

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

Bil	Berita	Media	Capaian Berita Penuh
<b>13 OGOS 2018 (ISNIN)</b>			
1.	<p><a href="#"><u>Natural gas and renewable energy to fuel a sustainable future</u></a></p> <p>Natural gas and renewable energy could potentially fuel a sustainable future in the power and energy industry, the Malaysian Gas Association (MGA) and Shell Malaysia said. Exploring potential strategies to help the nation achieve its COP21 commitments, the MGA and Shell Malaysia recently co-hosted an industry talk on Shell's 'Sky Scenario: Meeting the Goals of the Paris Agreement', in the presence of Minister of Energy, Science, Technology, Environment and Climate Change Yeo Bee Yin, with close to 100 industry leaders.</p>	The Borneo Post	Klik pada tajuk berita
2.	<p><a href="#"><u>Big step with small satellites</u></a></p> <p>"I felt very nervous watching the deployment. "Anything can happen at that moment," he said. "We have been working on this project for over a year. "I hope this will propel the Education Ministry and Ministry of Energy, Science, Technology, Environment and Climate Change to support similar projects," he said, adding that more universities should collaborate on such initiatives.</p>	The Star	Rujuk lampiran 1 atau klik pada tajuk berita
3.	<p><a href="#"><u>Usaha sama GreenTech, TNBES</u></a></p> <p>Malaysian Green Technology Corporation (GreenTech Malaysia) menjangkakan penubuhan syarikat tujuan khas (SPV), Tenaga E-Mobility Solutions Sdn. Bhd. (Temos) akan dapat menyediakan perkhidmatan bersepadu kepada pemilik kenderaan elektrik di negara ini pada masa akan datang. Ketua Pegawai Eksekutif Kumpulan GreenTech Malaysia, Dr. Mohd. Azman Zainul Abidin berkata, ia seterusnya akan menjadi pemacu kepada komitmen organisasi itu dalam mempromosikan</p>	KOSMO	Rujuk lampiran 2 atau klik pada tajuk berita

	<p>penggunaan kenderaan elektrik, me-ngurangkan pembebasan karbon dioksida, sekali gus memangkin pertumbuhan ekonomi hijau.</p>		
4.	<p><a href="#"><u>It's going to be hot until October</u></a></p> <p>It is scorching hot in many parts of the country and will remain so until the inter-monsoon season arrives in October. Kapit in Sarawak was the hottest spot in the country at 37°C, according to a check on the Malaysian Meteorological Department (Met-Ma-l-ay-sia) website. The next hottest locations were Kuala Krai in Kelantan; Sibu and Sri Aman (Sarawak); Temerloh (Pahang); and Mersing (Johor), which all recorded 35°C. The hottest state capitals were Ipoh (Perak), Kota Kinabalu (Sabah), Kuching (Sarawak) and Kuantan (Pahang), which were all at 34°C.</p>	The Star	Rujuk lampiran 3 atau klik pada tajuk berita
<b>12 OGOS 2018 (AHAD)</b>			
5.	<p><a href="#"><u>UPSI barakan pelajar jiwai Stem</u></a></p> <p>Arus pemodenan yang semakin pantas berkembang telah memperlihatkan minat belia negara dalam bidang Sains, Teknologi, Kejuruteraan dan Matematik (Stem) semakin berkurangan. Menurut Laporan Modal Insan dan Sains 2015 oleh Akademi Sains Malaysia, semakin sedikit pelajar negara ini cenderung memilih mengikuti bidang Stem di peringkat sekolah mahupun pengajian tinggi.</p>	Sinar Harian	Klik pada tajuk berita
6.	<p><a href="#"><u>Hijacking hardware in stealth mode</u></a></p> <p>If this crime strikes companies, it can lead to financial losses, as the malicious software slows down machines, hampers productivity and pushes up the electricity bill. The cybercriminals then pocket the cryptocurrency, after leeching off their victim's resources. What's worrying is that the cryptomining code, embedded in the victim's device, can run secretly and go undetected for a long time, says CyberSecurity Malaysia (CSM).</p>	The Star	Klik pada tajuk berita

	For this year so far, less than five cases involving organisations were reported to the CSM.		
7.	<p><b><u><a href="#">57 fraud calls and text messages as of June this year</a></u></b></p> <p>It's not unheard of, and despite numerous reports of it, fraud calls and messages are still persistent today. Because they can be so convincing, many still fall victim to such tactics. As of June this year, 57 cases of spam calls and text messages were received by CyberSecurity Malaysia (CSM). In 2017, the cases totalled to 88, with most or 76 cases being spam calls and WhatsApp messages. Twelve of them were fraudulent SMS messages. CSM chief executive officer Datuk Dr Amirudin Abdul Wahab says cybercriminals have up the ante in such cyberscams.</p>	The Star	Klik pada tajuk berita
8.	<p><b><u><a href="#">The Borneo Post receives 'Most Supportive Media Award' from CyberSecurity Malaysia</a></u></b></p> <p>The trophy and certificate were presented by CyberSecurity Malaysia Board of Directors chairman General (Rtd) Tan Sri Mohd Azumi Mohamed during a ceremony at the Marriott Hotel &amp; Spa here recently, where CyberSecurity Malaysia chief executive officer Dr Amirudin Abdul Wahab was also present. At the same event, CyberSecurity Malaysia also held a pre-launch ceremony for its Global Accredited Cybersecurity Education (ACE) Scheme. The scheme is a large-scale systematic plan of actions to certify and recognise cyber security workforce.</p>	The Borneo Post	Klik pada tajuk berita

## TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
<b>13 OGOS 2018 (ISNIN)</b>			
8.	<p><b><u>25 sekolah sertai STEM Challenge</u></b></p> <p>Seramai 100 pelajar dari 25 buah sekolah menengah di tiga negeri iaitu Johor, Melaka dan Negeri Sembilan menyertai Program Sains, Teknologi, Kejuruteraan dan Matematik (STEM) Innovation Challenge. Program kali keempat anjuran Kelab Taha Tabung Haji dan dikendalikan Berkat Minda Resources dengan kerjasama Universiti Kebangsaan Malaysia (UKM) itu diadakan di Universiti Tun Hussein Onn Malaysia (UTHM) di sini semalam.</p>	Utusan Malaysia	Klik pada tajuk berita
9.	<p><b><u>Technology stream worth a go</u></b></p> <p>Beyond information technologists, future engineers and scientists will also be required to work with autonomous machines and support the architecture of green buildings, smart learning environments, intelligent transport systems, civil infrastructure monitoring, humanoid robots and many more. As technology permeates all aspects of life, the time is ripe for educational institutions to embrace innovation in their daily processes.</p>	The Star	Klik pada tajuk berita
10.	<p><b><u>Biodiversity in decline</u></b></p> <p>The growing consensus within the global community is that we are fast heading towards an environmental catastrophe caused by two human-induced activities: climate change and the loss of biodiversity. While the former was given top billing by world leaders resulting in the much-heralded Paris Accord on Climate Change in 2015, biodiversity – the essential variety of life forms on Earth – remains a distant cousin.</p>	New Straits Times	Rujuk lampiran 4
11.	<p><b><u>Leverage technology for a leg up</u></b></p> <p>There is an unmistakable call for SMEs to embrace digital technology. In fact, industry observers say 'it is no longer about why we</p>	The Star	Rujuk lampiran 5

	should go digital but about how we use this tool'. There are endless opportunities for business to tap into by going digital and entrepreneurs are advised to exploit these benefits.		
12.	<p><b><u>Semangat luar biasa</u></b></p> <p>“Kita akan berusaha memuouk minat murid terhadap STEM di peringkat lebih awal sebagai persiapan mereka selepas melanjutkan pengajian ke peringkat lebih tinggi”, katanya. Dalam pertandingan itu, dua sekolah akan mewakili Sabah ke peringkat kebangsaan selepas muncul juara dan naib juara pertandingan.</p>	Harian Metro	Rujuk lampiran 6
13.	<p><b><u>150 firms to showcase expertise</u></b></p> <p>TNB is hosting CEPSE 2018 on behalf of the AESIEAP. Since its inception in 1976 in Hong Kong, CEPSE has grown in stature as a key international meeting point for power industry companies, utility leaders, industry professionals and experts from all over to exchange ideas and learn from one another.</p>	New Straits Times	Rujuk lampiran 7
15.	<p><b><u>Sarawak corridor attracts RM79.3bil in investments</u></b></p> <p>Sarawak corridor of Renewable Energy (SCORE), which is now into its phase two development, has attracted about RM79.3bil investments from both the private and public sectors. Score, one of the Malaysia's five economic corridors, marks its 10<sup>th</sup> anniversary this year,</p>	The Star	Rujuk lampiran 8
16.	<p><b><u>Malaysia terdedah gempa bumi</u></b></p> <p>Malaysia berdepan risiko gempa bumi memandangkan negara ini sudah diletakkan dalam Jaluran Lingkaran Api Pasifik sejak 2007. Walaupun secara umum kebanyakan gegaran di Semenanjung banyak berpunca daripada gempa bumi skala besar di Sumatera, namun risiko</p>	Harian Metro	Rujuk lampiran 9

	gempa bumi yang berpusat di negara ini berlaku tetap ada.		
17.	<p><b><u>Wantoon Weekly</u></b></p> <p>Survey ranks Tokyo as world's most innovative city, for adopting facial recognition and artificial intelligence in its service.</p>	New Straits Times	Rujuk lampiran 10
18.	<p><b><u>Meteor shower lights up skies over Bosnia</u></b></p> <p>A meteor shower lit up the skies above eastern Bosnia on Saturday night, giving star gazers a rare opportunity to see a display of shooting stars with the naked eye. "I think that everybody should see this," said Miralem Mehic, a Bosnian from an international group of star gazers who watched the light show at the Sand Pyramids - an area of naturally occurring sand columns - near the town of Foca.</p>	Reuters	Klik pada tajuk berita
<b>12 OGOS 2018 (AHAD)</b>			
19.	<p><b><u>Kisar botol jadi pasir binaan</u></b></p> <p>Usaha berterusan Reef Check iaitu organisasi tidak berkepentingan global berkolaborasi dengan Yayasan Sime Darby (YSD) memperkasakan ruang lingkup sosial dalam pembabitan kerja pemeliharaan alam sekitar, memberi gambaran mengenai masa depan lebih cerah bagi ekosistem pulau yang terkenal dengan keindahan terumbu karangnya. Penulis bersama wakil media yang kebanyakannya kali pertama menjejaskan kaki ke pulau yang turut diwartakan sebagai Taman Laut pada 1994 bawah Akta Perikanan, berasa kagum dengan keindahan pemandangannya.</p>	Harian Metro	Klik pada tajuk berita
20.	<p><b><u>UiTM puts nano satellite into orbit</u></b></p> <p>The UiTMSAT-1 satellite was launched at 5.45pm local time from the International Space Station (ISS) and a live feed of the event from the Japan Aerospace Exploration Agency (JAXA) was watched by Higher Education director-general Datin Paduka Dr Siti Hamzah Tapsir.</p>	New Straits Times	Rujuk lampiran 11

## ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
<b>13 OGOS 2018 (ISNIN)</b>			
21.	<p><a href="#"><u>NASA lancar kapal angkasa dekati matahari</u></a></p> <p>Pentadbiran Aeronautik dan Angkasa Kebangsaan (NASA) cipta sejarah baharu apabila melancarkan kapal angkasa mendekati matahari. Parker Solar Probe yang berlepas dari Cape Canaveral, Florida pada Ahad bakal menjadi objek buatan manusia paling hampir dengan matahari. Kapal angkasa ini akan berada pada jarak sekitar 6.12 juta kilometer dari matahari.</p>	Astro Awani	Klik pada tajuk berita
22.	<p><b><u>NASA launches mission to 'touch the Sun'</u></b></p> <p>NASA yesterday blasted off a US\$ 1.5 billion (RM6 billion) spacecraft towards the Sun on a historic mission to protect the Earth by unveiling the mysteries of dangerous solar storms. The Parker Solar Probe soared skywards aboard a Delta IV-Heavy rocket from Cape Canaveral, Florida at 3.31 am (3.31pm in Malaysia) yesterday.</p>	The Sun	Rujuk lampiran 12
23.	<p><b><u>The beginning of a wave</u></b></p> <p>There is no shortage of predictions about how artificial intelligence is going to reshape where, how and if people work in the future. But the grand work-changing projects of AI, like self-driving cars and humanoid robots, are not yet commercial products. A more humble version of the technology, however, is already making its presence felt in a less glamorous place: the back office. New software is automating mundane office tasks in operations like accounting, billing, payments and customer service. The programs can scan documents, enter numbers into spreadsheets, check the accuracy of customer records and make payments with a few automated computer keystrokes.</p>	New Straits Times	Rujuk lampiran 13

24.	<p><b><u>50,000 moved as floods hit Manila again</u></b></p> <p>More than 50,000 people have been evacuated to higher ground in the Philippine capital and nearby provinces as monsoon rain triggered fresh floods on Saturday night. Marikina City in Metro Manila implemented forced evacuations affecting at least 21,000 people after its river, the catch basin of water flowing from the mountains, reached critical level.</p>	Malay Mail	Rujuk lampiran 14
25.	<p><b><u>Setback for Lombok tourism</u></b></p> <p>The powerful earthquakes that struck the Indonesian island of Lombok in recent weeks and killed some 400 people have sent holidaymakers fleeing, raising questions about how its lucrative tourism sector will bounce back.</p>	The Star	Rujuk lampiran 15
26.	<p><b><u>Afghan farmers hit by worst drought in decades</u></b></p> <p>After his wheat crop failed and wells dried up, Ghulam Abbas sold his animals and joined thousands of other farmers migrating to cities as Afghanistan's worst drought in living memory ravages the war-torn country. A huge shortfall in snow and rain across much of the country over the normally wet colder months decimated the winter harvest, threatening the already precarious livelihoods of millions of farmers and sparking warnings of severe food shortages.</p>	The Star	Rujuk lampiran 16
27.	<p><b><u>Heat wave gets flamingos in the mood</u></b></p> <p>A British conservation charity says record-breaking temperatures have encouraged a rare flock of Andean flamingos to lay eggs for the first time since 2003. The Wildfowl &amp; Wetlands Trust says six of the exotic birds laid nine eggs, all of which were infertile. The charity's reserve in Gloucestershire in southwest England then gave the Andean flamingos eggs from near-relatives, Chilean flamingos, to look after. Mark Roberts, the aviculture manager at the Slimbridge reserve, says "with the Andeans in full parenting mode, we</p>	The Star	Rujuk lampiran 17



	gave them Chilean chicks to bring up as their own. It's great motivation and enriching for the birds."		
28.	<p><a href="#"><u>Dunia alami perubahan iklim</u></a></p> <p>Dunia menyaksikan kawa-san Hemisfera Utara, bermula dari California sehinggalah ke Artik, Sweden dan kemudian, Greece berdepan de-ngan insiden kebakaran hutan yang dahsyat pada musim panas ini. Bahkan kemarau di Eropah menyebabkan tanah subur de-ngan tumbuhan menghijau bertukar tandus manakala masyarakat di Jepun dan Korea turut terpaksa 'kepanasan' apabila negara itu mencatat suhu paling tinggi.</p>	Utusan Malaysia	Klik pada tajuk berita
29.	<p><a href="#"><u>Ignore the energy ratings on TVs and washing machines</u></a></p> <p>Energy performance labels have been condemned as worthless after the government admitted that shoppers should not use them as a guide to how efficiently products will work in the home. Campaigners say that the certificates can mislead consumers into buying products that use significantly more energy than they realise. Under European Union rules, all electrical products, from washing machines to televisions, are given an energy efficiency rating from A to G. The system has come under fire, however, after it emerged that the tests used to generate the scores are designed in conjunction with manufacturers and do not necessarily reflect the way that consumers use the goods.</p>	The Times	Klik pada tajuk berita
30.	<p><a href="#"><u>AI tech boosting smart agriculture</u></a></p> <p>Most livestock and field crops rely heavily on the weather for their comfort, and providing water and energy. But China's more than 1.3 billion residents, a growing number of whom are becoming mid-income earners, are building up such an appetite that farmers are having to change the way they grow and sell food. In order to transform an ancient business that was largely run using intuition, the modern answer is technology. Artificial intelligence has come to the farmyard, helping to ensure the country's</p>	The Star	Klik pada tajuk berita

	increasing numbers of pigs remain active and crop yields grow ever larger.		
<b>12 OGOS 2018 (AHAD)</b>			
31.	<p><b><u>Air quality alerts issued over California wildfires</u></b></p> <p>Authorities battling massive wildfires in large swathes of California issued mandatory evacuation orders and health warnings over the worsening air quality as the flames grew ever closer to populated areas. After almost a month of wildfires, the National Weather Service warned that satellite images showed "widespread smoke" drifting from the fires into western and central Canada before heading back south in the US Northern Plains. The Kaibab National Forest service in neighbouring Arizona warned that "wildfires across the West are creating regional haze."</p>	The Star	Rujuk lampiran 18
32.	<p><b><u><a href="#">UAE Artificial Intelligence camp hosts more than 600 Emiratis</a></u></b></p> <p>The UAE Artificial Intelligence camp has hosted more than 600 Emirati pupils and university students in its first month. The camp is part of the UAE Strategy for Artificial Intelligence, which launched in October 2017, and includes programmes to develop the skills of government employees and young people. More than 5,000 people will participate directly or in partnership programmes organised through the camp, the state-news agency Wam has reported. "We, in the UAE, are pioneering the use of AI technologies and applications to build a better future for all and ensuring that we, as a country, assume a global leadership position across all sectors," said Minister of State for Artificial Intelligence, Omar Al Olama.</p>	The National	Klik pada tajuk berita
33.	<p><b><u><a href="#">New tax on carbon won't stop natural climate change</a></u></b></p> <p>Since the end of the last ice age, approximately 15,000 years ago, the world has been warming, glaciers have been melting, sea levels have been rising, atmospheric carbon dioxide increasing and</p>	Herald Net	Klik pada tajuk berita

	no amount of taxation could have stopped it! So, what would be the ultimate effect of a carbon tax? The ultimate effect will be that earth will continue, unabated, churning through its cycles, and you will experience annually escalating costs for everything you need to survive: automotive fuel, natural gas and propane, electricity, food, clothing, housing, and all consumer goods (increased costs will be passed on to consumers). And this is just the beginning.		
<b>11 OGOS 2018 (SABTU)</b>			
34.	<p><a href="#"><u>We're dangerously unprepared for the heat crisis from climate change</u></a></p> <p>Well, if you live in one of the many US cities where official heat emergencies have been declared, or if you live in California, suffering the worst wildfires in the state's history, the answer is obvious. Extreme heat creates terrible conditions. And for many vulnerable individuals those conditions can be -- and often are -- deadly.</p>	CNN	Klik pada tajuk berita
35.	<p><a href="#"><u>AI for cybersecurity is a hot new thing—and a dangerous gamble</u></a></p> <p>The security industry's hunger for algorithms is understandable. It's facing a tsunami of cyberattacks just as the number of devices being hooked up to the internet is exploding. At the same time, there's a massive shortage of skilled cyber workers (see "Cybersecurity's insidious new threat: workforce stress"). Using machine learning and AI to help automate threat detection and response can ease the burden on employees, and potentially help identify threats more efficiently than other software-driven approaches.</p>	Technology Review	Klik pada tajuk berita
36.	<p><a href="#"><u>NASA gave \$44 million to 6 private companies which includes Jeff Bezos' Blue Origin to develop 'tipping point' space technologies</u></a></p> <p>NASA is doling out a total of \$44 million in awards among six private companies, including Jeff Bezos' secretive rocket company, Blue Origin. The new contracts are part of the agency's third "Tipping Point" competition and an ongoing push to commercialize space. The goal of these awards is to help companies take what NASA</p>	Catch News	Klik pada tajuk berita

	sees as exciting. The capital will manage 10 distinct projects so that there will be ways for robots to land on the moon to explore more.		
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# Big step with small satellites

Varsity impresses with collaboration of and launch of CubeSats

By SANDHYA MENON  
newsdesk@thestar.com.my

**SHAH ALAM:** Malaysia has created another milestone with the deployment of its first nanosatellite in space.

Universiti Teknologi Mara's UiTMSAT-1 was deployed from the International Space Station on Friday.

