orders or alerts affecting nearly 22,000 people and 11,000 properties.

Cities from Vancouver on the Pacific coast to Winnipeg in the Prairies region about 2,300km to the east were blanketed with smoke from the fires.

Nearly 3,400 firefighters, including from Australia, Mexico and New Zealand, are battling the flames.



Pallid sky: The St'atlat'en First Nation in Fraser Lake, British Columbia, shrouded in an orange haze as smoke continues to drift over from the wildfires. — Reuters

On Monday, the British Columbia government formally requested help from the federal government, which responded by sending 200 troops as well as military aircraft to help contain and “mop up” the wildfires.

“We are challenged with the number of fires in the province,” British Columbia Forests Minister Doug Donaldson told public broadcaster CBC.

“It's across the entire province unlike last year, where it was con-

centrated,” he explained.

Across Canada, hot and dry weather has fuelled a number of wildfires.

Last month, an indigenous man died while helping to suppress forest fires in Ontario province. — AFP