

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<a href="#"><u>Pelajar Terengganu ke Antartika</u></a>	Sinar Harian	Klik pada tajuk berita
2.	<a href="#"><u>Dua pelajar Terengganu dihantar sertai penerokaan, penyelidikan di Antartika</u></a>	Berita Harian	Klik pada tajuk berita
3.	<a href="#"><u>Govt to further expand household poisoning awareness campaign</u></a>	Malay mail	Klik pada tajuk berita
4.	<a href="#"><u>PM's Lynas decision gives govt the upper hand</u></a>	New Straits Times	Klik pada tajuk berita dan Rujuk Lampiran 1
5.	<a href="#"><u>Lebih 90 peratus keracunan berlaku di rumah</u></a>	Kosmo	Klik pada tajuk berita
6.	<a href="#"><u>Pencemaran aktiviti perlombongan di Kelantan pada tahap minimum</u></a>	Utusan Malaysia	Klik pada tajuk berita
7.	<a href="#"><u>Mangsa pencemaran toksik saman kerajaan negeri, kilang terbabit</u></a>	Utusan Malaysia	Klik pada tajuk berita
8.	<a href="#"><u>Penduduk bengang kilang buat pembakaran terbuka / Port Dickson: Kilang buat pembakaran terbuka bikin penduduk marah</u></a>	Harian Metro	Klik pada tajuk berita dan Rujuk Lampiran 2
9.	<a href="#"><u>Pelajar, guru dari Terengganu ke Antartika</u></a>	Harian Metro	Klik pada tajuk berita
10.	<a href="#"><u>Pelajar Terengganu ke Antartika</u></a>	Sinar Harian	Klik pada tajuk berita
11.	<a href="#"><u>Govt to expand household poisoning awareness campaign nationwide</u></a>	The Star	Rujuk Lampiran 3



12.	<u>Iktibar bencana Sungai Kim Kim</u>	Utusan Malaysia	Rujuk Lampiran 4
13.	<u>Alam sekitar: Penduduk bimbang pembakaran terbuka cetus pencemaran</u>	Berita Harian	Rujuk Lampiran 5

## TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
14.	<a href="#"><u>JMG, SPAN kaji punca pencemaran Sungai Rui, Gerik</u></a>	Astro Awani	Klik pada tajuk berita
15.	<a href="#"><u>Rumah rosak, pokok tumbang dilanda ribut petir</u></a>	Kosmo	Klik pada tajuk berita
16.	<a href="#"><u>Rumah, kereta rosak dihempap pokok</u></a>	Harian Metro	Klik pada tajuk berita
17.	<a href="#"><u>Hujan lebat serta ribut kuat landa KL, Selangor</u></a>	Sinar Harian	Klik pada tajuk berita
18.	<a href="#"><u>Taman Melur dilanda banjir lumpur</u></a>	Sinar Harian	Klik pada tajuk berita
19.	<a href="#"><u>Bekalan air kepada lebih 1 juta pengguna di Johor hampir pulih / Isu Pencemaran Ammonia Sungai Sayong : Bekalan air tiga daerah di Johor hampir pulih</u></a>	Berita harian	Klik pada tajuk berita dan Rujuk lampiran 6
20.	<a href="#"><u>Johor selamat dikunjungi</u></a>	Harian Metro	Klik pada tajuk berita
21.	<a href="#"><u>'40 tahun kami dok hadap benda ni'</u></a>	Malaysiakini	Klik pada tajuk berita
22.	<a href="#"><u>UTM kongsi ilmu cipta baja sisa makanan</u></a>	Harian Metro	Klik pada tajuk berita
23.	<a href="#"><u>Sungai Petani : 'Dari jauh Nampak pusaran</u></a>	Harian Metro	Rujuk



	<u>angin'</u>		Lampiran 7
24.	<u>River pollution</u>	The Star	Rujuk Lampiran 8
25.	<u>Rare materials for industrial revolution</u>	The Star	Rujuk Lampiran 9
26.	<u>AI to double rate of innovation in Malaysia</u>	The Star	Rujuk Lampiran 10
27.	<u>SAM ramps up production</u>	The Star	Rujuk Lampiran 11
28.	<u>Task Force Established: Study to be conducted to find out source of Sungai Rui pollution, says Jayakumar</u>	New Straits Times	Rujuk Lampiran 12
29.	<u>Impak Pencemaran Plastik</u>	Harian Metro	Rujuk Lampiran 13

## ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
30.	<u>VR industry players excited about China</u>	New Straits Times	Rujuk Lampiran 14
31.	<u>India pertahan serpihan satelit</u>	Berita Harian	Rujuk Lampiran 15

**LAMPIRAN 1**  
**NEW STRAITS TIMES (LETTERS): MUKA SURAT 60**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

ENVIRONMENT

# PM'S LYNAS DECISION GIVES GOVT THE UPPER HAND

PRIIME Minister Tun Dr Mahathir Mohamad has allowed Lynas to operate, with the condition that the firm removes its radioactive waste from the country.

He said Lynas must reduce the radioactivity of raw materials before bringing them to Malaysia.

This has granted the government the upper hand in dealing with the situation.

However, the government's decision has also drawn criticism from Netizens and environmentalists.

**The Sungai Kim Kim toxic pollution crisis serves as an example of the deleterious effect of improper waste disposal on people and the environment.**

The struggles of Energy, Green Technology, Science, Climate Change and Environment Minister Yeo Bin Yin and Bentong member of parliament Wong Tack to disallow Lynas from operating have been in vain.