"This is history for Malaysia. UiTM will act as a catalyst for capacity building and to boost research within the space industry," Education Ministry's Department of Higher Education director-general Datin Dr Siti Hamisah Tapsir said after watching the live feed of the launch at the Shah Alam campus.

The UiTMSAT-1 is a product of Malaysia's collaboration with Japan, Bhutan and the Philippines under an initiative called the "Joint Global Multi-Nation BIRDS-2 Project".

Bhutan and the Philippines also developed a nanosatellite each.

Dr Siti Hamisah said the ministry would provide funding to universities to carry out more research in the field but needed the support of the industry.

"The government alone cannot afford to sponsor all research grants," she said.

Describing the achievement as "impressive", Dr Siti Hamisah said it showed that Malaysian postgraduate students, together with their project supervisors, were able to contribute their knowledge and skills in big projects.

UiTM deputy vice-chancellor (academic) Prof Dr Mohamad Kamal Harun said the varsity was committed to producing technology-oriented products through researches.



**Tiny space traveller:** Muhammad Hasif (right) shows a prototype of the UiTMSAT-1 to Dr Siti Hamisah after watching the launching of the nanosatellite at UiTM, Shah Alam.

"UiTMSAT-1 is just the beginning. We are stepping our feet in space-faring community.

"Next, we are going to anchor ourselves and build a harbour in nanosatellite technology," he said.

Speaking from the Japan Aerospace Exploration Agency, UiTM vice-chancellor Prof Emeritus Datuk Dr Hassan Said thanked everyone involved in the project.

The nanosatellites, or CubeSats, were developed and tested by 10 postgraduate students – two Malaysians, two from the Philippines, three Japanese and three from Bhutan – at the

Laboratory of Spacecraft Environmental Interaction Engineering, Kyushu Institute of Technology, Japan.

The Malaysians on the team, UiTM postgraduate students Syazana Basyirah Mohammad Zaki and Muhammad Hasif Azami, have been working on the project since December 2016.

Muhammad Hasif, 27, found it hard to put his emotions into words. "I felt very nervous watching the deployment.

"Anything can happen at that moment," he said.

"We have been working on this

project for over a year.

"I hope this will propel the Education Ministry and Ministry of Energy, Science, Technology, Environment and Climate Change to support similar projects," he said, adding that more universities should collaborate on such initiatives.

The nanosatellite is a low-cost miniature instrument for space research.

Watch the video  
[thestartv.com](http://thestartv.com)





LAMPIRAN 2  
KOSMO (NIAGA): MUKA SURAT 51  
TARIKH: 13 OGOS 2018 (ISNIN)

Temos lengkapi industri kenderaan elektrik, pelbagai inisiatif bakal disepadukan

# Usaha sama GreenTech, TNBES

Oleh NOR SYARIZA MUHD. TAHIR

**B**ANGI – Malaysian Green Technology Corporation (GreenTech Malaysia) menjangkakan penubuhan syarikat tujuan khas (SPV), Tenaga E-Mobility Solutions Sdn. Bhd. (Temos) akan dapat menyediakan perkhidmatan bersepadu kepada pemilik kenderaan elektrik di negara ini pada masa akan datang.

Ketua Pegawai Eksekutif Kumpulan GreenTech Malaysia, Dr. Mohd. Azman Zainul Abidin berkata, ia seterusnya akan menjadi pemacu kepada komitmen organisasi itu dalam mempromosikan penggunaan kenderaan elektrik, mengurangkan pembebasan karbon dioksida, sekali gus merangsang pertumbuhan ekonomi hijau.

“Dengan adanya Temos, ia akan mengendalikan pelbagai perkara berhubung inisiatif berkaitan kenderaan elektrik.

“Ia termasuk operasi stesen dan terminal pengecas kenderaan elektrik yang disepadukan bagi kemudahan pemilik kender-

aan elektrik di Malaysia.

“Kerjasama antara GreenTech Malaysia dan anak syarikat milik Tenaga Nasional Bhd. (TNB) iaitu TNB Energy Services Sdn. Bhd. (TNBES) ini dijangka mula beroperasi pada 1 September ini,” katanya.

Beliau berkata demikian kepada *Kosmo!* dalam satu temu bual di pejabat GreenTech Malaysia di sini baru-baru ini.

Sebelum ini, pada Oktober 2017, GreenTech Malaysia memeterai kerjasama tiga pihak dengan TNBES dan Petronas Dagangan Bhd. bagi bersama-sama meningkatkan komitmen dalam mencapai sasaran pengurangan emisi Malaysia dan dalam masa sama menjadi pemangkin kepada inisiatif ekonomi hijau.

Di bawah kerjasama tersebut, ketiga-tiga pihak akan bekerjasama rapat dalam melaksanakan pelbagai inisiatif bagi memasang stesen pengecas kenderaan elektrik, panel solar fotovoltan serta pelbagai inisiatif lain pada masa akan datang.



MOHD. AZMAN menunjukkan terminal pengecas kenderaan elektrik di pejabat GreenTech Malaysia, Bangi baru-baru ini.

Dalam pada itu, ditanya mengenai perkembangan bagi skim pembiayaan yang disediakan GreenTech Malaysia, Skim Pembiayaan Teknologi Hijau (GTFS), Mohd. Azman berkata, pihaknya menyasarkan untuk mengeluarkan pembiayaan bernilai RM1 bilion sehingga akhir tahun ini di bawah GTFS 2.0.

“Bagi GTFS 2.0 yang dilaksan-

akan selama lima tahun bermula 2018, kami menyediakan pembiayaan keseluruhan bernilai RM5 bilion untuk membantu syarikat-syarikat berasaskan teknologi hijau mendapatkan dana bagi mengembangkan perniagaan mereka,” ujarnya.

Bermula dari tahun 2010 hingga 2017, sebanyak RM3.5 bilion pembiayaan telah dikeluarkan

## INFO GreenTech Malaysia

- Merupakan sebuah organisasi di bawah bidang kuasa Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim.
- Ditubuhkan pada tahun 2010.
- Diberi mandat untuk menerajui pembangunan dan mempromosikan teknologi hijau sebagai sebuah enjin strategik bagi pertumbuhan sosioekonomi, sejajar dengan Pelan Induk Teknologi Hijau (GTMP) 2017-2030.
- Di bawah GTMP, terdapat enam sektor yang diberi keutamaan bagi membangunkan teknologi hijau iaitu tenaga, perkilangan, pengangkutan, bangunan, sisa buangan dan air.

di bawah GTFS yang memberi manfaat kepada 319 projek yang secara majoritinya terdiri daripada syarikat-syarikat berkaitan tenaga.

**LAMPIRAN 3**  
**THE STAR (NATION): MUKA SURAT 1**  
**TARIKH: 13 OGOS 2018 (ISNIN)**

## The heat is on – hits 37°C in Kapit

With temperatures hitting as high as 37°Celsius in Sarawak, Malaysians are cooling off with coconut water and staying indoors with air-conditioners running. A number of them are even making trips to the highlands while students head to lake gardens for group revisions.

**> See reports on Page 2**



**Fun in the sun:** Muhd Syarafudin Ludin, 15, splashing water on his three-year-old sister Nur Azwa Safrina at a pool in Petaling Jaya. The heat has some feeling 'hot under the collar' while others take the opportunity to have fun. — AZHAR MAHFUF/The Star



## Tourists taking to the hills for a cool respite

**KUANTAN:** The blazing weather in most parts of Pahang has resulted in many tourists visiting hilly areas such as Cameron Highlands, Fraser's Hill and Genting Highlands. Some are coming from Singapore and even as far away as Europe.

Peter Leslie, who manages a tea plantation in Sungai Palas, Cameron Highlands, said all rooms at hotels and homestays had been fully occupied since Friday.

"The unfortunate few who could not find a room had to head back down to the city or seek accommodations elsewhere," he said.

Leslie added that the temperature ranged from 16-18°C during the day and at night, it fell to 10°C. "In Tanah Rata, where the town

centre is located, it can get a little warmer," he said.

He added that it only rained for a short while.

Meanwhile, temperatures in Genting Highlands ranged between 17°C and 19°C on Friday, but rose on the weekend to 23°C.

On Fraser's Hill, a hotel manager said it was 25°C yesterday and that most rooms were occupied by bikers, who came there for a cool respite.

"I only saw a few tourist buses come up," he added.

One resident said fewer tourists were visiting Fraser's Hill despite the cool climate because of the bad road conditions and poor facilities.



**Quick getaway:** A large crowd queuing up to get on the cable cars at Awana Skyway to go up to Genting Highlands.

## It's going to be hot until October

Inter-monsoon season expected to bring cooler weather, says dept

By RAZAK AHMAD  
razak@thestar.com.my

**PETALING JAYA:** It is scorching hot in many parts of the country and will remain so until the inter-monsoon season arrives in October.

Kapit in Sarawak was the hottest spot in the country at 37°C, according to a check on the Malaysian Meteorological Department (Met-Malaysia) website.

The next hottest locations were Kuala Krai in Kelantan; Sibul and Sri Aman (Sarawak); Temerloh (Pahang); and Mersing (Johor), which all recorded 35°C.

The hottest state capitals were Ipoh (Perak), Kota Kinabalu (Sabah), Kuching (Sarawak) and Kuantan (Pahang), which were all at 34°C.

The readings were taken at 5.15pm yesterday, when the hot weather would usually have subsided from its afternoon peak.

Meanwhile, Perak, Pahang, Kelantan and Sabah were the warmest states with an average highest temperature of 34°C.

According to MetMalaysia, the average highest temperatures from yesterday until Saturday will remain at 34°C in all four states except Sabah, where the average highest temperature is forecast to drop to 33°C on Friday and Saturday.

The hot weather has affected many people in several states.

Temperatures in many parts of the country have been rising due to the current South-West monsoon, which started in the third week of May.

