

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<p><a href="#"><b>Open letter from Lynas</b></a></p> <p>The Energy, Science, Technology, Environment and Climate Change Ministry (MESTECC) also released a statement on December 4 relating to the decision of the ministry to subject Lynas Malaysia to two new preconditions for its licence renewal on September 2, 2019 and future permission renewals in relation to residue management (detailed below). The statement is available via the MESTECC Twitter page.</p>	The Malaysian Insight	Klik pada tajuk berita
2.	<p><a href="#"><b>Lynas Shares Crash On Malaysian Review</b></a></p> <p>“This is disappointing as the Ministry’s intention to impose new conditions contradicts a media statement issued on 30 October 2018 by MESTECC (Minister for Energy, Science, Technology, Environment and Climate Change) which stated that Cabinet would review the Review Committee’s report before any decisions were announced. This process does not appear to have been followed,” Lynas said.</p>	Share Cafe	Klik pada tajuk berita
3.	<p><a href="#"><b>Lynas weighs options for radioactive waste in Malaysia</b></a></p> <p>Lynas was left reeling by a shock announcement by the Malaysian energy and environment ministry on Tuesday that waste removal would be a pre-condition for any future licence to operate.</p>	Financial Review	Klik pada tajuk berita
4.	<p><a href="#"><b>Lynas terkejut dengan prasyarat pembaharuan lesen</b></a></p> <p>Lynas Corporation Ltd (Lynas) terkejut dengan keputusan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim berhubung prasyarat pembaharuan lesen</p>	Berita Harian	Klik pada tajuk berita



	kepada LAMP untuk terus beroperasi di negara ini.		
5.	<b><u>Rampas tanah jika masih ingkar / Rampas tanah jika ingkar</u></b>  Menurutnya, justeru, Operasi Tindakan Penguatkuasaan Bersepadu bersama Majlis Perbandaran Klang (MPK), Lembaga Urus Air Selangor (Luas) dan Jabatan Alam Sekitar (JAS) Selangor dilaksanakan di tapak pelupusan sampah haram berkenaan, semalam.	Sinar Harian	Klik pada tajuk berita atau rujuk lampiran 1
6.	<b><u>S'gor to ban import of plastic waste in 5 years</u></b>  The Selangor government plans to completely ban the import of plastic waste into the state within the next three to five years, the state legislative assembly was told.	The Sun Daily	Klik pada tajuk berita
7.	<b><u>Selangor haram import plastik dalam tempoh 3-5 tahun / Haram import plastik dalam tempoh 3-5 tahun</u></b>  Namun begitu beliau berkata permasalahan itu dapat diatasi selepas beberapa tindakan diambil oleh pihak berkuasa tempatan (PBT) dan Jabatan Alam Sekitar (JAS) terhadap pihak bertanggungjawab.	Sinar Harian	Klik pada tajuk berita atau rujuk lampiran 2
8.	<b><u>Enam pusat pengumpulan e-waste diwujudkan di Pahang / Pahang wujud enam pusat pengumpulan e-waste</u></b>  Jabatan Alam Sekitar (JAS) Pahang membuka enam pusat pengumpulan sisa kitar semula barang elektronik (e-Waste) di negeri ini.	Sinar Harian	Klik pada tajuk berita dan rujuk lampiran 3
9.	<b><u>Amaran cuaca peringkat waspada di negeri Pantai Timur</u></b>  Jabatan Meteorologi Malaysia (METMalaysia) mengeluarkan notis amaran cuaca waspada peringkat kuning di negeri-negeri Pantai Timur Semenanjung susulan angin kuat pada Jumaat ini.	Astro Awani	Klik pada tajuk berita



10.	<p><b><u>Amaran kuning di Terengganu 6 hingga 7 Disember / Amaran kuning di Terengganu</u></b></p> <p>Jabatan Meteorologi Malaysia (JMM) mengeluarkan amaran hujan lebat peringkat kuning bagi semua daerah di Terengganu selama dua hari bermula esok.</p>	Sinar Harian	Klik pada tajuk berita dan rujuk lampiran 4
11.	<p><b><u>Malaysia investing in data-driven future – but obstacles remain</u></b></p> <p>An example of this occurred just last month when the Malaysian Technology Development Corporation (MTDC) invited small and medium enterprises (SMEs) to get onboard with the fourth industrial revolution by embracing the launch of the Centre of 9 Pillars (Co9P) initiative.</p>	Data Centre News Asia	Klik pada tajuk berita
12.	<p><b><u>Lynas terkejut, kecewa keputusan kementerian</u></b></p> <p>Keputusan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim berhubung prasyarat pembaharuan lesen kepada Lynas Corporation Ltd. (Lynas) untuk terus beroperasi di negara ini adalah tidak selari dengan laporan berdasarkan kajian saintifik dan pakar oleh Jawatankuasa Eksekutif Penilaian kilang berkenaan.</p>	Utusan Malaysia	Rujuk lampiran 5
13.	<p><b><u>Kecewa laporan tak selari</u></b></p> <p>Lynas Corporation Ltd (Lynas) terkejut dengan keputusan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim berhubung prasyarat pembaharuan lesen kepada Lynas Advance Materials Plant (LAMP) untuk terus beroperasi di negara ini.</p>	Harian Metro	Rujuk lampiran 6
14.	<p><b><u>Selesai isu penstoran sisa</u></b></p> <p>Semalam, Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim, Yeo Bee Yin menyampaikan keputusan laporan daripada jawatankuasa Eksekutif Penilaian Operasi Lynas Advanced Material Plant (LAMP) meminta agar Lynas mengatasi masalah penstoran sisanya mengikut jangka waktu yang</p>	Sinar Harian	Rujuk lampiran 7