The Lynas issue has been a tug of war between Lynas stakeholders and the government.

Regardless of the scientific proof and arguments by Lynas representatives, the radioactive waste's toxicity

is a reason why the rare-earth processing plant was not built in



The Lynas processing plant in Gebeng, Kuantan. PIC BY FARIZUL HAFIZ AWANG

Australia or other First World countries.

It is time for Lynas to comply with regulations set by the government and find a solution.

Lynas may have to shift its operations to another country if negotiations fail.

The livelihood of more than

600 local employees, along with RM1.2 billion worth of investment, is at stake due to the decisions made by the previous government.

If First World nations are adamant about not having Lynas operate in their country, it may not be suitable for

Malaysia either.

The Sungai Kim Kim toxic pollution crisis serves as an example of the dangerous effect of improper waste disposal on people and the environment.

**DR B. HARIN**  
Johor Baru, Johor

**LAMPIRAN 2**  
**HARIAN METRO (SETEMPAT): MUKA SURAT 8**  
**TARIKH: 8 APRIL 2019 (ISNIN)**



*ANTARA sisa bahan tercemar yang dipercayai dibakar secara terbuka di sebuah kilang di Kampung Baru Tanah Merah Site C.*

**Port Dickson**

### **Kilang buat pembakaran terbuka bikin penduduk marah**

Pembakaran terbuka sebuah kilang memproses minyak terbuang menimbulkan kemarahan penduduk Kampung Baru Tanah Merah Site C, Chuah di sini, kelmarin.

Beberapa penduduk cuba menegur tindakan pekerja kilang itu, namun menimbulkan ketegangan menyebabkan mereka membuat aduan kepada Ahli Dewan Undangan Negeri (ADUN) Chuah, Michael Yek Diew Ching untuk tindakan lanjut.

Pegawai Khas ADUN

Chuah Goh Yoke Shien berkata, pihaknya menerima aduan itu sebelum ke lokasi untuk melakukan tinjauan.

“Saya difahamkan pembakaran terbuka itu kerap dilakukan pada sebelah malam, tetapi semalam (kelmarin) mereka melakukannya pada siang menyebabkan penduduk hilang sabar.

“Saya meminta bantuan Jabatan Alam Sekitar (JAS) dan membuat laporan polis untuk tindakan lanjut serta keselamatan,” katanya ketika ditemui di sini.

**LAMPIRAN 3**  
**THE STAR (NATION): MUKA SURAT 16**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

## Govt to expand household poisoning awareness campaign nationwide

**GEORGE TOWN:** The government will further expand the household poisoning awareness campaign at the national level to increase public awareness of the high percentage of accidents that occur at home.

Domestic Trade and Consumer Affairs Minister Datuk Seri Saifuddin Nasution Ismail said that based on statistics provided by the National Poison Centre from 1994

to 2018, 93% of the cases occurred at home.

"These poisoning incidents are not just occurring at the factories and farms.

"The statistics show that the highest number of cases took place at home, so we will expand the campaign across the country and at all levels," he told reporters after officiating the Penang State Safe Homes carnival at the compound of

Al-Huda Mosque in Sungai Ara here yesterday.

Saifuddin also said he would discuss the matter of household poisoning with Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin and Health Minister Datuk Seri Dr Dzulkefly Ahmad as part of efforts to spread the awareness campaign.

"We will highlight this issue so that the local community will be

more careful when handling toxic materials at home," he added.

Based on the statistics, 66% of the poisoning cases recorded involved household chemical products (33%) and medicines (33%), while 46% of the cases involved children aged one to nine.

Meanwhile, detergents and cleaning products contributed 54% of chemical poisoning incidents at home.— Bernama

“

These poisoning incidents are not just occurring at the factories and farms.

Datuk Seri Saifuddin Nasution Ismail

”

## LAMPIRAN 4

### UTUSAN MALAYSIA (RENCANA): MUKA SURAT 17

#### TARIKH: 8 APRIL 2019 (ISNIN)

# Iktibar bencana Sungai Kim Kim



Pandangan IKIM

ROSMIDZATUL AZILA  
MAT YAMIN

**B**ENCANA pencemaran kimia di Sungai Kim Kim, Pasir Gudang, Johor baru-baru ini memberi cerminan jelas bahawa tahap kesedaran masyarakat di pelbagai peringkat masih lagi berada pada tahap yang sangat rendah dan membimbangkan.

Apabila bencana seumpama ini berlaku, pastinya sedikit sebanyak mencalarakan imej dan mengundang persepsi negatif terhadap peranan badan-badan berkaitan pengurusan alam sekitar yang terlibat di negara ini. Antara persoalan yang pastinya timbul adalah membabitkan kelemahan dari sudut penguatkuasaan dan pemantauan badan-badan alam sekitar terlibat.

Kejadian yang lepas usah diketahui, sebaliknya jadikan ia sebagai iktibar dan pedoman untuk kita memperbaiki segala kekurangan dan kelemahan di pihak masing-masing ke arah yang lebih baik.

Allah SWT berfirman yang bermaksud: "Tidak ada kesusahan (atau bala bencana) yang menimpah (seseorang) melainkan dengan izin Allah SWT; dan sesiapa yang beriman kepada Allah SWT, nescaya Allah SWT akan memimpin hatinya (untuk menerima apa yang telah berlaku itu dengan tenang dan sabar); dan (ingatlah), Allah Maha Mengetahui akan tiap-tiap sesuatu" (Surah At-Taghâabun, ayat 11).