According to the country's official



**On the job:** Fire and Rescue Department personnel extinguishing a bushfire caused by the hot and dry weather at Taman Lestari Perdana in Seri Kembangan. — AZHAR MAHFOF/The Star

definition of a heatwave, temperatures between 35-37°C for three days straight are classified as "alert level" or Category 1.

Category 2 or "heatwave level" is defined as temperatures over 37°C for three days straight, while Category 3 or "emergency level" is when

the temperature soars above 40°C for three days in a row.

The classifications were defined at a 2016 national technical meeting on tackling El Niño and dry weather.

On July 28, Sik (Kedah), Kuala Krai and Beluran (Sabah) recorded

maximum temperatures between 35°C and 37°C for more than three days, putting them on a heatwave alert.

In a recent statement, Met-Malaysia director-general Alui Bahari said the country's atmosphere is generally drier due to

reduced convection during the southwest monsoon.

Convection is when warm air rises and produces an upward current in the atmosphere, creating wind, clouds or other weather.

"As such, the country will experience more days without rain in this period compared to others," said Alui.

However, the arrival of the inter-monsoon period in October is expected to bring cooler weather.

Throughout the inter-monsoon season, late afternoon and early evening thunderstorms and heavy rains are forecast in the west coast Peninsular states and western Sabah, along with western and central Sarawak, according to Met-Malaysia's forecast.

In addition, most parts of Peninsular Malaysia are expected to receive higher than normal rainfall at this time.

The inter-monsoon will be followed by the northeast monsoon, which starts in November and ends in March.

The North-East monsoon brings heavy rains, especially to the east coast of the peninsula and western Sarawak, which often leads to floods in some of the affected areas.

A major heatwave recently hit Europe, Japan and some other parts of the world.

The phenomenon reportedly killed 50 in Canada and 80 in Japan, led to droughts in Germany and caused temperatures to spike to record levels in Britain, Algeria, Morocco and Oman.

## Adults and youngsters stay inside to beat the heat

By LO TERN CHERN  
and ALLISON LAI  
newsdesk@thestar.com.my

**GEORGE TOWN:** Penang has been experiencing hot weather despite being hit by two freak storms earlier.

It is now the South-West monsoon season, but there has been no sign of rain since the July 30 and April 8 storms that caused flash floods, uprooted trees, ripped open zinc roofs and caused a billboard to topple.

Engineer B.L. Lam, 44, said the extremely hot weather over the past few days made him feel sleepy, so he did not go out much.

"I tend to take a nap in my air-conditioned bedroom instead of going out with my family. I just find it too hot to go out," he said.

According to the Malaysian Meteorological Department's website, Penang will be bright and sunny from today until Wednesday.

However, isolated thunderstorms and rain are expected from Thursday until Saturday.

State Environment Committee chairman Phee Boon Poh advised the people to keep hydrated and not to stay out in the sun for long periods of time.

"If they need to exercise, they should do it in shady areas. They should also ensure that water is within reach at all times," he added.

Meanwhile in **Taiping**, youngsters appear to be staying indoors.

A fast food outlet in Lake Gardens was packed because of the stifling hot weather outside.

At least five tables in the two-sto-

rey outlet were occupied by youths with piles of books on their tables.

An 18-year-old, who wanted to be known only as Lee, said he and his two classmates decided to come to the air-conditioned outlet to revise for an exam.

"It is too hot outside. An important examination is coming up and many of us are preparing for it."

"I usually do my revision at home, but it has been too hot these last few days."

"Since it is the weekend, I asked my classmates to join in a group

revision at the restaurant so we could enjoy the cold drinks as well," said Lee, a student at Hua Lian High School.

According to *weather.com*, noon temperatures in Taiping today will hit a high of 34°C with humidity of over 52% the entire day.

One of Lee's classmates said: "There has been little rain lately and it feels equally warm at night."

"It is uncomfortable to stay in this kind of weather, so I usually try to find an indoor place, preferably with air-conditioning."





ZAKRI ABDUL  
HAMID

ENVIRONMENTAL CATASTROPHE

## BIODIVERSITY IN DECLINE

Four landmark regional reports released in March say the Earth's life support system is failing

**T**HE growing consensus within the global community is that we are fast heading towards an environmental catastrophe caused by two human-induced activities: climate change and the loss of biodiversity.

While the former was given top billing by world leaders resulting in the much-heralded Paris Accord on Climate Change in 2015, biodiversity — the essential variety of life forms on Earth — remains a distant cousin.

As one UK commentator recently put it: "(Our) response to the rising evidence of mass extinction and ecological degradation has been largely to throw crumbs at it."

Where we have acted it's been in a mostly haphazard and modest way — a protected area here, a conservation programme there, a few new laws, and a pinch of funding. The problem is such actions — while laudable and important — in no way match the scope and size of the problem where all markers indicate that life on Earth continues to slide into the dustbin.

During a major meeting of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) last March in Colombia, we were again told that the Earth's life support system is failing.

According to four landmark regional reports released at the meeting, biodiversity is in decline almost everywhere, endangering human economies, livelihoods, food security, and the quality of life.

At the same time, said IPBES Chair Sir Robert Watson, there are many remedies with proven track records, providing considerable room for hope. (We await with interest a comprehensive global sequel to the regional reports, authored by 150 experts



Belum Forest in Gerik, Perak, is a treasure trove of biodiversity. PIC BY DJ DOLASOH

from 50 countries, looking at changes in terrestrial and marine biodiversity over the past 50 years. That report will be released by IPBES in Paris next May.)

In a 2016 book, Harvard biologist E.O. Wilson wrote that to save life on Earth (including ourselves) we must set aside roughly half the planet in various types of reserves. This bold idea immediately sparked controversy (would some policymakers consider it no holds barred in the other half of Earth?), but was soon picked up by like-minded, deeply concerned fellow scientists.

In a landmark paper the following year, 49 scientists advanced the Half Earth concept ("Nature Needs Half"), proposing a global deal for Nature comparable and complementary to the Paris Climate accord. The new accord would increase habitat protection and restoration, promote national and ecoregion-scale conservation strategies, and empower as protectors of their traditional lands the world's indigenous peoples — now widely recognised, after decades of being sidelined, as some of nature's best stewards.

If it gains further traction, the proposed agreement would almost surely be negotiated under the 26-year-old United Nations Convention on Biological Diver-

sity (CBD), and would succeed the Aichi Targets set by the CBD in 2010.

Meeting in Aichi, Japan eight years ago, CBD member states (the United States being a notable non-member) agreed to 20 non-binding and largely voluntary biodiversity targets for 2020. These include cutting habitat loss and deforestation by half, managing fisheries sustainably, preventing the extinction of known endangered species, and minimising the impact of climate change on coral reefs.

Every region is unlikely to meet most targets, the exception being the setting aside of 17 per cent of land area as protected areas and 10 per cent of marine and coastal areas. Today, 15 per cent of land area is protected (albeit, in many cases, the protection consists of inadequately funded 'paper parks'), as is about eight per cent of the oceans.

The CBD's executive secretary, Dr Cristiana Paça Palmer, has endorsed the idea of making half the planet more nature-friendly by 2050 within a new agreement to replace the Aichi Targets two years from now. And while this falls short of E.O. Wilson's vision of Half Earth under protection, it is significantly more ambitious than the goals set in Aichi.

As Palmer notes, our economic models must recognise that

Earth is a closed system with ecological limits.

And when it comes to achieving our development goals and human wellbeing, protecting biodiversity is at least as important as the fight against global climate change.

To quote IPBES executive secretary Anne Larigauderie: "Richer, more diverse ecosystems are better able to cope with disturbances, such as extreme events and the emergence of diseases. They are our 'insurance policy' against unforeseen disasters and, used sustainably, they also offer many of the best solutions to our most pressing challenges."

Malaysia has always been a leading proponent of biodiversity conservation and sustainable use of its components. We were active in the negotiations of the CBD in the early 1990s and in meetings of its Conference of Parties held every two years. Our National Policy on Biological Diversity was last reviewed and relaunched in 2016. With a forest cover of more than 50 per cent of its land area, this country would have no difficulty meeting the global aspiration of "Half Earth".

The writer, the founding chair of IPBES, is also a former chairman of the CBD's Subsidiary Body on Scientific, Technical and Technological Advice

**The growing consensus within the global community is that we are fast heading towards an environmental catastrophe caused by two human-induced activities: climate change and the loss of biodiversity.**



# Leverage technology for a leg up

Small businesses can benefit from going digital

By JOY LEE  
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THERE is an unmistakable call for SMEs to embrace digital technology.

In fact, industry observers say "it is no longer about why we should go digital but about how we use this tool".

There are endless opportunities for businesses to tap into by going digital and entrepreneurs are advised to exploit these benefits.

"Going digital allows the business owner to focus more on what they are passionate about in the business and technology gives them the platform to share that passion with their customers," said Digi's business division chief business officer Eugene Teh Yee at SOBA Lab last Wednesday.

When businesses are able to engage customers at such a level, it is easier for them to upsell customers their products and services.

In this way, companies will be able to increase their sales.

Teh was one of the speakers in the panel discussion on "Technology - The Engine of Change". The other panellists were PKT Logistics Group Sdn Bhd chief marketing officer Kuan Eu Jin and RHB Bank Bhd group transaction banking head Chung Chee Kai.

The panel was moderated by Malaysia Retail Chain Association council member Raymond Woo.

PKT has also found social media platforms, Facebook in particular, to be an effective tool in engaging the public.

"We are a business-to-business (B2B) company. But we've gone past B2B engagement. With Facebook, we are doing business-to-consumer (B2C) engagement."

"And that has helped us as we move into e-commerce, which is a B2C segment. Now, we are able to sell a unique service to our customers. Our clients put their products in our warehouses and we are able to put those products up online to help them with sales because we've gotten the consumers' attention," said Kuan.

The logistics company is known for its use of social media as a communication tool with its employees. Kuan added that this helps the company engage and retain its talents.

"By using social media, we've also cut down on costs. We have zero hiring cost because our recruitment is done via Facebook and there is no need for us to invest in intranet," he said.

