

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>Nanosafety programme to help local nanotech entrepreneurs</u> Deputy Minister of Energy, Science, Technology, Environment and Climate Change Isnaraissah Munirah Majilis said entrepreneurs who are interested to commercialise the results of local nanotechnology can also get help in their applications for Mestecc funds.	The Malaysian Insight	Klik pada tajuk berita
2.	<u>Ministry working on generating interest in nano tech</u> Its deputy minister, Isnaraissah Munirah Majilis, told Parliament today said her ministry is working on an awareness programme with with government agencies to get more companies involved and interested in nanotechnology.	The Edge Markets	Klik pada tajuk berita
3.	<u>NNC implements Nanosafety programme to help entrepreneurs produce safe products</u> Deputy Minister of Energy, Science, Technology, Environment and Climate Change (MESTECC) Isnaraissah Munirah Majilis said entrepreneurs who are interested to commercialise the results of local nano technology can also get help in their applications for the MESTECC funds.	Borneo Post	Klik pada tajuk berita
4.	<u>Re, energy mix TNB's way to tackle escalating cost</u> Kuala Lumpur: The Energy, Science, Technology, Environment and Climate Change Ministry is targeting to grow renewable energy's (RE) proportion of generation mix from the current two per cent to 20 per cent by 2025-2030.	Daily Express	Klik pada tajuk berita
5.	<u>TNB tingkat tenaga boleh diperbaharui</u> Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC) menyasar untuk meningkatkan saranan tenaga boleh diperbaharui bagi gabungan tenaga	Utusan Malaysia	Rujuk lampiran 1

	daripada dua peratus kepada 20 peratus bagi tempoh 2025 hingga 2030.		
6.	<p><u>Waste dump pollutes river</u></p> <p>“The land owners were allocated the plots under a scheme by the state government for agricultural purposes,” he said, adding that his office took up the issue with the district council and Department of Environment (DOE).</p>	The Star	Rujuk lampiran 2
7.	<p><u>Re-think teaching of science</u></p> <p>There have been disturbing reports about the decline in the number of students doing science in schools. Though the government has earlier set the ratio of science to arts students at 06:40 as a matter of policy, the actual ratio is much lower.</p>	The Star	Rujuk lampiran 3

TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
8.	<p><u>Acquire knowledge, learn about Artificial Intelligence — Dr M</u></p> <p>If there was one main take away from the question and answer session between the Malaysian diaspora here and Prime Minister Tun Dr Mahathir Mohamad, it is the need to continuously acquire knowledge.</p>	The Malaysian Insight	Klik pada tajuk berita
9.	<p><u>U.K. ignites interest in 3rd national car</u></p> <p>Black, who is based in Singapore, was here to lead an Artificial Intelligence (AI) trade delegation to meet Communications and Multimedia Minister Gobind Singh Deo and senior representatives of Malaysia Digital Economy Corp, Kuala Lumpur Business Club and the British Malaysian Chamber of Commerce.</p>	New StraitsTimes	Klik pada tajuk berita
10.	<p><u>AirAsia launches fully digitalised ground handling control centre</u></p> <p>"This is just step one, we're going to start putting in artificial intelligence and machine learning,</p>	The Star Online	Klik pada tajuk berita

	which will aid us tremendously in reducing turnaround times and cost," Fernandes said.		
11.	<u>142 kawasan berpotensi banjir kilat</u> KERAJAAN negeri Selangor mengenalpasti 142 kawasan berpotensi mengalami banjir kilat akibat fenomena Monsun Timur Laut yang dijangka berakhir Mac depan.	Harian Metro	Klik pada tajuk berita
12.	<u>34 penduduk dipindahkan akibat banjir kilat</u> Seramai 34 orang dari sembilan keluarga di Kampung Juntai, Simpang Durian dekat sini terjejas akibat banjir kilat kira-kira pukul 11 pagi tadi.	Utusan Malaysia	Klik pada tajuk berita
13.	<u>Banjir Hulu Langat: Jumlah mangsa meningkat</u> Jumlah mangsa banjir di Hulu Langat dekat sini meningkat kepada 124 orang berbanding 60 orang hari ini.	Utusan Malaysia	Klik pada tajuk berita
14.	<u>Banjir di KL, ini puncanya...</u> Banjir kilat yang berlaku di Kuala Lumpur, semalam, disebabkan taburan hujan luar biasa dan sistem perparitan tersumbat akibat kerja-kerja pembinaan.	Sinar Harian	Klik pada tajuk berita
15.	<u>Banjir di Lipis semakin pulih</u> Banjir di Lipis semakin pulih apabila sebuah pusat pemindahan sementara (PPS) di daerah itu ditutup pada 4 petang tadi.	Sinar Harian	Klik pada tajuk berita
16.	<u>Lima rumah terjejas banjir kilat</u> JELEBU - Hujan lebat selama tiga jam lewat petang kelmarin, menyebabkan banjir di Kampung Petaseh di sini sehingga menjejaskan laluan jalan raya utama dan lima rumah penduduk.	Sinar Harian	Klik pada tajuk berita
17.	<u>Selaras agihan bantuan banjir</u> PASIR PUTEH - Pihak tertentu atau individu yang mahu membantu mangsa banjir perlu merujuk Pejabat Kebajikan Masyarakat setempat supaya agihan dapat diselaraskan.	Sinar Harian	Klik pada tajuk berita

18.	<p><u>Penuntut USIM bina rumah solar di Dubai</u></p> <p>NILAI: Bekerja di tapak pembinaan lebih 14 jam sehari adalah antara cabaran dihadapi 35 penuntut Universiti Sains Islam Malaysia (USIM) yang menyertai Pertandingan Decathlon Solar Timur Tengah (SDME) 2018 di Dubai.</p>	Berita Harian	Klik pada tajuk berita
19.	<p><u>Kerajaan PH digesa segera tutup Lynas</u></p> <p>"Sebaliknya mereka bertindak membelakangkan kepentingan negara dan rakyat dengan membantu dan memudahkan syarikat asing dalam melakukan kesalahan. Tiada alasan langsung untuk mengekalkan operasi Lynas yang menghasilkan lebih banyak bahan buangan yang bahaya kepada negara," kata Hon.</p>	Malaysiakini	Klik pada tajuk berita
20.	<p><u>Isu kilang plastik: PBT perlu diberi kuasa</u></p> <p>Kerajaan negeri Pulau Pinang semalam memohon agar pihak berkuasa tempatan (PBT) diberi kuasa untuk mengambil tindakan terhadap syarikat atau kilang-kilang memproses sisa plastik yang tidak sah di negeri ini.</p>	Kosmo!	Rujuk lampiran 4
21.	<p><u>Detector for babies left in cars wins innovators challenge</u></p> <p>A prototype to prevent infant deaths after being left in vehicles clinched the top prize at the Sime Darby Young Innovators Challenge (SYDIC) 2018 National Championship.</p>	New Straits Times	Rujuk lampiran 5
22.	<p><u>Maths made easy</u></p> <p>A calculator makes life simpler as using fingers and toes to count only goes so far. However, not all topics in mathematics are grounded in formulas which can be solved with a calculator, for example transformation.</p>	New Straits Times	Rujuk lampiran 6
23.	<p><u>Kesimbangan urus alam sekitar, sosioekonomi</u></p> <p>Pembangunan pasarana awam, pendidikan, rumah mampu milik dan pekerjaan pula berhasrat membina kelestarian sosial.</p>	Berita Harian	Rujuk lampiran 7

ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
24.	<u>Balaroa bina hidup baharu selepas ditelan bumi</u> Hari ini genap 44 hari kelurahan Balaroa di Kota Palu ditelan likuifaksi susulan gempa bumi dan tsunami pada Jumaat 28 September lalu.	Sinar Harian	Klik pada tajuk berita
25.	<u>China vows to 'open up economy'</u> Multilateralism under threat from economic pressures, says Singapore PM.	New Straits Times	Rujuk lampiran 8
26.	<u>31 mayat rentung ditemui</u> Angka kematian akibat kebakaran hutan yang marak di negeri California meningkat kepada 31 orang kemarin selepas enam lagi mayat mangsa ditemui.	Kosmo!	Rujuk lampiran 9
27.	<u>Ten ways climate change can make wildfires worse</u> Other factors have also fuelled an increase in the frequency and intensity of major fires, including human encroachment on wooded areas, and questionable forest management.	Malaymail	Rujuk lampiran 10
28.	<u>Commanding a robot on the frigid Red Planet</u> Some 126 million kilometres from Earth, alone on the immense and frigid Red Planet, a robot the size of a small 4x4 wakes up just after sunrise. And just as it has every day for past six years, it awaits its instructions.	The Star	Rujuk lampiran 11
29.	<u>Fierce California winds whip fires as toll rises to 31</u> The death toll from wildfires raging in the California rose to 31 after six more people were found killed in what was poised to become the deadliest wildfire in state history.	Malaymail	Rujuk lampiran 12
30.	<u>Six more dead in California wildfires</u> As wildfires continued to rage on both ends of California, officials released another grim statistic: six more dead in a swath of Northern	The Star	Rujuk lampiran 13



	California wiped out by fire, raising the death toll there to 29. It matched California's record for deaths in a single fire.		
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LAMPIRAN 1

UTUSAN MALAYSIA (BISNES): MUKA SURAT 47

TARIKH: 13 NOVEMBER 2018 (SELASA)

LOJI janakuasa
TNB di manjung,
Perak.

TNB tingkat tenaga boleh diperbaharui

■ KUALA LUMPUR 12 NOV.

KEMENTERIAN Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC) menyasar untuk meningkatkan saranan tenaga boleh diperbaharui bagi gabungan tenaga daripada dua peratus kepada 20 peratus bagi tempoh 2025 hingga 2030.

Ini menjadi petanda baik bagi industri bekalan elektrik (ESI), yang kini bergelut dengan peningkatan harga arang batu global memandangkan akhirnya, sasaran baharu ini mungkin membolehkan tarif ditetapkan pada kadar yang lebih stabil pada masa depan, menurut penganalisis.

Sebanyak 53 peratus daripada tenaga elektrik Malaysia dijana oleh arang batu, 42 peratus oleh gas asli dan bakinya oleh hidro dan tenaga boleh diperbaharui.

Harga semasa arang batu bergerak melebihi AS\$100 (RM417) satu tan, meningkat lebih 100 peratus selepas mencecah paras terendah dalam tempoh 10 tahun pada 2016 (di bawah AS\$50 (RM218) satu tan).

Peningkatan sejak Julai lepas telah menjelaskan kos pen-



Permintaan arang batu bagi dua tahun akan datang dijangka kekal stabil pada sekitar paras semasa."

PAKAR EKONOMI TENAGA
KANAN ABN AMRO
HANS VAN CLEEF

janaan ESI kerana arang batu diimport 100 peratus, dengan lebih 60 peratus dibeli dari Indonesia dan bakinya dari Australia, Afrika Selatan dan Rusia.

"Permintaan arang batu bagi dua tahun akan datang dijangka kekal stabil pada sekitar paras semasa," kata Pakar Ekonomi Tenaga Kanan di ABN Amro, Hans van Cleef.

"Walaupun laporan berita menunjukkan bahawa permintaan arang batu akan meningkat dalam tempoh terdekat, namun realitinya permintaan itu kekal stabil bagi tahun-tahun akan datang," katanya.

Bagi menghadapi cabaran berkenaan, industri sebenarnya telah bersedia dengan mengambil langkah beberapa tahun ke hadapan menerusi kecekapan penjaanaan tenaga yang lebih baik melalui loji janakuasa arang batu.

Semua loji janakuasa arang batu baharu kini menggunakan teknologi *ultra-supercritical* (USC) yang membakar arang batu dalam kuantiti yang lebih kecil namun menjana lebih tenaga, serta mematuhi piawaian pelepasan.

Manjung 4 dengan 1,000 MW milik Tenaga Nasional Bhd., yang memulakan ope-

rasi pada 2015, merupakan loji janakuasa arang batu USC pertama di Asia Tenggara.

Ia boleh menghasilkan elektrik yang mencukupi untuk dua juta rumah dengan pengurangan tiga peratus penggunaan arang batu.

Melangkah ke hadapan, kerajaan telah menyediakan beberapa mekanisme untuk meningkatkan sumbangan tenaga boleh diperbaharui dalam penjaanaan kuasa.

Ini termasuk Skim Pemetaan Tenaga Bersih (NEM), loji solar berskala besar (LSS), Skim Pembiayaan Suku Hijau dan mekanisme Tarif Galakan.

TNB, syarikat utiliti nasional komited untuk menyokong agenda tenaga boleh diperbaharui kerajaan.

Sebagai sebahagian daripada Pelan Strategik 10 tahunnya, TNB bercita-cita untuk menjadi peneraju ASEAN dalam sektor tenaga boleh diperbaharui ketika permintaan terhadap tenaga hijau melonjak.

Syarikat itu telah memulakan LSS terbesar di negara ini melalui projek 50 megawatt (mW) di Kuala Langat, Selangor dan beberapa usaha sama berkaitan stesen janakuasa biomas dan biogas.

Usaha terbaru TNB adalah melalui anak syarikat tenaga boleh diperbaharui yang mana syarikat itu merancang untuk menawarkan pembiayaan pakej penjaanaan sendiri bagi panel solar fotovolta (PV) kepada pelanggan kediaman menjelang akhir tahun ini.

Pakej terbahit telah ditawarkan kepada pelanggan komersial dan industri sebelum ini.

Tumpuan jangka pendek segera kerajaan adalah untuk meneroka projek yang boleh diperbaharui berskala besar yang berdaya maju di bawah tarif yang sama seperti loji berasaskan bahan api fosil.

Ini penting untuk mengekalkan harga yang rendah dalam memastikan kemampuan tarif elektrik.

Melalui dorongan yang kuat oleh MESTECC serta sokongan kukuh TNB dan industri, negara ini sedang bergerak dalam keadaan baik ke arah memenuhi janji kepada Konvensyen Rangka Kerja Pertubuhan Bangsa-bangsa Bersatu mengenai Perubahan Iklim untuk mengurangkan pelepasan gas rumah hijau daripada KDNK sebanyak 45 peratus menjelang 2030. — BERNAMA

LAMPIRAN 2
THE STAR (NEWS): MUKA SURAT 3
TARIKH: 13 NOVEMBER 2018 (SELASA)



Construction waste being disposed at the vacant plot in Kuala Selangor.