	ditetapkan dalam syarat lesen penstoran sisanya.		
15.	<p><b><u>Projek solar terbesar Malaysia mula operasi</u></b></p> <p>Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim menetapkan sasaran bahawa 20 peratus daripada tenaga elektrik negara akan dijana menerusi sumber boleh diperbaharui menjelang 2030.</p>	Berita Harian	Rujuk lampiran 8
16.	<p><b><u>Lynas to proceed with facility</u></b></p> <p>This is in spite of the Energy, Science, Technology, Environment and Climate Change Ministry's decision to impose a pre-condition for Lynas to remove the WLP residue from Malaysia.</p>	The Star	Rujuk lampiran 9
17.	<p><b><u>Sisa sampah bersatu di pusat pelupusan?</u></b></p> <p>Ini kerana menurut Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTEC), Yeo Bee Yin, sisa-sisa yang diasingkan di peringkat isi rumah dicampurkan semula di tempat pelupusan sampah.</p>	Utusan Malaysia	Rujuk lampiran 10
18.	<p><b><u>Tiada lagi penyedut minuman plastik</u></b></p> <p>Masih ingatkah anda tentang reaksi berbeza dan tidak kurang juga dengan kecaman yang diterima oleh Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC) apabila menyuarakan pengharaman penggunaan penyedut minuman plastik di Wilayah Persekutuan bermula 1 Januari 2020?</p>	Utusan Malaysia	Rujuk lampiran 11
19.	<p><b><u>Open letter by Lynas</u></b></p> <p>The Minister for Energy, Science, Technology, Environment and Climate Change (MESTECC) also released a statement on 4 December relating to the decision of the Ministry to subject Lynas Malaysia to two new pre-conditions for its licence renewal on 2 September 2019 and future permission renewals in relation to residue management (detailed below).</p>	New Straits Times	Rujuk lampiran 12



## TEMPATAN

Bil	Berita	Media	Capaian Berita Penuh
20.	<p><b><a href="#"><u>Polis belum terima laporan bedah siasat kali kedua CEO Cradle Fund</u></a></b></p> <p>Polis masih belum menerima laporan bedah siasat kali kedua milik Ketua Pegawai Eksekutif (CEO) Cradle Fund Sdn Bhd yang maut dalam kebakaran di rumahnya Jun lalu.</p>	Berita Harian	Klik pada tajuk berita
21.	<p><b><a href="#"><u>Tech: More local companies interested in blockchain as hype subsides</u></a></b></p> <p>In Malaysia, several listed companies have announced blockchain-related pursuits with some even partnering the more established players in the field. For example, CIMB Group Holdings Bhd has announced a strategic collaboration with Ripple to enable instant cross-border payments across its various markets.</p>	The Edge Markets	Klik pada tajuk berita
22.	<p><b><a href="#"><u>Growing M&amp;A bustle as Malaysia moves past GE14</u></a></b></p> <p>“Coupled with the finance minister’s announcement on investments to facilitate readiness for the Fourth Industrial Revolution, foreign investors with relevant technology are also looking at digitising fundamentally strong but traditional businesses (namely blockchain technology providers working with financial institutions) in Malaysia, spurring further M&amp;A potential,” she says.</p>	The Edge Markets	Klik pada tajuk berita
23.	<p><b><a href="#"><u>Malaysia's 'Silicon Valley' seeks a reboot</u></a></b></p> <p>Putrajaya announced it intends to revitalise Cyberjaya as the country prepares to embrace the Industry Revolution 4.0, which involves big data analytics; data science; the Internet of Things; as well as blockchain technology.</p>	Malaysian Reserve	Klik pada tajuk berita
24.	<p><b><a href="#"><u>Kesatuan sekerja perlu berubah sikap - Dr.Mahathir</u></a></b></p> <p>Perdana Menteri, Tun Dr. Mahathir Mohamad</p>	Utusan Malaysia	Klik pada tajuk berita