However, Kuan noted that the initial process of implementing social media as a communication tool is not necessarily easy. Some resistance and hiccups are bound to happen.

That shouldn't stop businesses from going digital.

"Because of connectivity, we are part of the ecosystem. We can't be left behind," emphasised Chung.

Chung said businesses stand to benefit from digital developments such as mobile payment as Malaysia advances into a cashless society.

"We need to look at ways to educate SMEs on cost effectiveness by transacting the cashless way. It is also a more convenient transaction for them in terms of speed and efficiency," he said.

While there are concerns among business owners over the cost of technology adoption, Chung countered that the cost for companies to go digital, to set up e-commerce, for example, is a lot lower than the cost of handling cash.

"Retailers are not aware of the cost of leakages from cash-heavy businesses," added Teh.

SMEs can also leverage digital technology to grow their business abroad.

Malaysia External Trade Development Corporation (Matrade) deputy chief executive officer Sharimahton Mat Saleh said only 10% of Malaysian SMEs have adopted e-commerce.



**Technology edge:** (from left) Woo, with panellists Teh, Kuan and Chung discussing the benefits of digital technology for businesses.



**Digital approach:** Hoh says SMEs can go on its portal to get relevant pointers on financing.



**Look ahead:** Sharimahton says e-commerce helps future-proof businesses.



**Brand conscious:** Soraya says a key factor to growing a business is to be passionate for the brand.

"But e-commerce is a way to future-proof your business. Brick-and-mortar will still be relevant but you need a digital front," she said.

Note that even Credit Guarantee Corp Malaysia Bhd (CGC) is reaching out to companies digitally, offering SMEs advisory and assistance through its portal.

On hand at the workshop to address a major challenge - funding - faced by SMEs was CGC vice-president of SME advisory and marketing Jenny Hoh.

According to Hoh, small businesses often lack collaterals, track record and access to good financing options. Hoh said CGC can help them by providing guarantees and support to get funding.

Participants at the workshop were also able to draw from the experiences of successful entrepreneurs such as Vitality Boost Sdn Bhd managing director and founder Dr Soraya Ismail, Sirius International (M) Sdn Bhd chief executive officer and founder Anne Tham and Hernan Corp group chief executive officer Anna Teo.

Soraya advises business owners to build

strong foundations.

"This was a brand that I am personally passionate about. And that was key," she said.

Soraya, who holds a doctorate in chemical engineering from Imperial College, London, is the master franchisor of Boost Juice Bars in Malaysia, Singapore and Brunei.

She noted that some of the factors that helped Boost Juice grow to over 80 stores in Malaysia were her efforts to localise the business, continued improvements of its processes, people and systems, resilience and her understanding of the market.

Tham concurred that it is important to "know and understand your target audience".

Tham has been in the education industry for many years now, moving from a teacher who taught in private colleges to running her own school.

Sirius International owns and manages Dwi Emas and its sister school, Sri Emas International School.

Meanwhile, Teo shared her experiences on how she became an entrepreneur and



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stumbled upon the opportunity to run something of her own when she could not find any Malaysian products while shopping in Chinatowns overseas.

Her journey led an opportune call for a container load of Malaysian durians.

"I am very lucky that the government is supporting me to make our Malaysian product more globalised. There are many products that can be produced using durian. It is not just a fruit," she said.

She noted that the cost of one-acre of durian farming land has increased to RM600,000 from RM60,000 four years ago.

The SOBA Lab workshops were organised in conjunction with The Star Outstanding Business Awards (SOBA) 2018.

SOBA 2018 is organised by Star Media Group with Digi, PKT Logistics Group Sdn Bhd and RHB Bank Bhd as main sponsors, Credit Guarantee Corporation as co-sponsor, Matrade as official trade promotion partner and New World Petaling Jaya Hotel as official venue.

SOBA 2018 is endorsed by the International Trade and Industry Ministry, supported by Bursa Malaysia, and audited by BDO, with 988, SuriaFM and dmsun as official media partners.

For more information on SOBA 2018, call Star Media Group Events Business Unit at 03-7967 1388 ext 1857 (Pei Wen) or go to [www.soba.com.my](http://www.soba.com.my).



**LAMPIRAN 6**  
**HARIAN METRO (BESTARI): MUKA SURAT N36**  
**TARIKH: 13 OGOS 2018 (ISNIN)**



PENGANJUR dan peserta bergambar selepas program Cabaran Inovasi Sains, Teknologi, Kejuruteraan dan Matematik (STEM)

# SEMANGAT LUAR BIASA

Pelajar pedalaman redah perjalanan 4 jam sertai program cabaran STEM di UMS

**Fazurawati Che Lah**  
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**Pelajar** dari tiga sekolah menengah dari Kudat, Sabah sanggup meredah perjalanan lebih empat jam untuk menyertai program Cabaran Inovasi Sains, Teknologi, Kejuruteraan dan Matematik (STEM) yang diadakan di Universiti Malaysia Sabah (UMS) baru-baru ini.

Mereka antara 112 pelajar daripada 28 sekolah sekitar Sabah yang menyertai cabaran Zon Sabah anjuran Kelab Tabung Haji (TAHA) serta Berkat Minda Recources dengan kerjasama Universiti Putra Malaysia (UPM) yang

mendapat pengiktirafan Kementerian Pendidikan.

Pengurus Besar (Khidmat Pelanggan) Tabung Haji Mohd Nasir Mohd Yusoff berkata, penganjuran seperti itu mampu menarik minat pelajar untuk memilih bidang berkenaan ketika di menara gading kelak.

Menurutnya, semangat yang ditunjukkan 12 pelajar dan tiga guru dari ketiga-tiga sekolah itu membuktikan mereka tidak mahu mengeneipkan kepentingan STEM kerana sedar ia mempunyai potensi.

"Pihak penganjur menyediakan kemudahan penginapan untuk peserta dan guru pengiring bagi

memudahkan mereka sepanjang program," katanya.

Menurutnya, program seperti itu dianjurkan untuk memberi pendedahan awal kepada golongan berkenaan supaya mereka dapat mendekatkan diri menerusi kaedah praktikal.

"Kami harap program ini dapat menarik minat lebih ramai pelajar khususnya Bumiputera dalam bidang STEM dalam skop pendidikan," katanya.

Program turut dihadiri Pengarah Tabung Haji Sabah, Datin Nurlaila Said dan Pengerusi Pusat Pembudayaan STEM UKM, Prof Dr Mohamad Sattar Rasol.

Mohd Nasir berkata,

pihaknya berhasrat memperluaskan skop cabaran pada tahun depan dengan memperkenalkannya ke sekolah rendah.

"Kita akan berusaha memupuk minat murid terhadap STEM di peringkat lebih awal sebagai persiapan mereka selepas melanjutkan pengajian ke peringkat lebih tinggi," katanya.

Dalam pertandingan itu, dua sekolah akan mewakili Sabah ke peringkat kebangsaan selepas muncul juara dan naib juara pertandingan.

Sekolah berkenaan ialah Sekolah Menengah Sains Sabah dan Sekolah Menengah Kebangsaan Beaufort 3.



Pihak penganjur menyediakan kemudahan penginapan untuk peserta dan guru pengiring bagi memudahkan mereka sepanjang program

**MOHD NASIR**

**LAMPIRAN 7**  
**NEW STRAITS TIMES (NEWS/BUSINESS): MUKA SURAT B5**  
**TARIKH: 13 OGOS 2018 (ISNIN)**

CONFERENCE OF ELECTRIC POWER SUPPLY INDUSTRY 2018

# 150 FIRMS TO SHOWCASE EXPERTISE

6,000 visitors expected at event to be held at Kuala Lumpur Convention Centre on September 18-20

## KUALA LUMPUR

**A**BOUT 150 companies will showcase their leading technologies, products and services at the 22nd Conference of the Electric Power Supply Industry (CEPSI 2018).

CEPSI is the East Asian and Western Pacific's most prominent and prestigious electricity supply industry conference-cum-exhibition.

Half of the exhibitors are likely to be Malaysian firms involved in the electricity supply industry, said Tenaga Nasional Bhd chief corporate officer and Association of the Electricity Supply Industry of East Asia and Western Pacific 2017/2018 secretary-gen-

eral Datuk Roslan Ab Rahman.

The remaining are from China, Japan, Singapore, Indonesia, Australia, France, Germany, India, Ireland, South Korea, Portugal, Taiwan, the United Kingdom and the United States.

"About 6,000 visitors are expected to view the display during the three-day exhibition. We believe a huge number of 1,500 delegates and 4,500 trade visitors would take advantage of the exhibition as a business matching platform."

CEPSI 2018 will be held from September 18 to 20 at the Kuala Lumpur Convention Centre.

"CEPSI 2018 will be the best avenue for companies to raise their brand awareness, market their products and services, as well as find potential business

partners," said Roslan.

TNB is hosting CEPSI 2018 on behalf of the AESIEAP.

Since its inception in 1976 in Hong Kong, CEPSI has grown in stature as a key international meeting point for power industry companies, utility leaders, industry professionals and experts from all over the world to exchange ideas and learn from one another.

Themed "Reimagining Utility of the Future", CEPSI 2018 will focus on the current scenario of how the electricity supply industry is transforming in response to the emergence and convergence of technology disruptions, economic shifts, evolving sustainability and regulatory requirements, and increasing customer expectations.



The 22nd Conference of the Electric Power Supply Industry will see around 150 companies, half of which are Malaysian companies, showcasing leading electricity supply technologies.



# Sarawak corridor attracts RM79.3bil in investments

Ten projects are already in operation

By JACK WONG  
starbiz@thestar.com.my

**KUCHING:** Sarawak Corridor of Renewable Energy (Score), which is now into its phase two development, has attracted about RM79.3bil investments from both the private and public sectors.

Score, one of Malaysia's five economic corridors, marks its 10th anniversary this year.

Approved total private investments in 22 projects involving various industries amounted to RM33.6bil. Ten of the projects, mostly energy-intensive and heavy industries, are already in operation, according to Regional Corridor Development Authority (Recoda) chief executive officer Datuk Ismawi Ismuni.