Waste dump pollutes river

Illegal dumping activity angers Kuala Selangor villagers who depend on Sungai Buloh to catch fish and shrimp for their livelihood

By ELAN PERUMAL
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THE Kuala Selangor District Council seized several trucks, including compactors, for illegally disposing waste at vacant plots of land in Kampung Seri Sentosa, Kuala Selangor.

The operator of the illegal dumpsite was also issued a stop-work order and fined for its operations, said a council official.

Following a tip-off from the public, he said the council's enforcement team raided the area and found trucks disposing solid waste.

"We will pursue with legal action if the contractors continue to dispose waste at the site."

He added that the landowners, who were each allocated 0.2ha plot by the Selangor government five years ago, allowed dumping

of construction waste in the area with the intention to raise the ground level because the site was situated below sea level.

The area is also prone to flash floods.

"We don't object to them dumping construction waste, but not solid waste that includes domestic and industrial waste," he said.

StarMetro found that a company which also owned a piece of land in the area collects between RM100 and RM200 per truck for dumping waste there.

Villagers said the illegal activity was ongoing for more than two years, causing air pollution and foul stench in the area.

Jeram assemblyman Mohd Shaid Rosli said the dumpsite also polluted Sungai Buloh.

The river, he said, was situated not far from the dumpsite and leachate from the dumpsite

flowed into the river.

"The river gets contaminated and this affects the ecological condition of the riverine."

"Villagers earn a living from catching fish and shrimp from the river," he said.

He added that he was worried about their livelihood due to the pollution.

Mohd Shaid said the villagers made numerous complaints to his office and his investigations showed that the operator had no licence to operate the dumpsite and were unlawfully using the vacant land.

"The land owners were allocated the plots under a scheme by the state government for agricultural purposes," he said, adding that his office took up the issue with the district council and Department of Environment (DOE).



Mohd Shaid says leachate from the dumpsite has polluted Sungai Buloh.

LAMPIRAN 3
THE STAR (VIEWS): MUKA SURAT 29
TARIKH: 13 NOVEMBER 2018 (SELASA)

Re-think teaching of science

THERE have been disturbing reports about the decline in the number of students doing science in schools. Though the government has earlier set the ratio of science to arts students at 60:40 as a matter of policy, the actual ratio is much lower.

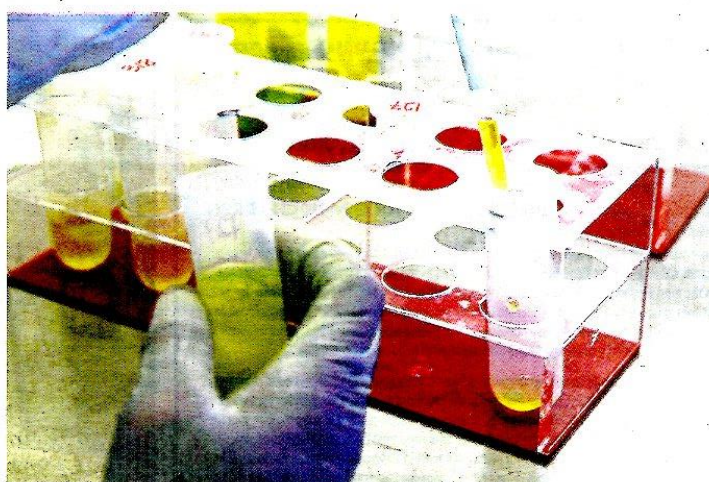
Some are saying it may be more like 20:80 in favour of the arts. At the rate things are shaping up, it will be a tough challenge for the government to increase the number of research scientists and engineers (RSEs) in the country. The government target of 60 RSEs per 10,000 members of the national workforce by 2020 does not look achievable.

This can have serious repercussions for the country moving forward. This is because scientific and technological innovation has been identified as one of the key features of Malaysia's development in the coming years. The handling of Science, Technology, Engineering and Mathematics (STEM) subjects calls for serious rethinking. How can we address this?

Ask any student what would be their preferred profession. Or for that matter, ask any parent what they want their children to be. There is a good chance that neither will recommend a career in science. They would instead rather go for finance, communication, legal or business courses. Not science. Why is this so? Why is science unattractive?

Well, experts have offered many reasons for the declining interest in science. Top of the list is the fact that a career in science does not pay as well. It is not lucrative. Scientists, for example, do not stand a chance of becoming CEOs of big corporations. But studies have also shown there is more to it than that. One factor contributing to the growing disinterest in science is that science is widely viewed as a complicated course. It is uninteresting and difficult to master.

But the question is why is it complicated now and not previously? In the past, there was no difficulty getting students to join the science stream. In fact, in the early years, the country was able to attract



many to study science. Some were disappointed when told they did not qualify to join the science class. So is it the teaching methods that are putting students off science nowadays? Or is it to do with the facilities for science?

Many countries have introduced new approaches to teaching science. In France, for example, their inquiry based science education (IBSE) is proving to be a hit among students. China is also implementing its own IBSE model. They call it the "handsbrain" programme. In the United States, their K12 model has also shown positive signs of success.

All such programmes are based on the use of practical approaches to explain and describe scientific theories and phenomena. Which is why recent reports of some schools in Malaysia not having suitable science laboratories are very disturbing. This does not augur well for teaching science. It can further negate the national target to increase the number of scientists to support the nation's transformation agenda.

Under the government's economic restructuring programme, as outlined in the recent review of the 11th Malaysia Plan, STEM has been identified as a key element of the

nation's agenda to venture into the digital economy. This cannot be achieved without the necessary critical mass of scientific talent. With declining interest in pursuing science as a career, the country may face difficulties competing in a global economy that is increasingly led by science and innovation.

Already the plantation sector has expressed concern over the lack of human capital in agriculture, especially agronomists, microbiologists and fertiliser chemists. An acute shortage in taxonomists has also been reported. Taxonomists have important roles to play in developing and harnessing the country's biodiversity wealth. Even in the area of mathematics, there are very few takers. Yet the command of mathematics is essential in almost all fields of science. In the developed countries, professionals in biotechnology, bioinformatics, ICT and computational biology have good grounding in mathematics.

It is high time we urgently resolve this talent issue in science. It is encouraging to know that the government has recently announced a review of the country's education policy. In relation to science, the review should seriously look at the policy to train science teachers in the country.

Disturbing:
Recent reports of some schools in Malaysia not having suitable science laboratories are very disturbing and does not augur well for the teaching of science. — Bloomberg

Often, the teaching of science is not the preferred vocation of many would be teachers. It is more like their last choice.

Some take up the option while waiting for a better job opportunity. As a result, there have been rampant cases of teachers not taking classroom teaching seriously. It has been widely reported that some teachers even do not cover the full syllabus in class. Instead, students have been persuaded to attend expensive tuition classes to make up whatever has been left out in the classroom. Such practice gives a bad name to those teachers who are more committed and passionate about teaching.