Walaupun insiden ini mendukacitakan seluruh rakyat Malaysia, namun setidak-tidaknya kejadian bencana yang berlaku ini menjadi *wake-up call* kepada semua pihak terlibat.

Rentetan daripada bencana Sungai Kim Kim juga telah membawa kepada pengumuman oleh Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim untuk meminda Akta Kualiti Alam Sekelling 1974.

Pengumuman pemindaan akta ini perlu disambut baik semua pihak, dengan harapan akta baharu yang bakal digubal dapat menjadi senjata ampuh untuk membela nasib alam sekitar.

Walau bagaimanapun, penggubalan akta baharu semata-mata bukan merupakan jaminan



SIKAP menjadikan sungai sebagai tempat pembuangan pelbagai sisa pencemaran, jelas menunjukkan betapa fakirnya tahap mentaliti sebahagian masyarakat kita. - UTUSAN/ FARID JANUDIN

bahawa insiden ini tidak berulang sekiranya tidak disusuli dengan aspek penguatkuasaan mantap.

Badan-badan berkaitan alam sekitar terlibat perlu memperkasa aspek penguatkuasaan di bawah bidang kuasa masing-masing bagi mencegah insiden ini berulang.

Jabatan alam sekitar umumnya perlu bersedia dengan tenaga kerja yang mencukupi bagi memastikan pemantauan secara berkala yang lebih kerap dapat dilakukan. Ini bukan untuk mengelak tragedi sama berulang, sebaliknya bagi memastikan jenayah alam sekitar lain dapat dibendung.

Selain itu, pegawai penguatkuasaan yang terlibat juga perlu dipastikan dapat bertindak lebih cekap dan pantas terhadap laporan-laporan berkaitan jenayah alam sekitar diterima, serta melakukan pemeriksaan susulan agar tindakan segera yang sewajarnya dapat diambil.

Manakala, di peringkat orang awam pula mereka perlu diberi pendedahan untuk berani bertindak membuat laporan kepada pihak berwajib sekiranya terdapat perubahan-perubahan yang mencurigakan terhadap alam sekitar yang berlaku di sekeliling mereka.

Keprihatinan daripada orang awam juga penting dalam memastikan maklumat tepat berkaitan jenayah alam sekitar dapat disalur dengan kadar segera kepada pihak berwajib untuk tindakan susulan.

Dari segi aspek pengurusan bencana pula, insiden pencemaran Sungai Kim Kim dilihat memberi isyarat jelas bahawa prosedur operasi standard (SOP) sedia ada perlu dinilai semula dan ditambah baik. Ini kerana, SOP yang ada kini

hanya tertumpu kepada pengurusan bencana seperti banjir dan jerebu sahaja.

Ini bermakna, tanggungjawab besar perlu digalas oleh Agensi Pengurusan Bencana Negara (NADMA) untuk menambahbaik SOP sedia ada dengan menambah satu lagi tumpuan iaitu penyelaras pengurusan bencana akibat pencemaran kimia. Penambahbaikan SOP ini penting memandangkan negara kita masih belum ada SOP yang lengkap dalam menghadapi pencemaran kimia, biologi dan radiologi.

Malah, cadangan daripada pelbagai pihak agar NADMA menubuhkan satu majlis penasihat untuk menasihati kerajaan mengenai pengurusan kesan kimia, biologi dan radiologi juga dilihat sangat relevan, terutamanya bagi memastikan kerajaan lebih bersedia sekiranya insiden seumpama ini berulang.

Antara tujuan cadangan penubuhan majlis penasihat ini adalah bagi menyediakan pelan tindakan pengurusan bencana yang lengkap meliputi beberapa aspek seperti: i) persampelan; ii) ujian makmal; iii) mengenalpasti bahan pencemar yang terlibat; iv) pembersihan dan pengurusan sisa bahan pencemar; v) pemantauan kualiti alam sekitar secara berkala dan berterusan; dan vi) rawatan dan pengawasan perubatan kepada mangsa yang terdedah kepada pencemaran.

Dengan terhasilnya pelan pengurusan bencana yang komprehensif dan mantap kelak, pastinya dapat mempersiap siagakan negara untuk lebih cekap dan terkehadapan dalam aspek pengurusan bencana pada masa hadapan.

**PENULIS** ialah Felo Pusat Kajian Sains dan Alam Sekitar, IKIM.

**LAMPIRAN 5**  
**BERITA HARIAN (DASAR & PENTADBIRAN): MUKA SURAT 17**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

**ALAM SEKITAR**

## Penduduk bimbang pembakaran terbuka cetus pencemaran

**Port Dickson:** Pembakaran terbuka sebuah kilang memproses minyak tercemar menimbulkan kemarahan penduduk berhampiran Kampung Baru Tanah Merah Site C, Chuah di sini.

Beberapa penduduk cuba menegur perbuatan pekerja di kilang itu, namun menimbulkan ketegangan menyebabkan mereka terpaksa mengadu kepada pejabat Ahli Dewan Undangan Negeri (ADUN) Chuah, Michael Yek Diew Ching.

Pegawai Khas ADUN Chuah, Goh Yoke Shien, berkata kali terakhir pembakaran terbuka itu dilakukan pagi semalam menyebabkan pihaknya terpaksa bertindak demi keselamatan penduduk kampung.

"Saya difahamkan pembakaran terbuka itu kerap dilakukan pada

waktu malam tetapi baru hari ini (semalam) mereka melakukannya siang hari.