The pioneer Score investors in Samalaju Industrial Park, Bintulu are Press Metal Aluminium Holdings Bhd (aluminium smelter), OM Materials (Sarawak) Sdn Bhd, Pertama Ferroalloys Sdn Bhd and Sakura Ferroalloys Sdn Bhd (ferrosilicon and manganese smelters), OCI Malaysia Sdn Bhd (formerly Tokuyama Malaysia Sdn Bhd) (polycrystalline silicon manufacturer). Also in operations in the park are Iwanti-SIG Industrial Gas Sdn Bhd and Elkem Carbon Malaysia Sdn Bhd.

Press Metal also owns an aluminium smelting plant in Mukah, one of Score's five growth nodes.

In the Tanjung Manis growth node, two agro-based projects owned by Taiwan's Sea Party and Fieldmart Sdn Bhd (Malaysia-Japan joint venture) are in operation.

These 10 projects involved total investments of about RM18.5bil.

For the remaining 12 approved projects, two each are in the construction stage and site preparation while the balance eight are under negotiations.

"Score has created more than 61,000 jobs. For Samalaju alone, the



**Hydro-electric power:** Sarawak Energy also owns Murum dam which cost RM4.8bil to build and produces 944MW.

spin-off of RM500mil a month injected into the local economy is benefitting the small and medium enterprises (SMEs)," said Ismawi.

Ismawi said out of Score's 10 priority industries, four were trigger industries – aluminium, steel, oil-based and glass – which had the ability to attract cluster industries.

"There are still investors who are keen to invest (in Score) because of the energy and competitive edge we have.

"We have sold out almost all of our Bakun dam power (2,400MW). We are now running out of power, so we build more hydro dams," said Ismawi in a paper presentation on "Let's invest in Sarawak: The opportunities and Potentials" business session during the inaugural Sarawak-China business forum last week. ▲

He said the green and renewable hydro energy was the key attraction

for heavy and energy intensive industries to set up manufacturing facilities in Score.

Sarawak Energy Bhd (SEB) recently acquired Bakun dam from the federal government for RM9bil. It also owns Murum dam (944MW) built for RM4.8bil and is now undertaking the RM9.5bil Baleh dam (1,285MW) project for scheduled commissioning by 2025.

SEB's power generation is further boosted with the commissioning of the Balingian coal-fired power plant (624MW).

SEB's available power capacity for Score was 3,837MW last year against customer demand of 3,434MW. This is expected to increase to 4,430MW and 4,162MW respectively in 2020.

Ismawi said the public investment in Score involved mainly infrastructure development, like roads and bridges, water supply

and telecommunication.

State-owned SEB has made significant investment in the power sector to bring electricity from the Bakun and Murum dams in the upper Rejang basins to the industrial park.

He said a deepsea port had been built to serve industries in Samalaju Industrial Park in the import of raw materials and export of finished products.

Score has made another milestone with the extension of its boundary by 30% to about 100,000 sq km from 77,000 sq km early this year.

"The extension of score boundary now covers the entire Limbang Division (in northern Sarawak bordering Sabah)," said Ismawi.

To accelerate the development of Score hinterland, the state government has set up three development agencies under Recoda. They are Upper Rejang Development Agency, Highland Development Agency and Northern Regional Development Agency.

Ismawi said the three agencies were tasked to bring development into the rural and interior Sarawak.

Six economic trigger projects – aquaculture, tourism, forestry, palm oil, rubber and biotechnology – have been identified for the Score hinterland which is endowed with abundant natural resources.

For the highland development, the focus is on commercial agriculture and production of highland crops. An integrated highland agriculture station, which is under construction, is expected to serve as a catalyst for commercial agriculture development.

"For commercial agriculture, we need to bring in anchor farmers," said Ismawi.

He sees the lack of basic infrastructure as a big challenge in the development of green-field areas in the Score hinterland.



# MALAYSIA TERDEDAH GEMPA BUMI

■ Negara sudah diletakkan dalam Jaluran Lingkaran Api Pasifik sejak 2007

Muhammad Saufi Hassan  
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Kuala Lumpur

**M**alaysia berdepan risiko gempa bumi memandangkan negara ini sudah diletakkan dalam Jaluran Lingkaran Api Pasifik sejak 2007.

Biarpun secara umum kebanyakan gegaran di Semenanjung banyak berpunca daripada gempa bumi skala besar di Sumatera, namun risiko gempa bumi yang berpusat di negara ini berlaku tetap ada.

Pensyarah Jabatan Geologi, Fakulti Sains Universiti Malaya (UM) Prof Madya Mustaffa Kamal Shuib berkata, sejak 2007 hingga 2009, kawasan Bukit Tinggi dan Janda Baik, Pahang sudah merasai gegaran lemah di bawah bacaan lima magnitud.

Menurutnya, gegaran sama turut dirasai di Jerantut, Pahang manakala lokasi paling selatan pernah direkodkan adalah di Ulu Bendul.



ANTARA kemusnahan berpunca daripada gempa bumi.



# LAMPIRAN 9 (SAMBUNGAN) HARIAN METRO (SETEMPAT): MUKA SURAT 6 TARIKH: 13 OGOS 2018 (ISNIN)

Negeri Sembilan pada tempoh yang sama.

Katanya, sejak 2007, Malaysia sudah diletakkan dalam Jaluran Lingkaran Api Pasifik memandangkan rantau ASEAN terutama Sumatera kerap berlaku gempa bumi dalam skala sederhana dan tinggi.

"Sebelum tahun berkenaan, negara kita tidak dimasukkan di dalam Jaluran itu namun kajian yang dilaksanakan membuktikan bahawa negara ini turut berisiko untuk berlaku gempa bumi pada masa depan.

"Selain Janda Baik dan Bukit Tinggi, gempa bumi tempatan ini direkodkan di Kenyir dan Kuala Berang, Terengganu pada 2010 hingga 2016 dan turut berlaku di Temenggor, Perak. Skala gegaran direkodkan masih di bawah lima magnitud.

"Gegaran dalam skala berkenaan sememangnya boleh dirasakan namun ia masih terlalu kecil untuk merosakkan struktur bangunan sama ada bangunan rendah atau pencakar

langit," katanya.

Mustaffa Kamal bagaimanapun tidak menolak kemungkinan pada masa depan mungkin gegaran skala lebih besar mampu direkodkan memandangkan negara ini sudah berada dalam Jaluran Lingkaran Api Pasifik.

"Kita sukar untuk meramalkan kejadian gempa bumi ini sama ada bila ia akan berlaku, di mana akan berlaku dan skalanya.

"Untuk tujuan itu, kita sudah melaksanakan prosedur pembinaan memandangkan kebanyakan bangunan di negara ini tidak dilengkapi dengan sistem serapan gegaran.

"Ia adalah pelan tindakan awal untuk menambah baik pembinaan bangunan sekali gus mempersiapkan kita jika berlaku gempa bumi pada skala besar yang berpusat di Malaysia," katanya.

Mengulas berhubung ancaman tsunami di negeri

pantai barat Semenanjung, beliau berkata, ancaman itu memang wujud jika gempa bumi berlaku di Aceh atau Lautan Andaman.

"Lokasi paling berisiko ialah Langkawi dan Pulau Pinang kerana ombak mampu mencapai tiga meter dan akan berkurangan apabila masuk di kawasan Perak dan Selangor.

"Ini berlaku kerana perairan di sekitar Selat Melaka adalah cetek berbanding perairan di utara Semenanjung yang terdedah dengan kedalaman lautan sekali gus memungkinkan ombak besar," katanya.