	berkata, dalam konteks masa kini, peranan kesatuan sekerja melangkaui tradisi kerana perubahan teknologi, automasi dan robotik jika tidak ditangani akan mengakibatkan pekerja ketinggalan		
25.	<p><b><u>Unions are bridges between staff and bosses</u></b></p> <p>Dr Mahathir also said that fast-changing technology, automation and robotics, if not embraced quickly, will result in workers being left behind and not becoming relevant.</p>	The Star	Klik pada tajuk berita
26.	<p><b><u>Dr M: Unions should be ‘bridges’ between workers, employers</u></b></p> <p>He said fast-changing technology, automation and robotics, if not embraced quickly will result in workers being left behind and not becoming relevant.</p>	The Borneo Post	Klik pada tajuk berita
27.	<p><b><u>Banjir, 31 penduduk dipindah</u></b></p> <p>Hujan berterusan, kadangkala lebat sejak semalam menyebabkan seramai 31 penduduk daripada lapan keluarga di Kampung Besol Lama, Bandar Bukit Besi dekat sini terpaksa dipindahkan ke pusat pemindahan banjir di sini pagi tadi.</p>	Utusan Malaysia	Klik pada tajuk berita
28.	<p><b><u>Selangor siapkan projek saliran terbengkalai selesai isu banjir</u></b></p> <p>Kerajaan Selangor akan menyelesaikan semua projek sistem saliran terbengkalai yang menyebabkan kejadian banjir di negeri ini pada tahun hadapan.</p>	Berita Harian	Klik pada tajuk berita
29.	<p><b><u>Kampung Besol Lama dilanda banjir</u></b></p> <p>Hujan lebat berterusan sejak semalam menyebabkan Kampung Besol Lama, Bukit Besi dekat sini mula dilanda banjir hari ini.</p>	Kosmo!	Klik pada tajuk berita
30.	<p><b><u>IPD Hulu Terengganu cipta bot amfibis</u></b></p> <p>Sepasukan anggota polis dari Ibu Pejabat Polis Daerah Hulu Terengganu di sini berjaya menghasilkan bot amfibis pertamanya bagi</p>	Utusan Malaysia	Klik pada tajuk berita



	mengangkut dan menyelamatkan mangsa-mangsa banjir.		
31.	<b><u>IPD Hulu Terengganu cipta bot amfibia bantu mangsa banjir</u></b>  Ibu Pejabat Polis Daerah (IPD) Hulu Terengganu berjaya mereka cipta bot amfibia yang mampu bergerak di daratan dan air untuk kegunaan pada musim banjir tidak lama lagi.	Kosmo!	Klik pada tajuk berita
32.	<b><u>Hubungi 999 jika hadapi banjir serius</u></b>  Angkatan Pertahanan Awam Malaysia (APM) Daerah Kuala Selangor menasihatkan penduduk yang berdepan musibah banjir supaya segera menghubungi pihak berwajib.	Sinar Harian	Klik pada tajuk berita
33.	<b><u>UMP and Asahitechno study flood mitigation tech / UMP, Japanese firm to develop flood-mitigation technology</u></b>  Universiti Malaysia Pahang's (UMP) Centre for Earth Resources Sustainability Centre (ERAS), together with Japanese firm Asahitechno Co Ltd Japan, has embarked on technology-sharing collaboration in addressing flood problem in the state.	New Straits Times	Klik pada tajuk berita atau rujuk lampiran 13
34.	<b><u>Flood-mitigation projects for Miri City to be sped up</u></b>  The RM25 million flood-mitigation projects for Miri City will be implemented expeditiously as part of the permanent solution for flood-prone areas in the city.	Malay Mail	Klik pada tajuk berita
35.	<b><u>Selangor promises to cut flash floods</u></b>  The Selangor state government has pledged to minimise flash floods by resolving uncompleted flood mitigation projects.	Malay Mail	Klik pada tajuk berita
36.	<b><u>NAHRIM prepared to assist in water conservation efforts: Xavier</u></b>  Natural phenomena have become alarming with the climate change the rising sea level effects such as coastal erosion, river estuaries, runoff sediment, flood frequency, drought, polluted	The Sun Daily	Klik pada tajuk berita



	water resources and the environment.		
37.	<p><b><u>FRIM objects to proposed development</u></b></p> <p>He said he was particularly concerned that the proposed development may affect FRIM's chances of achieving the Unesco World Heritage Site (WHS) status, apart from opening the floodgate of demands for further degazetttement of the forest reserve for development purposes.</p>	The Star	Klik pada tajuk berita
38.	<p><b><u>Projek solar terbesar beroperasi</u></b></p> <p>Projek solar terbesar di Malaysia milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor telah mula beroperasi dan menyumbang tenaga boleh diperbaharui (RE) ke Grid Nasional pada tengah malam 23 November lalu.</p>	Utusan Malaysia	Klik pada tajuk berita atau rujuk lampiran 14
39.	<p><b><u>Projek solar berskala besar TNB tingkat kapasiti tenaga / Solar terbesar Malaysia mula tugas</u></b></p> <p>Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) yang beroperasi sejak 23 November lalu berjaya meningkatkan kapasiti tenaga boleh baharu (RE) TNB ke grid nasional kepada 73.2MW.</p>	Sinar Harian	Klik pada tajuk berita dan rujuk lampiran 15
40.	<p><b><u>TNB's Mukim Tanjung 12 LSS contributes 73.2 MW of RE to national grid / TNB contributes 73.2MW to national grid</u></b></p> <p>Tenaga Nasional Berhad (TNB) is now contributing 73.2 MW of renewable energy (RE) to the national grid in line with the government's target of generating 20 per cent of RE resources by 2030.</p>	New Straits Times	Klik pada tajuk berita dan rujuk lampiran 16
41.	<p><b><u>Projek solar terbesar Malaysia mula operasi</u></b></p> <p>Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor sudah mula beroperasi dan menyumbang tenaga boleh baharu (RE) ke grid nasional pada tengah malam 23 November lalu.</p>	Berita Harian	Klik pada tajuk berita
42.	<p><b><u>Projek LSS mula beroperasi</u></b></p>	Harian Metro	Klik pada tajuk berita dan

	Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor sudah mula beroperasi dan menyumbang tenaga boleh baharu (RE) ke grid nasional bermula tengah malam 23 November lalu.		rujuk lampiran 17
43.	<b><u><a href="#">Micro-hydro for remote villages</a></u></b>  The Government has agreed, in principle, to build a micro-hydro system in all villages in Sabah which are too remote to be connected to the state electricity grid.	Daily Express	Klik pada tajuk berita
44.	<b><u><a href="#">Acromec unit, Chew's to power energy plant with chicken waste</a></u></b>  Acromec's subsidiary has signed a letter of intent (LOI) with egg producer Chew's Group to operate a waste-to-energy power plant that will use chicken manure as feed stock.	The Straits Times	Klik pada tajuk berita
45.	<b><u><a href="#">EEC berjaya jimatkan penggunaan elektrik lebih RM134,000 di sekolah</a></u></b>  Cabaran Kecekapan Tenaga (EEC) di kalangan sekolah-sekolah di seluruh negara anjuran Suruhanjaya Tenaga pada tahun ini berjaya menjimatkan penggunaan tenaga elektrik sebanyak 428,311kw/jam iaitu bersamaan RM134, 147 untuk tempoh enam bulan.	Utusan Malaysia	Klik pada tajuk berita
46.	<b><u><a href="#">Xavier: More subject matter experts needed in biodiversity / ‘Nation needs to groom experts in biodiversity, climate change’</a></u></b>  The country needs to have continuity in grooming experts in the field of climate change and biodiversity, or we will keep going back to retraining new individuals all the time, without showcasing Malaysia to the world.	New Straits Times	Klik pada tajuk berita dan rujuk lampiran 18
47.	<b><u><a href="#">Malaysia plans to roll out new high-tech car in four years</a></u></b>  Economic Affairs Minister Azmin Ali told reporters on Monday "we will share the prototype with the public soonest next year" and that "the main objective is to enhance our	The Straits Times	Klik pada tajuk berita



	engineering capacity among Malaysians and to build a new ecosystem which is very deeply involved in innovation and technology".		
48.	<b><u>TNB completes solar power job</u></b>  Tenaga Nasional Berhad (TNB) has completed its 50MW solar power project in Sepang, Selangor – the largest solar project in the country.	The Star	Rujuk lampiran 19
49.	<b><u>TNB starts operations of Malaysia's largest solar plant</u></b>  Tenaga Nasional Berhad (TNB) which commenced operations of the country's largest Large-Scale Solar (LSS) photovoltaic plant on Nov 23, expects the plant to generate 1,700 megawatts (MW) of renewable energy by 2025.	The Sun Daily	Rujuk lampiran 20
50.	<b><u>Conscience in age of big data</u></b>  The past industrial revolutions tested our skills and resilience to combat labour challenges. This time, we are faced with a greater challenge – our conscience.	The Star	Rujuk lampiran 21
51.	<b><u>Projek solar terbesar negara mula beroperasi di Sepang</u></b>  Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor telah mula beroperasi dan menyumbang tenaga boleh diperbaharui (RE) ke grid nasional pada tengah malam 23 November lalu.	Kosmo!	Rujuk lampiran 22
52.	<b><u>Import of recyclable plastics to go on</u></b>  Selangor assemblymen are unhappy that the state will not stop the import of recyclable plastic indefinitely despite the Federal Government's pro-green efforts.	The Star	Rujuk lampiran 23
53.	<b><u>UMP kaji teknologi tangani banjir</u></b>  Penyelidik Universiti Malaysia Pahang (UMP) terus mendapat kepercayaan daripada pihak antarabangsa bagi menjalankan penyelidikan bagi menghasilkan inovasi atau sistem memberi	Harian Metro	Rujuk lampiran 24



	manfaat kepada rakyat.		
54.	<p><b><u>Penapis air sistem solar</u></b></p> <p>Ketiadaan dan kekurangan air bersih akibat banjir di Kelantan pada tahun 2015 menjadi ilham kepada pensyarah Universiti Malaya (UM), Profesor Dr Mohd Azlan Hussain membangunkan Sistem Penapisan Air Ultra Mudah Alih Berkuala Solar.</p>	Harian Metro	Rujuk lampiran 25
55.	<p><b><u>Our attitude can save the environment</u></b></p> <p>Solid waste is one of the three major environmental problems in the country. According to SWCorp Malaysia, a government agency dealing with the solid waste, Malaysians generate about 38,000 tonnes of waste per day.</p>	New Straits Times	Rujuk lampiran 26