"Saya terpaksalah meminta bantuan Jabatan Alam Sekitar (JAS) dan laporan polis juga dibuat kerana bimbang berlaku kekecohan dan salah faham," katanya.

Pihak media dilarang masuk kerana tidak mahu menimbulkan ketegangan ketika pemantauan dijalankan.

### Penduduk bimbang berlaku pencemaran

Katanya, aduan penduduk ada atasnya kerana mereka bimbang berlaku pencemaran udara jika dibiar kan berterusan.

"Saya difahamkan api akibat pembakaran terbuka sisa terbuang itu amat besar dan asap hitam tersebut ke kawasan kediaman



[FOTO MOHD KHIDIR ZAKARIA/BH]

**Antara sisa bahan tercemar yang dipercayai dibakar secara terbuka di sebuah kilang di Kampung Baru Tanah Merah Site C, Chuah, Port Dickson.**

penduduk sekitar.

"Penduduk di sekitar kawasan ini ada lebih 1,500 penduduk dari dua buah kawasan penempatan iaitu Kampung Baru Tanah Merah Site C dan taman perumahan

di sebelahnya sekitar 700 rumah.

"Kami harap JAS akan menyelesaikan perkara ini agar tidak berulang kerana boleh membahayakan kesihatan penduduk setarik" katanya.

Sementara itu, Pengarah JAS negeri, Norhazni Mat Sari berkata, pihaknya ada menerima aduan dan siasatan sedang dijalankan sebelum tindakan lanjut dibuat.



**LAMPIRAN 6**  
**BERITA HARIAN (PENDIDIKAN): MUKA SURAT 18**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

**ISU PENCEMARAN AMMONIA  
SUNGAI SAYONG**

## Bekalan air tiga daerah di Johor hampir pulih

**Johor Bahru:** Bekalan air kepada lebih sejuta pengguna di sebahagian Johor Bahru, Kulai dan Kota Tinggi yang terbabit dengan kesan pencemaran ammonia bermula di Sungai Sayong sejak Rabu lalu, sudah hampir pulih sepenuhnya semalam.

Ranhill SAJ Sdn Bhd (Ranhill SAJ) dalam satu kenyataan semalam, berkata sehingga jam 10 pagi semalam, pengguna di kawasan terbabit mula mendapat bekalan air terawat secara berperingkat, kecuali beberapa kawasan tinggi dan pada hujung sistem agihan.

Menurut kenyataan itu, kawasan tinggi dan hujung sistem agihan itu membabitkan 5,067 akaun di sebahagian Johor Bahru meliputi sebahagian Taman Pelangi Indah, Desa Tebrau, Kempas Lurah, Kempas Denai, Kempas Permatang, Kempas Banjaran dan Taman Kempas.

“Bagi sistem Loji Rawatan Air (LRA) Tai Hong pula membabitkan sebahagian FELDA + Ulu Tebrau, Taman Bukit Tiram, Taman Bukit Jaya dan Taman Puteri Wangsa dijangka menerima bekalan air sepenuhnya menjelang tengah malam ini (semalam).

“Bagaimanapun, sekiranya masih ada kawasan yang tidak menerima bekalan air, pengguna perlu menghubungi Ranhill SAJ di talian 1800887474 atau di e-mel: customer.care@ranhill.com.my untuk mendapatkan bantuan tangki air,” katanya.

### Sungai Johor terjejas

Pencemaran ammonia berkenaan turut menyebabkan Sungai Johor menerima kesan apabila aliran air mengandungi ammonia dikesan mengalir masuk ke sungai berkenaan sejak awal pagi, Khamis lalu.

“Keadaan ini menyebabkan LRA Semanggar dan LRA Sungai Johor milik Ranhill SAJ serta LRA Tai Hong (PUB) terpaksa henti operasi sebaik kehadiran ammonia terbabit dikesan berhampiran muka sauk,” tambah kenyataan itu.

Sementara itu, Ketua Pegawai Eksekutif Ranhill SAJ, Datuk Ahmad Faizal Abdul Rahman, berkata keputusan menghentikan operasi loji berkenaan perlu diambil bagi memastikan air bersih tidak dicemari ammonia.

“Pihak kami tidak akan merawat air mentah yang sudah pasti mendatangkan risiko kesihatan kepada pengguna bekalan air, jadi keputusan menghentikan operasi loji berkenaan dilakukan bagi memastikan air bersih yang dirawat tidak dicemari ammonia.”

“Kes pencemaran ammonia di Sungai Johor perlu dipantau sewajarnya dan tindakan tegas perlu diambil kepada pelaku bagi memastikan ia tidak berulang.

“Langkah ini penting supaya pihak kami tidak menghadapi gangguan bekalan air tidak dirancang seperti ini yang bukan sahaja boleh menyebabkan loji henti operasi merawat air, malah mendatangkan kesulitan kepada jutaan pengguna untuk beberapa hari,” katanya.

**LAMPIRAN 7**  
**HARIAN METRO (SETEMPAT): MUKA SURAT 8**  
**TARIKH: 8 APRIL 2019 (ISNIN)**



KEADAAN bumbung rumah Abdul Samad selepas dilanda ribut.

**Sungai Petani**

**'Dari jauh nampak pusaran angin'**

"Dari jauh saya nampak pusaran angin datang dari arah ladang kelapa sawit berdekatan sebelum ia menghampiri rumah kami lalu menghempas bumbung rumah," kata Abdul Samad Abdul, 59.