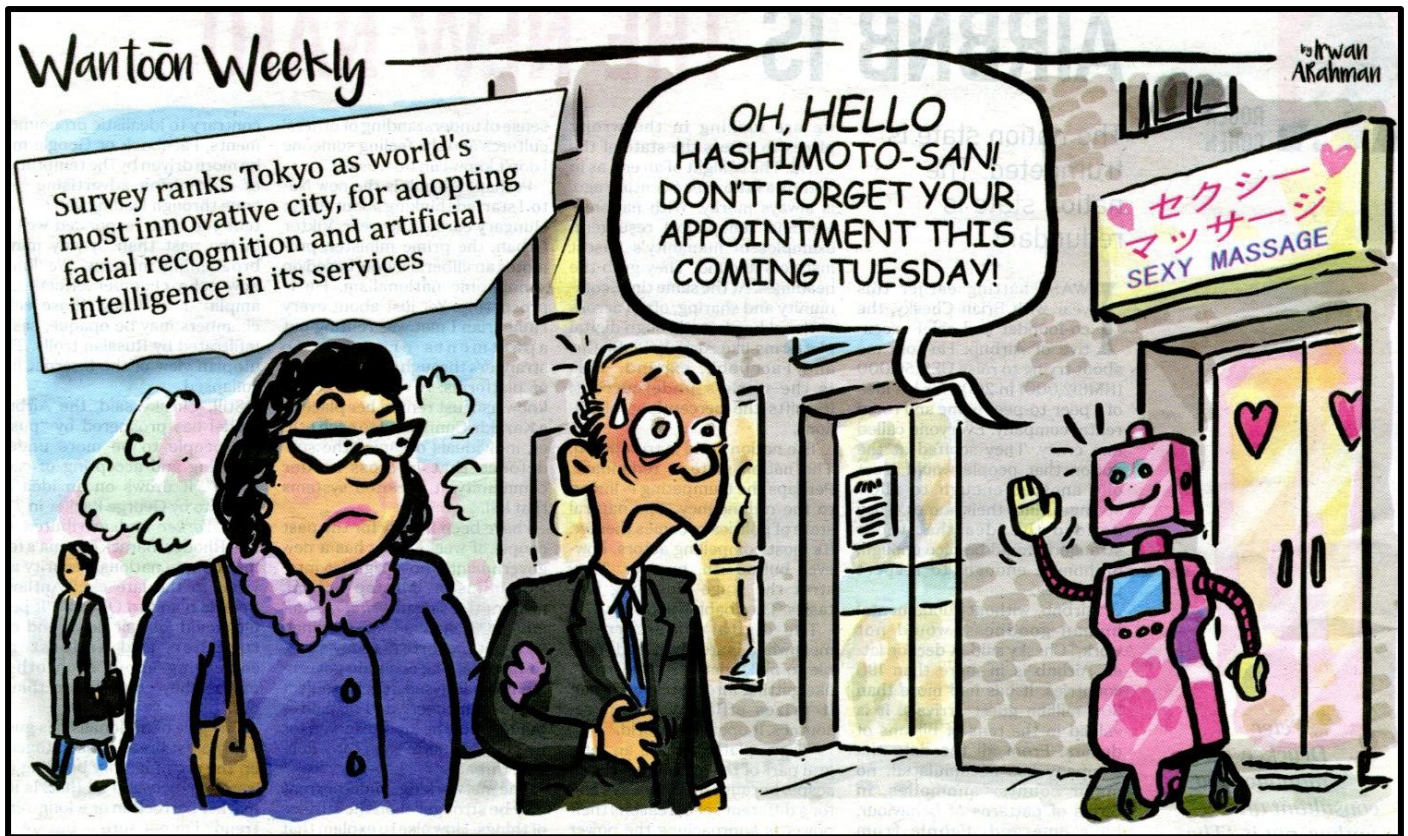
## MALAYSIA KINI DIMASUKKAN DALAM JALURAN LINGKARAN API PASIFIK



### ANCAMAN TSUNAMI

1. Jika berlaku gempa skala besar di Aceh dan Lautan Andaman, ombak mampu mencecah 3 meter
2. Lokasi terjejas pantai barat
3. Langkawi dan Pulau Pinang paling terjejas.
4. Kekuatan ombak menurun ketika memasuki kawasan Perak







HISTORIC

# UiTM PUTS NANO SATELLITE INTO ORBIT

'A turning point in  
empowering space  
research in Malaysia'

SHAH ALAM

UNIVERSITI Teknologi Mara (UiTM) created history on Friday by becoming the first local university to launch a nano-satellite into orbit.

The UiTMSAT-1 satellite was launched at 5.45pm local time

from the International Space Station (ISS) and a live feed of the event from the Japan Aerospace Exploration Agency (JAXA) was watched by Higher Education director-general Datin Paduka Dr Siti Hamisah Tapsir.

Siti Hamisah said the satellite launch was a turning point in empowering space-related research in Malaysia.

"The satellite project by UiTM is something that we should be proud of.

"Other local universities are encouraged to follow in UiTM's footsteps to boost

Higher Education director-general Datin Paduka Dr Siti Hamisah Tapsir (second from left), Universiti Teknologi Mara Deputy Vice-Chancellor Professor Dr Mohamad Kamal Harun (third from left) and Malaysian National Space Agency's space operation unit head Hamid Salim (right) at the live telecast of the satellite launch in Shah Alam on Friday. With them is Japan Aerospace Exploration Agency representative Tanigaki Fumiaki (second from right). BERNAMA PIC (Inset) A replica of UiTMSAT-1

space studies."

The UiTMSAT-1 was transported to the ISS on board the Space X Falcon 9 spacecraft, which was launched from Cape Canaveral, Florida, in the United

States, on June 29.

The cube-shaped nano-satellite, measuring 10cm, was built by UiTM students Syazana Basyirah Mohamad Zaki and Muhammad Hasif Azami, who

are studying in Japan, following a collaborative effort with the Kyushu Institute of Technology (KyuTech) under the "Joint Global Multi-Nation" programme.





# Nasa launches mission to 'touch the Sun'

> Fastest manmade object ever will fly directly through outer solar atmosphere

**TAMPA:** Nasa yesterday blasted off a US\$1.5 billion (RM6 billion) spacecraft towards the Sun on a historic mission to protect the Earth by unveiling the mysteries of dangerous solar storms.

The *Parker Solar Probe* soared skywards aboard a *Delta IV-Heavy* rocket from Cape Canaveral, Florida at 3.31am (3.31pm in Malaysia) yesterday.

Within two minutes of take-off, Nasa's ground control were able to confirm its trajectory and flight "looked good".

A voice could be heard saying: "A daring mission to shed light on the mysteries of our closest star."

Over the next seven years, *Parker* will fly directly through the Sun's roasting hot outer atmosphere in a bid to unlock some of the solar system's greatest secrets.

In particular, scientists hope it will provide information about solar winds and solar energy particles.

The craft will be the fastest man-made object ever and endure temperatures of more

than 1,300°C while looping round the Sun a planned 24 times while sending data back to Earth.

At some points, it will move to just 3.83 million miles from the star's broiling surface.

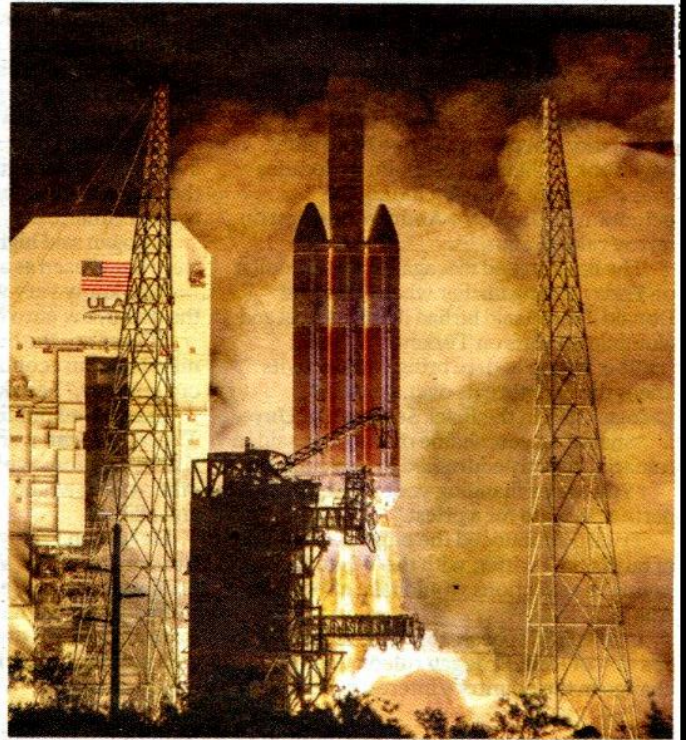
One of those watching the historic moment was Dr Eugene Parker, the 91-year-old scientist who first suggested the possibility of solar winds in 1958 and whom the craft is named after.

"All I can say is 'Wow, here we go, we're in for some learning over the next several years'," he said.

"It's a whole new phase and it's gonna be fascinating throughout ... and we're just waiting for the data now so the experts can get busy because there's a lot of data that will be coming in."

Hundreds of thousands more watched online with many sending messages of goodwill via social media.

The mission has been more than two decades in the making and has now been enabled by the breakthroughs in thermal



The Delta IV Heavy rocket with the Parker Solar Probe onboard launches from Cape Canaveral in Florida.

engineering that will allow the small probe to survive despite the blazing heat.

The successful launch followed an aborted take-off on Saturday morning. - The



**T**HERE is no shortage of predictions about how artificial intelligence (AI) is going to reshape where, how and if people work in the future.

But the grand work-changing projects of AI, like self-driving cars and humanoid robots, are not yet commercial products. A more humble version of the technology, instead, is making its presence felt in a less glamorous place: the back office.

New software is automating mundane office tasks in operations like accounting, billing, payments and customer service. The programs can scan documents, enter numbers into spreadsheets, check the accuracy of customer records and make payments with a few automated computer keystrokes.

#### IMPROVING TECH

The technology is still in its infancy but it will get better, learning as it goes. So far, often in pilot projects focused on menial tasks, artificial intelligence is freeing workers from drudgery far more often than it is eliminating jobs.

The bots are mainly observing, following simple rules and making yes-or-no decisions, not making higher-level choices that require judgment and experience.

"This is the least intelligent form of AI," said Thomas Davenport, a professor of information technology and management at Babson College.

But all the signs point to much more to come. Big tech companies like IBM, Oracle and Microsoft are starting to enter the business, often in partnership with robotic automation start-ups.

Two of the leading start-ups, UiPath and Automation Anywhere, are already valued at more than US\$1 billion. The market for the robotlike software will nearly triple by 2021, by one forecast.

"This is the beginning of a wave of A.I. technologies that will proliferate across the economy in the next decade," said Richard Wong, a general partner at Accel, a Silicon Valley venture capital firm, and an investor in UiPath.

#### BOTS

The emerging field has a klutzy name, "robotic process automation". The programs — often called bots — fit into the broad definition of artificial intelligence because they use ingredients of AI tech-

# The beginning of a wave

Artificial intelligence tiptoes into the workplace, writes Steve Lohr



Artificial intelligence is freeing workers from drudgery rather than eliminating jobs.

nology, like computer vision, to do simple chores.

For many businesses, that is plenty. Nearly 60 per cent of the companies with more than US\$1 billion in revenue have at least pilot programs underway using robotic automation, according to research from McKinsey & Company, the consulting firm.

The US companies and government agencies that have begun enlisting the automation software run the gamut. They include General Motors, BMW, General Electric, Unilever, Mastercard, Manpower, FedEx, Cisco, Google, the Defence Department and Nasa.

State Auto Insurance Companies in Columbus, Ohio, started its first automation pilot project two years ago. Today, it has 30 software programs han-

dling back-office tasks, with an estimated savings of 25,000 hours of human work — or the equivalent of about a dozen full-time workers — on an annualised basis, assuming a standard 2,000-hour work year.

#### INCREASING PRODUCTIVITY

Holly Uhl, a technology manager who leads the automation program, estimated that within two years, the company's bot population would double to 60 and its hours saved would perhaps triple to 75,000, nearly all in year-after-year savings rather than one-time projects.

Cutting jobs, Uhl said, is not the plan. The goal for the company, whose insurance offerings include auto, commercial and workers' compensation, is to increase productivity and State Auto's revenue with

limited additions to its head count, she said.

Uhl said her message to workers is: "We're here to partner with you to find those tasks that drive you crazy."

Rebekah Moore, a premium auditor at the company, had one in mind. Premium auditors scrutinise insurance policies and make recommendations for changing rates. They audit less than half of the policies, she said.