## ANTARABANGSA

Bil	Berita	Media	Capaian Berita Penuh
56.	<p><b><u>Gempa bumi 5.2 Richter gegar Chile</u></b></p> <p>SANTIAGO 6 Dis. - Gempa bumi berukuran 5.2 skala Richter menggegarkan kawasan pantai di tengah Chile, hari ini.</p>	Utusan Malaysia	Klik pada tajuk berita
57.	<p><b><u>Tsunami warning issued after 7.6 quake off New Caledonia</u></b></p> <p>NOUMÉA: A powerful undersea earthquake with a magnitude of 7.6 struck off the east coast of New Caledonia in the South Pacific on Wednesday, said the Pacific Tsunami Warning Center, adding tsunami waves had been observed.</p>	New Straits Times	Klik pada tajuk berita
58.	<p><b><u>Snag in the Crusade against Global Warming</u></b></p> <p>Grim future awaits humanity if we fail to act decisively on the matter; countries must refocus on carbon-capturing technologies.</p>	New Straits Times	Rujuk lampiran 27
59.	<p><b><u>Gempa kuat melanda New Caledonia</u></b></p>	Kosmo!	Rujuk lampiran 28



	NOUMEA, New Caledonia – Pihak pentadbir New Caledonia semalam mengarahkan pengosongan di kawasan pesisir pantai susulan satu amaran tsunami selepas kejadian gempa bumi kuat bawah laut berukuran 7.6 magnitud.		
60.	<p><b><u>Siberian region fights to preserve permafrost as planet warms</u></b></p> <p>YAKUTSK: Eduard Romanov points to a spot on a block of flats where a major supporting beam has sagged and begun to crack, destabilising the nine storeys of apartments above.</p>	The Star	Rujuk lampiran 29

**LAMPIRAN 1**  
**SINAR HARIAN (KLANG): MUKA SURAT 22**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Rampas tanah jika ingkar

**Tanah tapak sampah haram di Taman Teluk Gedung Indah disita**

AZIE YAHAYA

KLANG

Pemilik yang menjadikan tanah milik mereka tapak pembuangan sampah haram berhampiran Taman Teluk Gedung Indah, di Pelabuhan Klang, berdepan tindakan undang-undang, termasuk tanah mereka dirampas.

Pegawai Daerah Klang, Mohd Zainal Mohd Nor berkata, pihaknya tidak boleh bertolak ansur dengan pemilik tanah yang terus berdejel walaupun sudah diberikan amaran.

"Awal April tahun lalu, kita menerima maklumat mengenai aktiviti pembuangan sampah di kawasan berkenaan,



MOHAMAD YASIN

"Malah notis kepada pemilik tanah di lot 1847 dan lot 1854 turut dikeluaran pada 27 April tahun lalu supaya menghentikan operasi pembuangan sampah," katanya kepada Sinar Harian, semalam.

#### **Pembuangan sampah masih aktif**

Bagaimanapun, aktiviti pembuangan sampah di kawasan itu dikehendaki aktif selepas pihaknya menerima laporan berhubungan perka itu. Justeru, kata beliau, Operasi Tindakan Pengquatkuasaan Bersepadu bersama Majlis Perbandaran Klang (MPK), Lembaga Urus Air Selangor (Llias) dan Jabatan Alam Sekitar (JAS) Selangor dijalankan di tapak pelupusan sampah haram



Anggota pengawas meletakkan papan amaran di laluan masuk ke tapak pembuangan sampah haram itu dalam Operasi Tindakan Pengquatkuasaan Bersepadu yang dijalankan, kelmarin.



Sinar Harian 3 Disember lalu yang menyuarakan isu berkenaan.



Tapak sampah haram menimbulkan masalah kepada penduduk setempat.

mulihkan Pelanggaran Syarat Tanah. "Pemilik tanah diberi tempoh selama tiga bulan dan tindakan perampasan tanah boleh diambil jika pemilik gagal mematuhi perintah notis."

"Jika sabit kesalahan, pencerobohan turut memasang pita kuasing dan papan tanda amaran di laluan masuk ke tapak pembuangan sampah haram itu."

"Skuad Pantas MPK juga akan menjalankan pemantauan berterusan bagi menghalang sebarang aktiviti pembuangan sampah di situ," katanya.

Operasi dijalankan selama tiga jam dan berakhir jam 3 petang itu diketuai Penolong Pegawai Daerah Klang, Mohammad Saiful Azri Fouzi melibatkan 40 anggota daripada piagam terbabit.

Kelmarin, Sinar Harian melaporkan lebih 100 keluarga di Taman Teluk Gedung Indah, di sini, menganggur derita apabila terpaksa berdepan dengan masalah pencemaran bau sejak dua tahun lalu berkaitan wujudnya tapak pelupusan sampah haram. Penduduk mendakwa, tapak pelupusan sampah haram

itu hanya terletak kira-kira 30 meter dari kawasan perumahan sekali gus menjejaskan kualiti kehidupan mereka apabila terpaka berhadapan dengan bau busuk setiap masa.

#### **Pemilik tanah diberi tempoh 14 hari**

Malis Perbandaran Klang (MPK) mengeluarkan notis kepada pemilik tanah supaya melakukan kerja pemberantas tapak pelupusan sampah haram.

Yang Dipertua MPK, Datuk Mohamad Yasin Bidin berkata, pemilik tanah diberi tempoh 14 hari untuk memberhentikan aktiviti tersebut dan memulihkan semula tanah kepada keadaan asal.

Katanya, pihaknya mendapati aktiviti meratakan tanah dan pembuangan sampah industri terutamanya plastik secara haram melibatkan sebahagian tanah kerajaan serta tanah persendirian.