We may want to take a cue from some countries that have been more successful in attracting the best brains to take up the teaching of science.

Our neighbour Singapore has successfully attracted top students to take up the teaching of science by offering them truly lucrative rewards. Apart from the better pay, those who join the programme are also given opportunities to pursue further studies, up to the PhD level.

Dr Ahmad Ibrahim
Fellow, Academy of Sciences
Malaysia

LAMPIRAN 4
KOSMO! (NEGARA): MUKA SURAT 17
TARIKH: 13 NOVEMBER 2018 (SELASA)

Isu kilang plastik: PBT perlu diberi kuasa

GEORGE TOWN - Kerajaan negeri Pulau Pinang semalam memohon agar pihak berkuasa tempatan (PBT) diberi kuasa untuk mengambil tindakan terhadap syarikat atau kilang-kilang memproses sisa plastik yang tidak sah di negeri ini.

Pengerusi Jawatankuasa Kebajikan, Masyarakat Penyayang dan Alam Sekitar negeri Phee Boon Poh berkata, pada masa ini, PBT tidak diberikan kuasa berkenaan dan lambakan kilang-kilang memproses sisa plastik juga semakin berleluasa.

"Setakat ini, apa yang boleh pihak berkuasa lakukan apabila mengeta-



KERAJAAN Pulau Pinang memohon PBT diberi kuasa untuk mengambil tindakan terhadap syarikat atau kilang memproses sisa plastik tidak sah di negeri itu. - Gambar hiasan

hui berlakunya salah laku (pemprosesan tidak sah) hanyalah dengan memberi

notis kepada operator-operator kilang.

"Selain itu, untuk mem-

berhentikan operasi kilang terabit ini adalah dengan membawa tindakan itu ke mahkamah tetapi beberapa kes telah ditangguhkan selama dua atau tiga tahun," katanya kepada *Bernama* di luar persidangan Dewan Undangan Negeri (DUN) Pulau Pinang di sini semalam.

Terdahulu, semasa menjawab soalan tambahan H'ng Mooi Lye (PH-Jawi) dan Lee Khai Loon (PH-Machang Bubok) pada sidang DUN itu berhubung kilang sisa plastik, Boon Poh berkata, ketika ini hanya 27 permohonan Lesen Import yang diluluskan dan dikeluarkan oleh agensi persekutuan.

LAMPIRAN 5
NEW STRAITS TIMES (SCHOOL NEWS): MUKA SURAT 49
TARIKH: 13 NOVEMBER 2018 (SELASA)

Detector for babies left in cars wins innovators challenge

A prototype to prevent infant deaths after being left in vehicles clinched the top prize at the Sime Darby Young Innovators Challenge (SDYIC) 2018 National Championship.

The prototype was developed by Team Smart e-Saver comprising Joseph Chung, 16, and Thomas Brabbs, 15, from Tunku Putra International School, Kuching, Sarawak.

This is Chung's second win at the championship. Chung won the SDYIC 2016 National Championship with the Robin Food app idea that is now a full-fledged app connecting supermarkets and restaurants to food banks which distributes excess food to the needy.

Team Smart e-Saver's invention beat 14 other prototypes created by teams from schools across seven states to win the coveted top spot.

The team designed the prototype after being moved by news articles on babies dying in vehicles after being left by their parents. The invention uses a sensor to detect babies left in vehicles that are switched off and sends a signal to the caretaker's smartphone that the baby is left in the car.

They won a YSD innovation grant up to RM50,000 to develop and upscale their prototype to a viable business solution and a regional educational visit.

The winning teams were announced at



Team Smart e-Saver with a prototype of their invention.

the #MyDigitalMaker Fair at Axiata Arena in Bukit Jalil, Kuala Lumpur, which was attended by Yayasan Sime Darby (YSD) acting chairman Tan Sri Datuk Seri Dr Wan Mohd Zahid Mohd Noordin.

Wan Mohd Zahid said the innovation challenge provides a platform for students from all over Malaysia to sharpen their thought processes relevant to innovation and empower them to develop innovative solutions for

real-world problems, a much needed skill in the country.

He commended the strong support extended by 44 secondary schools in Sabah and Universiti Malaysia Sabah (UMS) to participate in the state-level competition towards competing in SDYIC 2018.

He said that out of the total 820 participating teams in the state-level Young Innovators Challenge (YIC) 2018

competitions held nationwide, a total of 150 teams hailed from schools all over Sabah, supported by Universiti Malaysia Sabah (UMS).

"The students came from as far as Semporna to participate in the Sabah state-level competition held in Kota Kinabalu. Some had even raised their own funds to cover their travelling expenses to attend the state-level competition," he said.

"I am impressed by their passion to take part in a competition which inculcates innovative thinking and skills in students. This shows the extent of Sabah leadership in education, which has created a culture of earnest determination in wanting to achieve the highest standards in education development, especially towards innovation and problem-solving," he added.

"This is a positive indication that the education system is moving in the right direction to prepare talent for the nation's future labour market. I am proud to state that we at Sime Darby are doing our part to empower youths to seize opportunities and gain knowledge that will help put them on the path to success," he said.

In the SDYIC 2018, participants had the opportunity to meet industry experts, Science, Technology, Engineering and Mathematics (STEM) professionals and other enthusiasts in the field of innovative technology who provided knowledge, solutions, information on market validation and entrepreneurial skills to the students.

The SDYIC 2018 is part of MDEC's #mydigitalmaker movement, a joint public-private-academia initiative to transform Malaysian youth from digital users to producers in the digital economy.



LAMPIRAN 6
NEW STRAITS TIMES (SCHOOL NEWS): MUKA SURAT 31 & 32
TARIKH: 13 NOVEMBER 2018 (SELASA)

SCHOOL TIMES

ISSUE 195

TEENAGERS AND VALUES
» PAGE 47

Teenagers and values
Ethics is the right way
Concept of right and
wrong is not right and
wrong.

THE PEOPLE OF DELI
» PAGE 50



Maths made easy

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SM Sains Tuanku Munawir, Seremban (SASER) students Kamarul Adamin Kamarulzaman, Haziq Mirza Mohamed Bustaman, Muhammad Najmi Zulkiflee, Muhammad Rosyidin Nasir, Dhillon Dhas Zhao and Ahmad Mulhim Akmal Azim have come up with their innovation called SASER Scientific Calculator with a transformation mode to help handle such questions.

Without the use of a calculator, the process of transformation in mathematics (rotation, translation, reflection and enlargement) involves high imagination and visualisation skills to draw various shapes.

are keyed in the mode, helps students to determine the image coordinates accurately.

Transformation questions require the ability to draw and think outside the box, says Ahmad Mulhim.

Many students, including us, have difficulty in answering transformation questions.

For other tasks, we use the calculator and get the answer right away. But with transformation, it's a bit easy.

» MORE ON PAGE 32

Mode of success

FROM PAGE 31

SASER team coordinator and mathematics teacher Ahmad Yasir Mustafa Bakri is no stranger to creativity, having competed in several innovation competitions.

"At these contests, the participants were focused on science and robotics. What sets us apart is that we have invented something in the area of mathematics that will assist many students who struggle in the subject."