Rumahnya antara tiga rumah yang rosak dalam kejadian ribut di Kampung Perak, Bukit Selambau pada jam 4.30 petang kelmarin.

Abdul Samad berkata, dia ketika itu berada di luar rumah, manakala dua anak lelakinya serta seorang adik lelakinya berada di dalam rumah.

"Waktu itu hujan lebat serta kilat, pusaran angin bergerak begitu pantas

sebelum saya mendengar dentuman kuat dari dalam rumah.

"Apabila masuk ke dalam rumah saya lihat bumbung di bahagian dapur hilang, manakala sebahagian lagi runtuh.

"Bahagian dinding rumah juga hampir runtuh," katanya ketika ditemui di sini, semalam.

Sementara itu, Pegawai Angkatan Pertahanan Awam Malaysia (APM) Daerah Kuala Muda Kapten (PA) Azahar Ahmad berkata, kejadian ribut itu turut menyebabkan beberapa pokok tumbang sehingga menghalang jalan ke kediaman penduduk.



**LAMPIRAN 8**  
**THE STAR (NATION): MUKA SURAT 5**  
**TARIKH: 8 APRIL 2019 (ISNIN)**



**River pollution**

Villagers living near Sungai Rui in Gerik, Perak, have stopped swimming in the murky river. They blame tin mining activities upstream as the cause of the river being polluted.

<https://bit.ly/2FYAw0O>

**LAMPIRAN 9**  
**THE STAR (VIEWS): MUKA SURAT 20**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

## Rare materials for industrial revolution

NOWADAYS, everyone seems to be talking about Industry 4.0 or the Fourth Industrial Revolution (IR4.0). Even politicians are now harping on the need for the nation to seriously embrace Industry 4.0, which involves artificial intelligence (AI), Internet of Things and data science, just to name a few.

I was in Munich recently to attend a forum on the current global interests in research and development (R&D). As expected, the deliberations were focused on the growing research investments in Industry 4.0, specifically applied research that are nearest to the market place.

The forum was hosted by the Fraunhofer Research Network of Germany, also known as the Fraunhofer Gessellschaft, which many in the applied research circle recognise as the leading applied research network in Germany, if not the world. There are now 70 institutes under the grouping, and the recent event also celebrated the group's 70 years of establishment.

Their model of industry-centred R&D has been hailed as the most effective in translating the findings of R&D for deployment in business. No wonder Germany is often recognised as a country which leads in many areas of tech-



nology. In fact, Industry 4.0 was coined in Germany.

In Malaysia, we have also taken the first steps in embracing Industry 4.0. There is now a blueprint on it for the nation. Hosted by the International Trade and Industry Ministry (Miti), the blueprint aims to motivate the business community to incorporate the relevant Industry 4.0 elements in their operations.

But contrary to popular belief, Industry 4.0 is not just about automation and robotics. Essentially, it is about integrating all the elements in business, allowing for a seamless flow of information and data.

It is this integration which effectively empowers the introduction

of process automation and the consequent deployment of robotics and AI technologies into the system. The end game is more efficient business operation and improvement in productivity, which many businesses crave.

We are now just talking about the application of Industry 4.0 in business and manufacturing. We must not forget that there are many other business opportunities associated with the global expansion in the use of Industry 4.0 technologies.

I am talking here about the key components driving those technologies. These include highly sensitive sensors, super magnets, new generation software and advanced microelectronics that need to be

supplied to enable Industry 4.0.

Most of the companies which manufacture such items are in the developed West where the demand for Industry 4.0 practices is already high. As we and our neighbouring countries move into Industry 4.0, the demand for such items is also expected to grow.

It is therefore timely for us to start planning to attract such investments to the country.

One common input material is the rare earths group (*pic*), which is a critical material in super magnets and sensitive sensors. This explains why China, the world's leading producer of rare earths, is very excited about the prospect that rare earths will soon replace oil as the most coveted resource in industry.

We are fortunate that we have Lynas, which produces rare earths at our doorstep. Instead of harassing Lynas, we would be better advised to use them as our trump card to attract such Industry 4.0 businesses to our country. Think about that!

**PROFESSOR DATUK DR AHMAD IBRAHIM**  
Fellow  
Asean Academy of  
Engineering and Technology  
UCSI University

## LAMPIRAN 10

### THE STAR (SMEBIZ): MUKA SURAT 9

### TARIKH: 8 APRIL 2019 (ISNIN)

THE application of artificial intelligence (AI) in businesses will not only increase employee productivity but also double the rate of innovation by 2021, business leaders opine.

According to a study from Microsoft and IDC Asia Pacific titled Future Ready Business: Assessing Asia Pacific's Growth Potential Through AI, employee productivity is expected to improve by 60% in Malaysia.

The study surveyed 100 business leaders and 100 workers in Malaysia.

However, it notes that while seven in 10 business leaders polled agreed that AI is instrumental for their organisation's competitiveness, only 26% of organisations in Malaysia have embarked on their AI journeys.

Companies that have adopted AI expect to increase their competitiveness by 2.2 times in 2021.

"Today, every company is a software company, and increasingly, every interaction is digital. To be successful in this new world, organisations need to be a fast adopter of best-in-class technology, and secondly, they need to build their own unique digital capabilities," says Microsoft Malaysia managing director K. Raman.

"AI is the defining technology of our time that significantly acceler-

## AI to double rate of innovation in Malaysia

ates business transformation, enables innovation, boosts employee productivity, and ensures further growth.

"Economies and businesses that have yet to embark on their AI journey run a real risk of missing out on the competitive benefits that are enjoyed by leaders."