"Bagi lot 1849 dan lot 1850, Pejabat Tanah dan Daerah telah mengambil tindakan dengan mengeluarkan lima notis di bawah Seksyen 425 Kanun Tanah Negara 1965 dan

memakat tiga papan tanda amaran pencerobohan tanah kerajaan.

"Kita juga mengeluarkan Notis Pemberitahuan kepada pemilik tanah kerana menyahli Seksyen 18, Akta Perancangan Bandar dan Desa 1976, iaitu menjalankan aktiviti bercanggah dengan zon perancangan gunatanah berdasarkan Rancangan Tempatan MPK (Pengubah 4) 2020 dan Seksyen 19, Akta Perancangan Bandar dan Desa 1976, iaitu menjalankan pemajuan tanpa kebenaran merancang bagi lot 1848, 1851 dan 1854," katanya.

Menurut beliau, MPK akan memperbaiki lagi operasi bersepadu bersama agensi lain bagi membantu aktiviti pembuangan sampah haram di daerah ini.

"Mana-mana pihak tidak boleh menceroboh tanah tanpa kebenaran pihak berkuasa termasuk menjadikannya tapak pembuangan sampah haram."

"Kita memandang serius perka ini dan akan mengenakan tindakan tegas kepada mana-mana pihak yang menyalah undang-undang sedia ada," katanya.



Tanah tapak sampah haram disita.



**LAMPIRAN 2**  
**SINAR HARIAN (SIDANG DUN SELANGOR): MUKA SURAT 18**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## ***Haram import plastik dalam tempoh 3-5 tahun***

**KERAJAAN** Selangor akan mengharamkan semua import sisa plastik di negeri ini dalam tempoh tiga hingga ke lima tahun akan datang.

Exco Alam Sekitar, Teknologi Hijau, Hal Ehwal Pengguna, Sains, Teknologi dan Inovasi Hee Loy Sian berkata, tempoh masa tersebut bersesuaian bagi memberikan sedikit masa kepada pengusaha-pengusaha kilang import plastik yang beroperasi secara sah di negeri ini.

"Bagi mereka (pengusaha molang sah) sedikit masa. Saya rasa kalau hanya untuk gantung sisa plastik, ia tak cukup untuk jalankan aktiviti harian mereka.

"Mereka terpaksa import, sebab itu saya bersetuju kita kena beranaur-ansur haramkan sisa plastik ini," katanya.

Loy Sian berkata demikian bagi menjawab soalan tambahan Datuk Dr Ahmad Yunus Hairi (Pas-Sijangkang) mengenai dasar Kerajaan Selangor berhubung import sisa plastik di negeri ini.

Mengulas lanjut, Loy Sian

yang juga merupakan Adun Kajang memaklumkan bahawa sebagai kerajaan negeri yang adil, isu melibatkan sisa plastik ini perlu dilihat secara menyeluruh bagi memberi keadilan buat semua pihak.

"Kita setuju sisa plastik ini perlu dikawal dimana hanya kilang-kilang yang sah sahaja dibenarkan untuk import.

"Kerajaan Selangor turut menetapkan levi yang lebih tinggi bagi menunjukkan kita tidak menggalakkan import sisa plastik di negeri ini," katanya.

Dalam pada itu, Loy Sian

memaklumkan bahawa selepas PH mengambil pentadbiran kerajaan pusat, Kerajaan Selangor dimaklumkan bahawa keadaan sisa plastik di Kuala Langat, Klang dan Ijok berada dalam keadaan tidak terkawal.

Namun begitu, beliau berkata, permasalahan itu dapat diatasi selepas beberapa tindakan diambil oleh pihak berkuasa tempatan (PBT) dan Jabatan Alam Sekitar (JAS) terhadap pihak bertanggungjawab.

**LAMPIRAN 3**  
**SINAR HARIAN (SENTRAL): MUKA SURAT 20**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

Mahamud (tengah) bersama penuntut Polisas bergambar pada Program Kesedaran E-Waste dan Majlis Pelancaran Pusat Pengumpulan E-Waste di Polisas, semalam.



## **Pahang wujud enam pusat pengumpulan e-waste**

KUANTAN- Enam pusat pengumpulan sisa kitar semula barang elektronik (e-waste) telah diwujudkan di negeri ini.

Pengarah Jabatan Alam Sekitar (Jas) negeri, Rosli Zul berkata, pusat pengumpulan itu ditempatkan di Bentong, Temerloh, Jerantut dan dua lagi di bandar Kuantan.

Menurutnya, semua pusat pengumpulan ini akan dikendalikan dan diuruskan secara bersama antara Jas dengan syarikat elektronik Senheng Electric Sdn Bhd (Senheng).

"Ada enam kategori e-waste dari isi rumah yang boleh dikitar semula seperti televisyen, peti sejuk, mesin basuh, penghawa dingin, telefon bimbit dan komputer peribadi yang sudah tidak lagi digunakan ke pusat e-waste disediakan.

"Jadi orang ramai boleh berbuat demikian sekiranya terdapat ba-

rangan yang disenaraikan itu sudah tidak digunakan lagi," katanya.

Beliau berkata demikian ketika berucap merasmikan Program Kesedaran E-Waste dan Majlis Pelancaran Pusat Pengumpulan E-Waste di Politeknik Sultan Haji Ahmad Shah (Polisas), semalam.