"We have enhanced the functions of the calculator with the mode — it's simple but impactful," said Ahmad Yasir.

Before proceeding with the project, the team analysed examination results for the mathematics subject and found that most students failed to answer transformation questions.

"Students told the team that they found it hard to work out the right steps to solve the questions."

"Secondary school students learn the transformation topic from Form Two. Matriculation students and undergraduates can benefit from our invention as well," said Ahmad Mulhim.

Muhammad Rosyidin learnt programming from scratch to work on the project.

"I am interested in technology. The Internet has helped me a lot in getting the hang of programming languages and Arduino (IDE) software. I am inspired by the many teenagers who have advanced digital knowledge."

The team had difficulties in assembling the prototype due to time constraint in meeting the deadline for a competition.

"It took a lot of time through trial and error. We made a lot of mistakes as well. But with teamwork, we finished the project on time," said Dhillon.

The current prototype was fully funded by the students. However, a local electronics company has shown interest in sponsoring a better prototype," added Ahmad Yasir.

"I have great hopes for this project. If the calculator penetrates the market, it will change how the Malaysian Examinations Syndicate sets examination questions."

Eventually, this innovation could lead to a change in curriculum.

Team presenter Ahmad Mulhim added that he has acquired the ability to speak fluently and confidently after taking part in the project.

"I have to play my part and deliver the message clearly. If I am unable to do that, people are not going to appreciate our innovation. What we have done is something big and if I don't emphasise its importance, they will think that it's nothing special."

In April, the team emerged champion in the International Engineering Invention Innovation Exhibition 2018 at Universiti Malaysia Perlis.

It also won The Best Young Mathematician award at the International Young Scientist Innovation Exhibition 2018 in Kuala Lumpur.

It took part in Pertandingan Inovasi STEM (Science, Technology, Engineering and Math) at the state level and will represent Negeri Sembilan at the national level this month.



The first SASER Scientific Calculator prototype. The cover picture shows (from left) Kamarul Adamin Kamarulzaman, Haziq Mirza Mohamed Bustaman, Muhammad Najmi Zulkiflee, Muhammad Rosyidin Nasir, Dhillon Dhas Zhao and Ahmad Mulhim Akmal Azim.



Ahmad Mulhim Akmal Azim explaining the innovation to a visitor.



Students at the innovation booth during STEM Carnival 2018.



LAMPIRAN 7

BERITA HARIAN: MUKA SURAT 10 & 11
TARIKH: 13 NOVEMBER 2018 (SELASA)

Keseimbangan urus alam sekitar, sosioekonomi

**Dari
Kaca
Mata**



**Prof Emeritus Datuk
Dr Ibrahim Komoo**

Felo Penyelidik Utama, Institut Alam Sekitar dan
Pembangunan (LESTARI), Universiti Kebangsaan
Malaysia & Pengerusi Warisan Negara

mengurus tanah dengan menggunakan akta Persekutuan kurang mendapat sambutan. Atas keprihatinan tempatan, beberapa negeri telah mewujudkan enakmen taman negeri bagi memperkenalkan kawasan perlindungan tersendiri.

Saya syokkan kerajaan Persekutuan bekerjasama dengan kerajaan negeri untuk menyediakan Daftar Warisan Alam Kebangsaan, pada masa yang sama membenarkan kerajaan negeri mewartakan kawasan berkaitan menggunakan enakmen masing-masing.

Daftar Warisan Kebangsaan

Kerajaan Persekutuan perlu memperkukuhkan Daftar Warisan Kebangsaan melalui pelbagai inisiatif pemuliharaan dan perlindungan pada peringkat negeri seperti Landskap Berpandangan Indah, Taman Negeri, Santuari Hidupan Liar, Monumen Geologi dan Tapak Terpelihara.

Sokongan kewangan dan kepakaran boleh diberikan secara berterusan dan pemilihan untuk calon Tapak Warisan Dunia (WHIS), Man and Biosphere Reserve (MAB) dan UNESCO Global Geoparks (UGG) boleh dilakukan berasaskan nilai warisan, kualiti pengurusan dan komitmen tinggi kerajaan negeri.

Belanjawan 2019 juga memperkenalkan Dana Pembiayaan Pembangunan Lestari (DPPL) berjumlah RM1 bilion bagi menyokong Agenda 2030 dengan 17 SDG bertujuan menyelamatkan bumi daripada terus mengalami purnasanaan akibat kerakusan manusia.

Walaupun warga dunia telah mengenal pasti 17 SDG yang perlu diberikan perhatian, negara perlu membuat analisis terperinci dan hanya memilih beberapa yang kritikal dan memerlukan tindakan segera.

Jika diteliti dengan lebih mendalam, Malaysia telah lama mengamalkan sebahagian besar daripada SDG ini, terutama matlamat satu hingga sembilan dan 17, iaitu agenda berkaitan pertumbuhan ekonomi dan sosial.

Kerajaan baharu sedang giat memperbaiki matlamat 16 (keadilan, keamanan dan memperkukuh institusi).

Matlamat kritikal yang masih perlu tindakan proaktif ialah 10 hingga 11 berkaitan kesejahteraan komuniti dan 12 hingga 15, iaitu hal ehwal alam sekitar seperti penggunaan sumber asli, perubahan iklim dan warisan tabii.

• Lihat Ms.11

Rancang pemuliharaan, pembangunan lestari

◀ Dari MUKA SEPULUH ▶

Dasar pembangunan negara masa ini ialah dasar terfokus kepada pembangunan ekonomi dan sosial. Tumpuan kepada menjaga kekayaan negara serta meningkatkan pendapatan warga penting daripada perspektif kelestarian ekonomi.

Pembangunan prasarana awam, pendidikan, rumah mampu milik dan pekerjaan pula berhasrat membina kelestarian sosial.

Begitupun, kelestarian ekonomi dan kesejahteraan sosial mampu

nyai hubungan intim dengan kelestarian alam sekitar. Dasar pembangunan ekonomi dan sosial tidak mungkin tercapai jika perhatian tidak diberikan kepada pembangunan alam sekitar.

Kehilangan sumber

Pembangunan lestari menuntut dasar payung yang bersifat holistik dan inovatif, berasaskan pemikiran bersifat syumul dan pendekatan pengurusan multi-sektor. Pemikiran pembangunan semasa amat taasub kepada keperluan memperkasa ekonomi dan kedudukan politik.

Kepentingan pembangunan

alam sekitar yang cirinya bersifat 'penting tetapi tidak segera' lazimnya diabaikan.

Oleh itu, isu pemuliharaan alam sekitar, perlindungan warisan alam, kemerosotan sumber laut dan menangani impak perubahan iklim umumnya masih tidak mendapat peruntukan yang mencukupi.

Sebagai contoh, penerokaan sumber mineral dan bahan bumi tanpa perancangan jangka panjang bukan sahaja tidak memberikan manfaat optimum pada masa ini, tetapi kita telah 'mencuri' sumber ini daripada generasi akan datang.

Semua sumber bumi seperti bahan tenaga fosil, bahan binaan, tanah dan mineral berekonomi ialah sumber tidak boleh diperbaharui.