The study further notes the top five drivers for organisations that have implemented AI initiatives were better customer engagements (31% of respondents), higher competitiveness (31%), accelerated innovation (12%), improved efficiency (12%) and having more productive employees (8%).

"Last year, organisations that have adopted AI saw tangible improvements in those areas in the range of 17% to 34%. They forecast further improvements of at least 1.6 times in the three-year horizon, with the biggest jump expected in accelerated innovation, higher competitiveness and better customer engagements," says Chin Jun-Fwu, research director for IDC Asia Pacific Datacenter Group.

The study uncovered that Malaysia needs to focus on improving on all areas, particu-

larly its data and investments, in order to accelerate its AI journey.

"Malaysia is not ready yet for AI. To succeed in the AI race, Malaysia needs to substantially improve its readiness.

"Organisations' leadership should make AI a core part of their strategy and develop a learning agility culture.

"They have to continuously invest in this transformative technology for the long-term success, sometimes without immediate returns.

"There is an urgent need for talents and tools to develop, deploy and monitor AI models, along with the availability of a robust data estate with the adequate governance," adds Chin.

The top three challenges faced by business leaders who are adopting AI include a lack of thought leadership and leadership commitment to invest in AI, a lack of skills, resources and continuous learning programmes as well as a lack of advanced analytics or adequate infrastructure and tools to develop actionable insights.

The study showed that to move ahead in their AI journeys, businesses must create the right

organisational culture to enable more risk-taking, proactive innovation and cross-function among teams.

Interestingly, the study found that Malaysia's business leaders and workers generally hold positive viewpoints about AI's impact on the future of jobs.

About 67% of business leaders and 64% of workers believe that AI will either help them do their existing jobs better or reduce repetitive tasks.

"About 17% of business leaders believe that AI will create new jobs, while 10% also feel that the technology will replace jobs.

"Workers are more optimistic, with only 7% expecting AI to replace jobs, and 18% to create new ones. At the same time, almost 11% of workers expect no impact to their jobs three years from now," says Chin.

The study also found that workers are more willing to reskill than business leaders believe they are. Some 23% of business leaders felt that workers have no interest to develop new skills, but only 10% of workers were not interested.

"It is heartening to see that 82% of businesses prioritise skilling

and reskilling of workers in the future. They plan to invest as much, or even more, in human capital than in new technology.

"Even so, 72% of business leaders have yet to implement plans to help their employees' acquire the right skills, which is worrying in today's context. They must have the urgency to support the fundamental shift in training workers for the future," notes Raman.

"As technology changes the rules of business, it is imperative to future-proof the Malaysian economy by building a strong digital innovation ecosystem. The potential of AI is far from being fully exploited.

"Malaysian businesses need to jump onto the bandwagon to embrace digital transformation and leverage digital technologies such as AI to accelerate the shift towards IR4 and retain their competitive edge," says Malaysia Digital Economy Corporation (MDEC) data economy director Dr Karl Ng Kah Hou.

MDEC expects to complete the development of the National Artificial Intelligence (AI) Framework by year-end to drive the country's AI ecosystem.

**LAMPIRAN 11**  
**THE STAR (NEWS): MUKA SURAT 2**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

# SAM ramps up production

## Singapore plant being equipped with high-tech machinery

By DAVID TAN

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**GEORGE TOWN:** SAM Engineering & Equipment (M) Bhd (SAMEE) is ramping up production at its facilities in Penang and Singapore this year to fulfil its RM3.1bil order book.

Group chief executive officer Jeffrey Goh said the US\$20mil plant in Singapore was being equipped with machinery.

"The plant, which produces engine casing for Airbus and Boeing, should be fully equipped by year-end and be fully operational in 2020," he said.

The nacelle beam production plant in the RM140mil Bukit Minyak plant is equipped with state-of-the-art precision machinery and will employ 200 highly-skilled workers when fully ramped up.

"We currently have an order book of RM3.1bil. The ramp up is to fulfil partially the orders in the book," he said.

Goh said the short-term market outlook remains positive for the

group's aerospace business, which generates about 60% of its revenue.

"We continue to deliver parts that are used in Boeing B737 and B787 aircraft where demand is stable, and we are ramping production on parts used in the new Airbus A320neo.

"For our parts that are used in business jet applications, demand continues to be volatile as compared with the commercial airliner market," he said.

On the recent controversy over the Boeing 737max, Goh said the group supplies engine casing to the aircraft.

"We are still producing parts for the model. There are no stop work instructions," Goh added.

On the cancellation of Airbus 380 by Airbus, Goh said the impact on SAMEE is minimal.

In Penang, SAMEE has five plants in Bayan Lepas on the island, of which two are involved in the production of aerospace components.

In Seberang Prai, it has one plant producing nacelle beams.

The group also has two plants in

Singapore and a plant in Thailand.

On the 2019 financial year that just ended March 31, Goh said the group expected the revenue from the aerospace industry which accounts for about 60% of our group revenue to remain stable.

"We expect the revenue from the equipment business to decrease marginally in the fourth quarter due to softer demand from the customers from semiconductor and HDD industry. "However, we expect the demand from the hard disk drive storage segment to recover next financial year," he said.

Meanwhile, Airbus' president for Asia Pacific Jean-Marc Nasr said recently in a media briefing in March that Airbus expected to increase its local sourcing activities and partnerships to US\$550mil (RM2.24bil) by 2023, up 38.3% from US\$400mil (RM1.62bil) in 2018.