The policies that will not be audited then have to be set aside and documented. That step, she explained, is a routine data-entry task that involves fiddling with two computer programs, plugging in codes and navigating drop-down menus. It takes a minute or two. But because auditors handle many thousands of policies, the time adds up, to about an hour a day, she estimated. **NYT**



## 50,000 moved as floods hit Manila again

MANILA — More than 50,000 people have been evacuated to higher ground in the Philippine capital and nearby provinces as monsoon rain triggered fresh floods on Saturday night.

Marikina City in Metro Manila implemented forced evacuations affecting at least 21,000 people after its river, the catch basin of water flowing from the mountains, reached critical level.

At least 19,000 more people were moved in nearby Rizal province.

"The water level continues to rise," mayor Marcelino Teodoro said on radio on Saturday night, likening the flooding brought about by tropical storm Yagi to Typhoon Ketsana.

Families were on rooftops in Marikina waiting for rescue, according to Twitter posts of people seeking help.

The *South China Morning Post* reported that more than 9,000 people were evacuated in Quezon City, Valenzuela, Manila, Malabon and Pasig — all in the capital region.

Floodwaters in some areas were chest high, rendering roads impassable. The gates of several dams have been opened, the weather bureau said.

ABS-CBN News reported that train services were halted and schools shut. In Cavite province near Manila, a bridge used as a short cut to the tourist destination of Tagaytay collapsed, according to the report.

The rain will continue until today, the weather bureau said.



A trishaw carrying passengers moves through a flooded street after a downpour in Manila on Saturday night. — Picture by AFP



# Setback for Lombok tourism

## Lucrative sector faces uphill task to bounce back after quake

**SENGGIGI:** The powerful earthquakes that struck the Indonesian island of Lombok in recent weeks and killed some 400 people have sent holidaymakers fleeing, raising questions about how its lucrative tourism sector will bounce back.

Two deadly tremors a week apart – accompanied by dozens of aftershocks – wrought widespread damage on homes and livelihoods, striking during the crucial tourism season when hotels, local businesses and seasonal workers earn the bulk of their annual revenue.

In the Gili Islands, a popular backpacker and diving destination just off Lombok's northern coast, thousands of terrified tourists jostled on powder-white beaches for departing boats.

Lombok's airport was briefly crammed with holidaymakers rushing to get flights out, while the main tourist drag of Senggigi has been left deserted.

Alfan Hasandi depended on peak season tourists to see his family through the rest of the year. He and his brothers ran a now shuttered business on one of the islands, Gili Air, offering boat tickets, snorkelling, trekking and vehicle rentals, usually earning five million rupiah (RM1,400) a day during peak season.

"We hope we can rebuild ... but it's impossible as people are still traumatised," the 25-year-old said.

"Our homes have been completely destroyed ... we don't have money to rebuild, we need help."

Located in the one of the most tectonically active areas in the



**Nature's wrath:** Motorists riding past a road torn apart by the earthquake in Gangga, Lombok. — AP

world, Indonesians are used to natural disasters and its tourism industry has bounced back from catastrophes in the past.

But for Lombok, the quakes struck at an especially cruel time, when the island's tourism industry was on the way up.

Dubbed "The Island of a Thousand Mosques", Muslim-majority Lombok was always a path less travelled destination than its bigger neighbour Bali, the Hindu-majority island that forms the backbone of Indonesia's US\$19.4bil (RM79bil) tourist sector.

But it had been earmarked as one of Indonesian President Joko Widodo's "10 new Balis" with the regional government hoping to develop it into a major destination, especially in the booming halal tourism sector.

Senggigi would normally be bustling with visitors this time of year. Now boats lie idle along its main beach, restaurants and hotels have been shuttered on its main drag and the usual stream of touts offering services has dried up.

"We don't know whether we can operate again in September," Susi

Hayati, manager of the Asmara restaurant, said.

Ketut Jaya, manager of the nearby Holiday Resort Lombok, said it might be a month before they could start taking guest bookings again.

Just 19 of the resort's 189 rooms were occupied by hardy tourists who decided not to leave after the quake.

Authorities estimate that the damage unleashed by the two quakes on buildings and infrastructure on Lombok will exceed two trillion rupiah (RM561mil).

But while the post-quake images of destruction and departing tourists were dramatic, analysts predict tourism in the region will recover after short-term pain.

Indonesia's tourism sector has been robust in the face of major crises before, including the 2004 tsunami and the 2002 Bali bombings.

"The impact is not as big as a tsunami and the (Lombok) airport is still open," Tedjo Iskandar, a Jakarta-based travel analyst with TTC Travel Mart, said.

Asnawi Bahar, chairman of Indonesia's tour and travel agency association, described the earthquake as a "temporary shock" for the sector.

The number of visitors to Bali plummeted after the 2002 bombings, which targeted a nightclub and bar frequented by Western tourists. The attacks killed over 200 people and shocked the world.

But the island soon regained its status as one of the world's most popular holiday spots. — AFP



# Afghan farmers hit by worst drought in decades

**MAZAR-I-SHARIF:** After his wheat crop failed and wells dried up, Ghulam Abbas sold his animals and joined thousands of other farmers migrating to cities as Afghanistan's worst drought in living memory ravages the war-torn country.

A huge shortfall in snow and rain across much of the country over the normally wet colder months decimated the winter harvest, threatening the already precarious livelihoods of millions of farmers and sparking warnings of severe food shortages.

Like hundreds of farming families in Charkint village in the normally fertile northern province of Balkh, Abbas, 45, has moved with 11 family members to the provincial capital Mazar-i-Sharif to find work.

"I don't remember a drought as severe as this year's," said Abbas, who has been a farmer for more than three decades.

"We never had to leave our village or sell our animals because of a drought in the past."

As dry conditions and high temperatures persist, there are growing concerns about the spring and summer crops that will be harvested later this year.

This year, Afghanistan's wheat harvest is already expected to be the lowest since at least 2011, according to the Famine Early Warning Systems Network, set up by Usaid in 1985.

Faced with an estimated shortfall of 2.5 million tonnes of wheat this year, more than two million people could become "severely food insecure" and would be in "desperate need" of humanitarian assistance in the next six months, the United



**Every drop counts:** An Afghan boy and his father collecting water at a water pump in Sakhi village on the outskirts of Mazar-i-Sharif. — AFP

Nations has warned.

Tens of thousands of sheep and goats have died and many farmers have eaten the seeds for the next planting season, as rivers and wells dry up and pastures turn to dust.

"If the authorities and the international community don't step up to this challenge now, Afghanistan could face a calamity as we head into the next winter," UN Humanitarian Coordinator in Afghanistan Toby Lanzer said recently.

But thousands of farmers like Abbas have already given up hope, abandoning their land and moving their families elsewhere to survive.

The UN estimates that more than 70,000 people have been displaced to urban areas due to the drought.

"Three years ago it rained and snowed well in our village," Abbas said.

"The crops yielded well and I made more than 300,000 afghanis (RM16,892). But this year, even though I sold my sheep and goats, I made less than 100,000 afghanis (RM5,630)."

The lack of precipitation in Balkh has left most of its farming and grazing land parched, Zabiullah Zoobin, provincial director of crops and cultivation management, said.

More than 450,000 farmers and nomadic herders in the province have slaughtered their cattle, goats and sheep, or sold them for a pittance, he added.

"All villagers are wondering what to do with their livestock and how to keep them alive because that is all they have in life," Haji Sorab, a sheep and goat herder in Dawlat Abad district, said.

Agriculture is the backbone of the Afghan economy. Nearly 15 million people are employed in the sector in the 20 provinces worst affected by the drought, according to the UN. — AFP

## Heat wave gets flamingos in the mood

**LONDON:** A British conservation charity says record-breaking temperatures have encouraged a rare flock of Andean flamingos to lay eggs for the first time since 2003.

The Wildfowl and Wetlands Trust said six of the exotic birds laid nine eggs, all of which were infertile.

The charity's reserve in Gloucestershire in southwest England then gave the Andean flamingos eggs from near-relatives, Chilean flamingos, to look after.

Mark Roberts, the aviculture manager at the Slimbridge reserve, said: "With the Andeans in full parenting mode, we gave them Chilean chicks to bring up as their own. It's great motivation and enriching for the birds."

The Andeans are some of the oldest animals at the trust's Slimbridge reserve. Some arrived in the 1960s as adults. The birds are long-lived and can breed into old age. — AP



**Burning bright:** Drivers stopping to watch the flames from the Holy Fire outside Glen Ivy Hot Springs in Corona, California. — AFP



## Air quality alerts issued over California wildfires

**LAKE ELSINORE (United States):** Authorities battling massive wildfires in large swathes of California issued mandatory evacuation orders and health warnings over the worsening air quality as the flames grew ever closer to populated areas.

After almost a month of wildfires, the National Weather Service warned that satellite images showed "widespread smoke" drifting from the fires into western and central Canada before heading back south in the US Northern Plains.

The Kaibab National Forest service in neighbouring Arizona

warned that "wildfires across the West are creating regional haze".

But it was northern California where most air quality alerts were being issued, with warnings of "unhealthy conditions" for vulnerable groups such as the very young and old.

The Mendocino Complex, made of two separate blazes, has been declared the most destructive fire in the state's history.

Its largest blaze, the Ranch Fire, was only 53% contained compared to 87% for its twin River Fire.

Further north, the Carr Fire was declared 51% under control, after

scorching 73,000ha of land and claiming the lives of three firefighters and five civilians, making it California's third deadliest fire ever.

More than 14,000 firefighters, including reinforcements from as far away as Australia and New Zealand, have fanned out across the state to stop the multitude of infernos.

Some inmates even assisted in the effort. The Miramonte jail camp made a fire line to stop the advancing Holy Fire from consuming homes in the area.

The man accused of deliberately starting the latest fast-moving blaze

faces life in prison if convicted of arson and other charges.

Forrest Gordon Clark, 51, stands accused of starting the Holy Fire, which in four days has burned more than 7,000ha of Cleveland National Forest. It is still spreading.

Prosecutors say Clark started the fire, which is only five per cent contained, with the intention of causing damage to others and burning a forest.

He has also been charged with threatening neighbours and resisting arrest. He faces sentences ranging from 10 years to life imprisonment. — AFP