Urus secara lestari

Kita bakal kehilangan kebanyakan sumber ini jika tidak memperkukuh dasar berkaitan penggunaan lestari sumber tidak boleh diperbaharui.

Bajet untuk meneruskan inventori bahan bumi perlu disediakan bagi memastikan kita mengetahui kuantitinya dan mengurus secara lestari.

Isu mengenai kepelbagaian bio-

logi, iaitu sumber bumi boleh diperbaharui juga memerlukan pemikiran semula dalam pengurusan.

Kita harus membezakan di antara sumber bersifat warisan tabii, perkhidmatan alam sekitar dan sumber makanan.

Dalam konteks ini, pendekatan pemuliharaan (perlindungan), pemuliharaan dan penggunaan lestari perlu dirancang dan dipastikan pelaksanaannya. Kerajaan perlu memperuntuk kos pembangunan alam sekitar seimbang dengan pembangunan ekonomi dan sosial demi kelestarian negara tercinta ini.



Pertubuhan Bangsa-Bangsa Bersatu (UNESCO) juga perlu diberikan sokongan padu.

Selama ini, strategi untuk mengangkat Tapak Warisan Alam Kebangsaan melalui Akta Taman Negara dan Akta Warisan Kebangsaan kurang berkesan disebabkan tanah ialah urusan kerajaan negeri. Oleh itu, sebarang tindakan

LAMPIRAN 8
NEW STRAITS TIMES (WORLD): MUKA SURAT 68
TARIKH: 13 NOVEMBER 2018 (SELASA)

+ MORE REGIONAL INTEGRATION

CHINA VOWS TO 'OPEN UP ECONOMY'

Multilateralism
under threat from
economic pressures,
says Singapore PM

SINGAPORE

CHINESE Premier Li Ke-qiang said yesterday Beijing will open up its economy in the face of rising protectionism, as he headed for meetings with Asia-Pacific leaders here that are expected to focus on trade tensions.

Li's remarks in an article in Singapore's *Straits Times* newspaper, ahead of his arrival in the city-state later in the day, came as Prime Minister Lee Hsien Loong called for more regional integration, saying multilateral-

ism was under threat from political pressures.

"China has opened its door to the world; we will never close it but open it even wider," Li said in the article, in which he called for an "open world economy" in the face of "rising protectionism and unilateralism".

He did not directly refer to China's bruising trade war with the United States.

Notably absent from this week's meetings is US President Donald Trump.

Vice-President Mike Pence will attend instead of Trump, and Russian President Vladimir Putin, Indian Prime Minister Narendra Modi and Japanese Prime Minister Shinzo Abe are among those expected to join Li and Asean leaders.

It was not clear if Li and Pence will hold separate talks on the sidelines of the meetings, which



A 'police robot' patrolling the Suntec International Convention and Exhibition Centre at the 33rd Asean Summit and Related Meetings in Singapore yesterday. EPA PIC

would be a prelude to a summit scheduled between Trump and Chinese President Xi Jinping at the end of the month in Buenos Aires, Argentina.

In remarks at a business summit yesterday ahead of this week's meetings, Lee said: "Asean has great potential, but fully realising it depends on whether we choose to become more integrated, and work resolutely towards this goal in a world, where multilateralism is fraying under political pressures."

Both Singapore and China are expected to rally support for the Regional Comprehensive Economic Partnership (RCEP) pact, showcased to be the free-trade deal that will encompass more than a third of the world's gross domestic product.

Li said China would work to "expedite" RCEP negotiations this week.

Asean also reached their first ever deal on e-commerce aimed at helping boost cross-border transactions. **Reuters**

LAMPIRAN 9
KOSMO! (DUNIA): MUKA SURAT 49
TARIKH: 13 NOVEMBER 2018 (SELASA)

Kebakaran hutan di California terus marak dan sukar dikawal

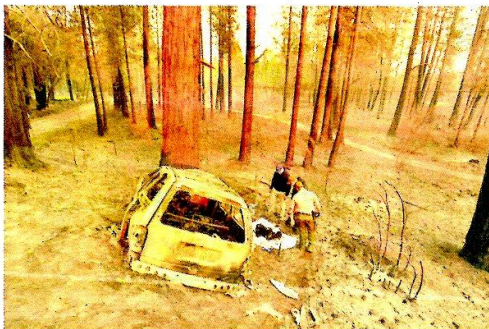
31 mayat rentung ditemui

PARADISE, CALIFORNIA – Angka kematian akibat kebakaran hutan yang marak di negeri California meningkat kepada 31 orang kelmarin selepas enam lagi mayat mangsa ditemui.

Beberapa pegawai berkata, mayat lima orang ditemui di beberapa kediaman yang hangus, manakala mangsa keenam dijumpai di dalam sebuah kenderaan di utara California di mana kebakaran besar dikenali sebagai Camp Fire terus marak, kata Syerif Daerah Butte, Kory Honea kepada pemberita petang kelmarin.

“Kira-kira 228 orang masih hilang, sementara 137 lagi telah dijumpai selepas rakan dan waris mengadu bahawa mereka gagal dihubungi,” katanya.

Kebakaran Camp Fire di California Utara meragut sekurang-kurangnya 29 nyawa sejak ia bermula Khamis lalu. Beberapa ratus kilometer ke selatan negeri itu pula, sekurang-kurangnya dua orang terkorban dalam kebakaran besar lain digelar Woolsey Fire yang mengancam ko-



PEMBANTU Sherif Daerah Yuba dan Butte memeriksa serpihan tulang mangsa berhampiran sebuah kenderaan hangus di Concow, California kelmarin.

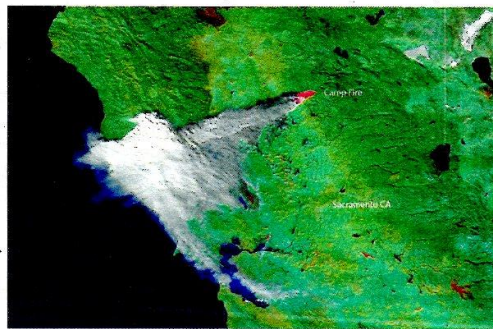
muniti mewah di Malibu, dekat Los Angeles.

Sementara itu, angin panas dan kering yang diramal bertiup sehingga hari mengakibatkan api sukar dikawal, kata beberapa pegawai.

“Kita memasuki situasi normal yang baharu,” kata Ketua

Bomba Daerah Ventura, Mark Lorenzen yang memberitahu satu sidang akhbar bahawa kebakaran hutan di California pada 2018 merebak lebih cepat berbanding 10 tahun lalu.

Katanya, pasukan bomba kini berusaha untuk mengawal 25 peratus kebakaran Camp Fire di



IMEJ satelit yang dirakam Pentadbiran Lautan dan Atmosfera Kebangsaan (NOAA) pada 8 November lalu menunjukkan asap tebal akibat kebakaran Camp Fire di California Utara.

California Utara yang telah memusnahkan 45,000 hektar tanah, manakala di California Selatan, kebakaran Woolsey Fire mengakibatkan kawasan seluas 33,700 hektar musnah. Hanya 10 peratus kebakaran itu dapat dipadamkan setakat kelmarin.