"We are 100% committed to growing our presence in Malaysia and we believe that the country's aerospace industry has the potential to become one of the largest in the region," he added.

The growth would be due to higher passenger traffic growth in the region, translating into higher demand for air traffic production and maintenance, repair and over-haul services, according to Nasr.

Currently, he said the company is the biggest partner for Malaysia's aerospace industry, while Malaysia is Airbus' third largest market in the Asia-Pacific region after China and India.

To date, the company works with more than 12,000 suppliers worldwide that provide products and services for flying and non-flying parts.

According to an Airbus 2018 forecast, the demand for aircraft in Asia Pacific would increase to 14,450 valued at US\$2.3 trillion over the next 20 years, which is more than 40% of global demand for almost 35,000 aircraft over the next 20 years.

Over the next 20 years, Airbus projects that the passenger traffic growth in Asia Pacific will grow 5.6% annually, compared with 4.4% per annum globally.

**LAMPIRAN 12**  
**NEW STRAITS TIMES (NEWS / NATION): MUKA SURAT 16**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

**TASK FORCE ESTABLISHED**

## Study to be conducted to find out source of Sungai Rui pollution, says Jayakumar



Water, Land and Natural Resources Minister Dr A. Xavier Jayakumar (right) at a eucalyptus farm in Bukit Sapi, Lenggong, yesterday. BERNAMA PIC

Sapi, here with Forestry Department director-general Datuk Akhirrudin Mahmud and foreign envoys.

Jayakumar said the river was a raw water source for the Air Ganda water treatment plant, which supplies water to 1,000 villages with a capacity of 0.68 million litres per day.

He said Klian Intan in Hulu Perak had been identified as an area rich in minerals, such as tin and sulfide minerals, such as arsenopyrite and pyrite, and any mining or land clearing could lead to a natural acidic reaction,

which, in turn, releases heavy metals, such as arsenic, iron, lead, zinc and nickel into the water.

The results will be known at least a week after the completion of the study.

"We do not want to point fingers at any party without identifying the causes of the pollution."

Jayakumar said this after visiting a eucalyptus farm in Bukit

Sapi, here with Forestry Department director-general Datuk Akhirrudin Mahmud and foreign envoys.

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On Thursday, Perak Education, Technology, Science and Environmental Committee chairman Dr Abdul Aziz Barl said based on recent tests by the department, Sungai Rui's pollution was believed to be due to high arsenic content. **Bernama**

**LAMPIRAN 13**  
**HARIAN METRO (BESTARI): MUKA SURAT 43**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

# IMPAK PENCEMARAN PLASTIK

Program larian sejauh 5 kilometer keliling kampus  
UM wujudkan kesedaran

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**Pencemaran** alam sekitar terutama berpunca daripada produk berasaskan plastik dikhawatiri meningkat pada kadar yang amat membimbangkan.

Berbeza dengan sifat sisa buatan organik lain, plastik mengambil masa yang lama untuk terurai semula jadi.

Bergantung kepada komposisi dan struktur kiminya, ada jenis plastik yang mengambil masa sehingga 400 tahun untuk terurai.

Walau pun secara dasarnya plastik boleh dikitar semula apabila dibebani dengan pelbagai kos tambahan seperti pengumpulan dan pembersihan, proses ini tidak menjadi keutamaan industri.

Dikatakan hanya sembilan peratus plastik dikitar semula daripada 6.3 bilion ton plastik yang dihasilkan di seluruh dunia sejak mula diperkenalkan pada 1950-an.

Lebih memburukkan keadaan, setiap tahun, dianggarkan sehingga lapan juta tan metrik sisa plastik memasuki sistem perairan dunia dan berakhiri di lautan.

Pencemaran ini menjaskan fisiologi kehidupan marin yang mungkin mem-



PEMENANG kategori lelaki dan wanita bergambar kenangan setelah tamat program.



PESERTA gigih berlari.



CABARAN membuka balutan plastik yang dililit pada potong penyu.



menuju ke Pasaraya "Go Green" li-befah!. Anda di minta untuk memilih arakan pilihan beg yang bersesuaian larian.



PESERTA gembira selepas berjaya menamatkan larian.

SATU daripada stesen yang perlu dilalui peserta.

ber kesan jangka panjang. Aspek pendidikan diilah mempunyai potensi untuk memberi impak kepada situasi pencemaran alam sekitar ini.

Selain mengambil bahagian dalam aspek pengurusan sisa, isu kelestarian alam sekitar yang berkait juga boleh dijadikan elemen penting dalam membentuk generasi bertanggungjawab.

Atas dasar itu, mahasiswa dari Kelab Sains Pengurusan Alam Sekitar (SPAS), Institut Sains Biologi, Universiti Malaya (UM) mengajurkan program larian yang mengetengahkan impak penggunaan plastik dalam kehidupan sehari-hari.

Penyayarah Kanan Institut Sains Biologi UM, Dr Rosazlin Abdullah berkata, program Run for the Environment: Towards Zero Plastic Lifestyle disertai lebih 200 peserta yang berlari sejauh lima kilometer mengelilingi kampus UM.

"Berbeza dengan program larian lain, peserta perlu melalui lima stesen aktiviti yang direka khusus bagi memberi pendedahan mengenai peranan dan impak plastik dalam kehidupan kita," katanya.

Menurutnya lagi, pendedahan melalui kaedah rekreasi santai sebegini diyakini mampu membantu dalam proses pemahaman isu yang dibawa.