Teks ucapan beliau dibacakan Timbalannya, Mahamud Ismail.

Turut hadir Timbalan Pengarah (Akademik) Polisas, Che Alias Mohd Yusof dan Timbalan Pengarah Sokongan (Akademik) Polisas, Shahrul Nizam Mohamed.

Dalam pada itu, Rosli berkata, menerusi peraturan sedia ada, pihaknya berupaya menguruskan buangan e-Waste dari sektor industri secara mesra alam sekitar.

Justeru, menurutnya, kempen kesedaran lebih agresif perlu dilakukan di negara ini bagi mendedahkan kepada orang ramai berhubung

kaedah pelupusan sisa buangan elektronik yang betul untuk mengelak daripada berlakunya ancaman kepada alam sekitar.

Sehubungan itu, Rosli memaklumkan sejumlah 700,000 tan metrik e-waste dari isi rumah, sektor perniagaan dan institusi berkaitan dihasilkan secara purata di negara ini setiap tahun.

"Sehubungan itu, dengan adanya pusat pengumpulan e-waste seperti yang kita lancarkan di Polisas hari ini (semalam), kita harap orang ramai akan lebih peka dengan kepentingan aspek penjagaan alam sekitar.

"Sebenarnya, kita ada akta membabitkan sisa buangan e-waste ini dan ia disenaraikan sebagai (sisa) buangan terjadual mengikut Peraturan-peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005," katanya.

**LAMPIRAN 4**  
**SINAR HARIAN (SETEMPAT): MUKA SURAT 35**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

**AMARAN CUACA WASPADA (KUNING)**

JABATAN METEOROLOGI MALAYSIA  
KEHENTERIAN TENAGA, SAINS, TEKNOLOGI, ALAM SEKITAR & PERUBAHAN IKLIM



Masa dikeluarkan:  
5:00 petang; 5 Disember 2018

Amaran cuaca dikeluarkan JMM.

## **Amaran kuning di Terengganu**

**KUALA TERENGGANU** - Jabatan Meteorologi Malaysia (JMM) mengeluarkan amaran hujan lebat peringkat kuning bagi semua daerah di Terengganu selama dua hari bermula hari ini.

Menurut kenyataan itu, selain Terengganu amaran cuaca waspada kuning itu turut melibatkan Kelantan dan daerah Jerantut dan Kuantan, Pahang.

"Angin timuran dari Lautan Pasifik Barat dijangka bertiup secara konsisten dan bertumpu di negeri-negeri Pantai Timur Semenanjung.

"Angin dengan kelajuan sehingga 40 kilometer sejam dengan ombak menca-

pai 2.5 meter juga dijangka berlaku di perairan Terengganu dan Kelantan dalam tempoh tersebut," kata kenyataan itu.

Sementara itu, laman web Jabatan Pengairan dan Saliran (JPS) Terengganu pula memaklumkan paras air Sungai Chalok di Jambatan Chalok, Setiu kini berada pada tahap bahaya.

Sehingga jam 5 petang semalam, tiga sungai pula berada pada paras berjaga-jaga iaitu Sungai Nerus di Kampung Langkap, Sungai Nerus di Kampung Bikit, Setiu dan Sungai Telemong di Kuala Ping, Hulu Terengganu.

**LAMPIRAN 5**  
**UTUSAN MALAYSIA (DALAM NEGERI): MUKA SURAT 10**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## Lynas terkejut, kecewa keputusan kementerian

**KUANTAN 5 Dis.** - Keputusan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim berhubung prasyarat pembaharuan lesen kepada Lynas Corporation Ltd. (Lynas) untuk terus beroperasi di negara ini adalah tidak selari dengan laporan berdasarkan kajian saintifik dan pakar oleh Jawatankuasa Eksekutif Penilaian kilang berkenaan.

Pengarah Urusan dan Ketua Eksekutifnya, Amanda Lacaze berkata, laporan jawatankuasa itu menunjukkan bahawa Lynas berdasarkan teknologi dan prosedur yang terkawal dengan risiko yang rendah serta mematuhi standard keselamatan, kesihatan dan alam sekitar mengikut peruntukan undang-undang sedia ada.

Jadi katanya, pihaknya terke-

jut dengan keputusan kementerian itu yang bertentangan dengan amalan di peringkat antarabangsa.

"Keputusan itu (prasyarat) seperti polisi berdasarkan politik bukannya berdasarkan sains, ia agak mengecewakan apabila menerimanya pada waktu yang sama laporan penilaian jawatankuasa berkenaan dikeluarkan," katanya dalam kenyataan di sini hari ini.

Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim dalam kenyataan yang dikeluarkan semalam mengenakan dua syarat untuk pembaharuan lesen LAMP antaranya menghantar sisa mangan-



AMANDA LACAZE

dungi bahan radioaktif keluar dari negara ini.

Kenyataan itu menyebut LAMP perlu memastikan sisa Fosfogypsum Besi (WLP) yang mengandungi bahan radioaktif hendaklah dihantar keluar dari negara ini.