Kebakaran Camp Fire turut memusnahkan lebih 6,700 kediaman dan premis perniagaan di bandar Paradise sekali gus kemusnahkan lebih banyak struktur berbanding mana-mana kebakaran hutan di California. – Reuters

LAMPIRAN 10
MALAYMAIL (WORLD): MUKA SURAT 17
TARIKH: 13 NOVEMBER 2018 (SELASA)

Ten ways climate change can make wildfires worse

PARIS — Deadly wildfires such as those raging in northern and southern California have become more common across the state and elsewhere in the world in recent years. Scientists spoke about the ways in which climate change can make them worse.

Other factors have also fuelled an increase in the frequency and intensity of major fires, including human encroachment on wooded areas, and questionable forest management.

"The patient was already sick," in the words of David Bowman, a professor of environmental change biology at the University of Tasmania and a wildfire expert. "But climate change is the accelerant."

Fine weather for a fire

Any firefighter can tell you the recipe for "conductive fire weather": hot, dry and windy.

"Besides bringing more dry and hot air, climate change — by elevating evaporation rates and drought prevalence — also creates more flammable ecosystems," noted Christopher Williams, director of environmental sciences at Clark University in Massachusetts.

More fuel

Dry weather means more dead trees, shrubs and grass — and more fuel for the fire.

"All those extremely dry years create an enormous amount of desiccated biomass," said Michel Vennetier, an engineer at France's National Research of Science and Technology for Environment and Agriculture (IRSTEA).

Change of scenery

To make matters worse, new species better adapted to semi-arid conditions grow in their place.

"Plants that like humidity have disappeared, replaced by more flammable plants that can withstand dry conditions, like rosemary, wild lavender and thyme," said Vennetier.

Thirsty plants

With rising mercury and less rain, water-stressed trees and shrubs send roots deeper into the soil, sucking up every drop of water they can to nourish leaves and needles.

That means the moisture in the earth that might have helped to slow a fire sweeping through a forest or garrigue is no longer there.

Longer season

"Today, the period susceptible to wildfires has extended from June to October," said IRSTEA scientist Thomas Curt, referring to the Mediterranean basin.

In California, which only recently emerged from a five-year drought, some experts say there's no longer a season at all — fires can happen year-round.

More lightning

"The warmer it gets, the more lightning you have," said Mike Flannigan, a professor at the University of Alberta, Canada and director of the Western Partnership for Wildland Fire Science.

"Especially in the northern areas, that translates into more fires."

Weakened jet stream

Normal weather patterns over North America and Eurasia depend heavily on the powerful, high-altitude air currents — produced by the contrast between polar and equatorial temperatures — known as the jet stream.

"We are seeing more extreme weather because of what we call blocked ridges, which is a high-pressure system in which air is sinking, getting warmer and drier

along the way," said Flannigan.

Unmanageable intensity

Climate change not only boosts the likelihood of wildfires, but their intensity as well.

"If the fire gets too intense" as in California right now, and in Greece last summer — "there is no direct measure you can take to stop it", said Flannigan.

Beetle infestations

With rising temperatures, beetles have moved northward into Canada's boreal forests, wreaking havoc — and killing trees — along the way.

"Bark beetle outbreaks temporarily increase forest flammability by increasing the amount of dead material, such as needles," said Williams.

Positive feedback

Globally, forests hold about 45 per cent of Earth's land-locked carbon and soak up a quarter of human greenhouse gas emissions.

But as forests die and burn, some of the carbon is released back into the atmosphere, contributing to climate change in a vicious loop that scientists call "positive feedback". — AFP

LAMPIRAN 11 THE STAR (WORLD): MUKA SURAT 27 TARIKH: 13 NOVEMBER 2018 (SELASA)

Commanding a robot on the frigid Red Planet

GREENBELT (United States): Some 126 million kilometres from Earth, alone on the immense and frigid Red Planet, a robot the size of a small 4x4 wakes up just after sunrise. And just as it has every day for the past six years, it awaits its instructions.

Around 9.30 Mars time, a message arrives from California, where it was sent 15 minutes earlier.

"Drive forward 10m, turn to an azimuth of 45°, now turn on your autonomous capabilities and drive."

The Curiosity rover executes the commands, moving slowly to its designated position, at a maximum speed of 35 to 110mph.

Its batteries and other configurations limit its daily drive span to around 100m. The most Curiosity has rolled on Mars in a day is 220m.

Once it arrives, its 17 cameras take shots of its environs.

Its laser zaps rocks. Other tools on board drill into a particularly interesting rock to study small samples.

Around 5pm Martian time, it will wait for one of NASA's three satellites orbiting the planet to pass overhead.

Curiosity will then send several hundred megabytes of scientific data via large ground antennae to its human masters on Earth.

On the ground floor of building 34 at NASA's Goddard Space Flight Center in Greenbelt, Maryland, scientists pore over Curiosity's data every day at 1pm, in a large windowless room full of scientific instruments and computers.

The scientists are looking for any indication of life on Mars.

Inside Curiosity lies a "marvel of miniaturisation", says Charles Malespin, the deputy principal investigator for Sample Analysis at

Mars (SAM), a chemist's lab the size of a microwave oven.

"It's the most complicated instrument NASA has ever sent to another planet," said Malespin, who has devoted his professional life to the project since 2006.

SAM analyses samples of Martian soil by heating them in an oven that reaches 1,000°C.

The hot rocks release gas, which is separated and analysed by instruments that offer a sample "fingerprint".

At Goddard, Maeva Millan, a French post-doctoral researcher, compares this chemical fingerprint to experiments carried out on known molecules.

When they look similar, she can say, "Ah, that's the right molecule."

It is thanks to SAM that researchers know there are complex organic molecules on Mars.

And SAM has helped scientists learn that the Martian surface – geologically speaking – is far younger than previously thought.

"If you're going to go to Mars, you don't want to bring stuff that's already there that you can use for resources, such as water," said Malespin.

"If you want to mine the soil and heat it up and release the water, you can bring a big oven with you and you have all the water you want."

The same goes for various materials that could be used to make rocket fuel, allowing the Red Planet to serve as a future service station for rockets.

On the other side of the United States, at NASA's Jet Propulsion Laboratory in Pasadena, California, about two dozen men and women make up the team that drives Curiosity.

"My favourite part of the day (is when) I get



Detailed work: Millan working in a lab at NASA's Goddard Space Flight Center in Greenbelt, Maryland. She works on identifying the chemical composition of samples analysed on Mars by the SAM instrument onboard the Curiosity rover. — AFP

to sit down and start looking at the imagery from Mars and understand where the rover currently is," said Frank Hartman, who has driven both Curiosity and another, older rover, Opportunity.

"And my feeling is that sometimes I'm probably the first person on Earth looking at some of these pictures."

The Mars drivers' main job is to write the sequence of commands for the rover to follow the next sol, or "day" on Mars, which lasts 24 hours and nearly 40 minutes. There is no joystick, and no real-time communication with the robotic vehicle.

There is a delay whenever drivers realise something has gone wrong, whether it's Opportunity getting buried by a Martian dust

storm earlier this year, or one of Curiosity's wheels getting pierced by a sharp rock.