"Walau pun pendedahan berkenaan isu kelestarian alam sekitar sudah banyak diketengah dan dijura oleh pelbagai pihak, namun usaha untuk meningkatkan

kesedaran pengguna perlu terus dilakukan.

"Peningkatan sisa plastik, jika dibiarkan, mampu memerdam ekosistem bumi, sama ada di darat maupun di laut, terutama penghasilan sisa plastik bersaiz mikro yang berisiko memasuki tubuh manusia," katanya.

Program itu turut menerima kerjasama daripada pelbagai pihak, termasuk Rimba Ilmu UM, Pertubuhan Pemuda GEMA Malaysia, Kumpulan Latihan Kelnasniswa UM dan SWCorp Wilayah Persekutuan.

Menariknya, di setiap stesen disediakan aktiviti yang direka khas supaya dapat memberikan maklumat dan pendedahan yang berbeza kepada peserta.

Dr Rosazlin berkata, aktiviti di setiap stesen disediakan sukarelawan dari rakan pengajar yang menyediakan aktiviti berbeza dan menarik.

"Ketika di Rimba Ilmu contohnya, peserta perlu melalui latuan yang berbeza menurut pilihan beg yang bersesuaian apabila membeli belah di pasar raya.

"Pilihan beg yang betul akan membentarkan peserta untuk meneruskan larian ke stesen berikutnya. Di stesen aktiviti terakhir, mereka diminta untuk menyelamatkan patung penyu dari lilitan plastik dan membawanya ke garisan penamat. Menariknya, peserta dibenarkan membawa patung penyu ini sebagai cenderahati program," katanya.

**LAMPIRAN 14**  
**NEW STRAITS TIMES (WORLD): MUKA SURAT 64**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

# VR industry players excited about China

**SHANGHAI:** Chen Jiuxiao puts on virtual reality (VR) goggles and is immediately transported to a snow-covered ski slope, down which she slaloms without ever leaving here.

"I felt weightless skiing down the mountain," Chen, 25, gushes after re-emerging in the material world.

"The scenery around me was so authentic."

Chen said she ventured into one of the city's VR arcades due to word of mouth from her tech-savvy friends.

China had an estimated 3,000 VR arcades in 2016, and the market was forecast to grow 18-fold between then and 2021 to amount to 5.25 billion yuan (RM3.2 billion), according to a joint report by iResearch Consulting Group and Greenlight Insights.

Add in the profits to be made from headsets, equipment, games and other products, and



A woman playing a video game using a virtual reality headset at an arcade in Shanghai. AFP PIC

it's little wonder that augmented-reality (AR) and VR industries are excited about China.

"Chinese growth in the next five years could see it dominate AR/VR long-term – and not by a small margin," Silicon Valley consultancy Digi-Capital said in a report last year.

One key factor is China's government.

Tens of millions of Chinese have become obsessive players of mobile video games, causing concern that China was raising a generation of myopic youngsters ad-

dicted to battle games.

Authorities imposed curbs last year on the number of new game releases and playing time for youths, rattling the industry and shaving billions off the market value of big players, including gaming giant Tencent.

But the government is pushing hard for China to become a world leader in next-generation technologies, including artificial intelligence and autonomous vehicles. VR has been lumped into that favoured class, benefiting from a slew of preferential policies.

Firms, such as Tencent Alibaba and Baidu, are investing in virtual online shopping and VR entertainment, all of which could trickle down into gaming.

Already a number of towns and cities in China have declared themselves incubator zones that are integrating VR into research, manufacturing, education and other spheres, luring in capital, according to Chinese reports.

The expected wide-scale adoption in China of ultra-fast 5G networks is expected to further boost VR development. **AFP**

**LAMPIRAN 15**  
**BERITA HARIAN (DUNIA): MUKA SURAT 73**  
**TARIKH: 8 APRIL 2019 (ISNIN)**

## India pertahan serpihan satelit

**New Delhi:** India menegaskan serpihan satelit susulan ujian peluru berpandu anti-satelit negara itu tidak mendatangkan bahaya kepada Stesen Angka Lepas Antarabangsa (ISS).

Ia sebagai menjawab kritikan Pentadbiran Angkasa Lepas dan Aeronautik Amerika Syarikat (NASA), baru-baru ini.

India terus mempertahankan tindakan itu susulan ujian pada 27 Mac lalu yang disifatkan NASA sebagai ‘perkara paling teruk’ yang mampu mencetus bahaya baru kepada angkasawan yang berada di ISS.

“Misi itu dirancang mengikut sifat serpihan berkenaan yang sangat cepat mereput dan hanya sebilangan kecil saja yang akan naik,” kata ketua Kajian Pertahanan dan Pertubuhan Pembangunan, G Satheesh Reddy, kepada wartawan.

“Memang wujud risiko selama 10 hari dan kami berjaya melepassi tempoh itu,” katanya pada sidang akhbar. Mengikut simulasi kami, tidak mungkin serpihan satelit itu akan menghentam ISS,” katanya.

Minggu lalu, Ketua NASA, Jim Bridenstine mengutuk pemusnahan satelit India menyifatkannya sebagai ‘perkara paling teruk’ yang menghasilkan 400 serpihan orbital atau ‘sisa angkasa lepas’.

Sisa angkasa lepas adalah berbahaya bukan kerana ia jatuh ke Bumi tetapi ia mungkin bertembung dengan satelit yang sedang mengorbit. Serpihan kecil yang berkelajuan tinggi, sudah cukup untuk merosakkan sebuah satelit.