Or the breakdown of Curiosity's drilling machine, which happened at the beginning of this year and took a few months to resolve.

"We haven't been to any of these places before. And so we always have to be aware of the fact that we know so little about what we're encountering," said Hartman.

Curiosity, which landed in 2012, has so far travelled just over 19.75km. It must wait another year before reaching its goal, Mount Sharp.

Then, a few months later, it will lose its Martian monopoly. Two rovers – one American and one European – are scheduled to land on the planet in 2020. — AFP

LAMPIRAN 12
MALAY MAIL (WORLD): MUKA SURAT 17
TARIKH: 13 NOVEMBER 2018 (SELASA)

Fierce California winds whip fires as toll rises to 31

LOS ANGELES — The death toll from wildfires raging in California rose to 31 after six more people were found killed in what was poised to become the deadliest wildfire in state history.

Officials said the bodies of five people were found in burned-out homes, and the sixth was found in a vehicle in northern California's Camp Fire, Butte County Sheriff Kory Honea told reporters.

Some 228 people are still unaccounted for, Honea said, while another 137 people have been located after friends or relatives reported being unable to contact them.

The so-called Camp Fire in the northern part of the state has claimed at least 29 lives since it broke out on Thursday. Hundreds of kilometres to the south, at least two people have died in the Woolsey Fire threatening the wealthy beach community of Malibu, near Los Angeles.

Hot dry winds expected to blow until today whipped up the flames and heightened the urgency of evacuation orders, officials said.

It has been more than 210 days since the area received 1.25cm or more of rain, making it easy for spot fires to spread to fresh patches of tinder-dry vegetation, fire officials said.

"We are entering a new normal," said Ventura County fire chief Mark Lorenzen, noting at a news conference that California's fires this year grow far more quickly than they did even 10 years ago.

Several officials urged residents to heed evacuation orders, noting they themselves had followed orders to leave their homes for safety.

"Winds are already blowing," chief Daryl Osby of the Los Angeles County Fire Department said. "They are going to blow for

the next three days. Your house can be rebuilt but you can't bring your life back."

Crews pushed forward to achieve 25 per cent containment of the Camp Fire in northern California, which had burned 45,000ha at the edge of the Plumas National Forest.

In Southern California, the blaze was only 10 per cent contained.

The Camp Fire burned down more than 6,700 homes and businesses in Paradise, more structures than any other California wildfire on record.

Its death toll now equals that of the Griffith Park Fire in 1933, the deadliest wildfire on record in California.

Winds of up to 64kph were forecast to blow in the north and gusts of up to 113kph, the so-called Santa Ana "devil wind", were expected in Southern California.

The Woolsey Fire doubled in size from Friday night into Sunday, threatening thousands of homes after triggering mandatory evacuation orders for a quarter million people in the upscale Malibu beach colony as well as other communities in Los Angeles and Ventura counties.

The entire nearby city of Calabasas, home to more than 20,000 people, was placed under a mandatory evacuation order by city officials on Sunday evening.

Governor Jerry Brown asked US President Donald Trump to declare a major disaster to bolster the emergency response and help residents recover.

Trump, on a trip to France, said in a Twitter post early on Sunday: "With proper Forest Management, we can stop the devastation constantly going on in California. Get Smart!" — Reuters

Fighting wildfires



LAMPIRAN 13
THE STAR (WORLD): MUKA SURAT 23
TARIKH: 13 NOVEMBER 2018 (SELASA)

Six more dead in California wildfires

228 others still missing as rescue teams battle strong winds and dry conditions

PARADISE: As wildfires continued to rage on both ends of California, officials released another grim statistic: six more dead in a swath of Northern California wiped out by fire, raising the death toll there to 29. It matched California's record for deaths in a single fire.

Another 228 remained unaccounted for as crews stepped up the search for bodies and missing people. Two people were killed in a wildfire in Southern California.

Ten search teams were working in Paradise — a town of 27,000 that was largely incinerated last week — and in surrounding communities in the Sierra Nevada foothills.

Authorities called in a DNA lab and teams of anthropologists to help identify victims.

Statewide, 150,000 remained displaced as more than 8,000 fire crews battled wildfires that have scorched 1,040sq km, with out-of-state crews continuing to arrive.

Whipping winds and tinder-dry conditions would threaten more areas through the rest of the week, fire officials warned.

"This is a tragedy that all Californians can understand and respond to," Gov Jerry Brown said at a press briefing. "It's a time to pull together."

Brown, who has declared a state emergency, said California was requesting aid from the Trump administration. President Donald Trump has blamed "poor" forest management for the fires.

Brown said federal and state governments must do more forest management, but that climate change is the greater source of the problem.

"And those who deny that are definitely contributing to the tragedies that we're now witnessing and will continue to witness in the coming years," he said.

Drought and warmer weather attributed to climate change, and the building of homes deeper into forests have led to more destructive wildfire seasons in California.

While California emerged from a five-year drought last year, much of the northern two-thirds of the state is abnormally dry.

In Southern California, firefight-



All that's left: Agoura Hills resident Santos Alvarado (right) and his son Ricky recovering a safe deposit box from their destroyed home at the Seminole Springs Mobile Home Park. — AP

ers beat back a new round of winds on Sunday, and the fire's growth and destruction are believed to have been largely stopped.

Malibu celebrities and mobile-home dwellers in nearby mountains were slowly learning whether their homes had been spared. Two people were killed and the fire destroyed nearly 180 structures.

Actor Gerard Butler said on Instagram that his Malibu home was "half-gone" and that he was "inspired as ever by the courage, spirit and sacrifice of firefighters".

Flames also besieged Thousand Oaks, the Southern California city in mourning over the recent massacre of 12 people in a shooting rampage at a country music bar.

In Northern California, where more than 6,700 buildings have been destroyed, the scope of the devastation was beginning to set in

even as the blaze raged on.

Butte County Sheriff Kory Honea said the county consulted teams of anthropologists because, in some cases, investigators were only able to recover bone fragments.

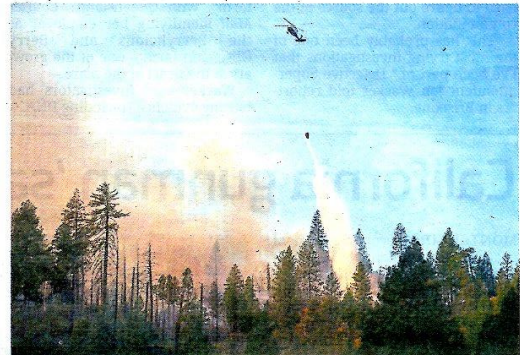
Public safety officials toured the Paradise area to begin discussing the recovery process. Much of what makes the city function is gone.

"Paradise was literally wiped off the map," said Tim Aboudara, a representative for the International Association of Fire Fighters.

"Anytime you're a firefighter and your town burns down, there's a lot of guilt and concern about what the future looks like.

"Every story we've heard coming through has been that way, like 'I wish I could have done more, what's going to happen to our community, where will my kids go to school?'"

— AP



Every effort counts: A helicopter making a water drop in the Feather River Canyon, east of Paradise. — AFP