Manakala bagi sisa buangan terjadual

Gypsum Magnesium (NUF) yang bukan radioaktif, syarikat itu perlu mengemukakan suatu pelan tindakan bagi pelupusan buangan yang terkumpul sebelum ia boleh dipertimbangkan bagi permohonan kelulusan di bawah Peraturan 9 (6) dan 9 (7), Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005.

**LAMPIRAN 6**  
**HARIAN METRO (SETEMPAT): MUKA SURAT 34**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## Kecewa laporan tak selari



**Kuantan:** Lynas Corporation Ltd (Lynas) terkejut dengan keputusan Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Pertubuhan Iklim berhubung prasyarat pembaharuan lesen kepada Lynas Advance Materials Plant (LAMP) untuk terus beroperasi di negara ini.

Pengarah Urusan dan Ketua Eksekutifnya, Amanda Lacaze berkata, ia tidak selari dengan laporan berdasarkan kajian saintifik dan pakar oleh Jawatankuasa Eksekutif Penilaian Mengenai Operasi LAMP di Gebeng, dekat sini, sekali gus bertentangan dengan amalan di peringkat antarabangsa.

Beliau berkata, pihaknya menghormati dan gembira dengan laporan penilaian jawatankuasa eksekutif menunjukkan bahawa LAMP yang berasaskan teknologi dan prosedur terkawal dengan risiko rendah dan mematuhi standard keselamatan, kesihatan serta alam sekitar mengikut peruntukan undang-undang sedia ada.

"Ia (prasyarat) berkenaan seperti polisi berdasarkan politik bukan berdasarkan sains. Memang mengecewakan apabila menerimanya pada waktu yang sama laporan penilaian jawatan-

kuasa berkenaan dikeluar-kan.

"Bagaimanapun, kita yakinkan kita dapat menguruskan sebarang perubahan dan pelaburan jangka panjang akan terus kukuh," katanya dalam kenyataan media di sini, semalam.

Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim dalam kenyataan yang dikeluarkan kelmarin, mengenakan dua syarat untuk pembaharuan lesen LAMP antaranya menghantar sisa mengandungi bahan radioaktif keluar dari negara ini.

Kenyataan itu menyebut LAMP perlu memastikan sisa Water Leached Purification Residue (WLP) yang mengandungi bahan radioaktif hendaklah diantar keluar dari Malaysia dan bagi sisa buangan terjadual Neutralization Underflow Residue (NUF) yang bukan radioaktif, LAMP perlu mengemukakan suatu pelan tindakan bagi pelupusan buangan yang terkumpul sebelum ia boleh dipertimbangkan bagi permohonan kelulusan di bawah Peraturan 9 (6) dan 9 (7), Peraturan-Peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005.

**LAMPIRAN 7**  
**SINAR HARIAN (SENTRAL): MUKA SURAT 20**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Selesai isu penstoran sisa

**Lynas tidak dibenar keluar sisa nadir bumi jika gagal**

NORAWAZNI YUSOF

KUANTAN

Lynas Corporation Ltd (Lynas) tidak akan dibenarkan mengeluarkan sisa nadir bumi sekiranya gagal menyelesaikan masalah penstoran sisa mengikut syarat ditetapkan Kerajaan PH.

Ahli Parlimen Kuantan, Fuziah Salleh berkata, lesen penstoran untuk sisa terhaduanal Lynas akan tamat tempoh pada 15 Februari tahun hadapan dan syarikat terabit seharusnya segera mengatas-

masalah itu mengikut jangka waktutetapkan.

Menurutnya, selepas berakhirknya tempoh terbatit, beliau yakin kerajaan PH tidak akan menerima sisa toksik daripada aktiviti Lynas untuk terus tercemar di daerah ini.

"Kesihatan rakyat akan diutamakan. Sebuah syarikat yang bertanggungjawab tidak akan membiarkan jumlah sisa yang begitu banyak seperti yang dilakukan oleh Lynas distorkan dengan cara yang begitu cuai dan berisiko," katanya dalam satu kenyataan semalam.

Semalam, Menteri Tenaga, Teknologi, Sains, Perubahan Iklim dan Alam Sekitar, Yeo Bee Yin menyampaikan keputusan laporan daripada Jawatankuasa Eksekutif Penilaian Operasi Lynas Advanced Material Plant



FUZIAH

(LAMP) meminta agar Lynas mengatasi masalah penstoran sisa yang mengikut jangka waktuyang ditetapkan dalam syarat lesen penstoran sisanya.

Dalam pada itu, Fuziah berkata, sejak memulakan operasi pada akhir 2012, Lynas telah menjana sejumlah besar buangan yang telah disimpan di premis penapisan.

samya di Gebeng.

Jelasnya, akibatnya, bahancbuangan, baik dari aliran radioaktif dan toksik yang dikenali sebagai 'water leached purification' (WLP) mampu aliran bukan radioaktif yang diklasifikasikan sebagai sisa terjadual, telah dikumpulkan oleh loji penapisan.

Bagaimanapun, Fuziah menjelaskan sudah tujuh tahun, Lynas diberi peluang untuk mencari penyelesaian yang selamat untuk mengrusak sisa, namun Lynas secara berterusan enggan mengakui bahawa sisa WLP adalah berbahaya.

Tegasnya, sebaliknya, Lynas sengaja mengehadkan perdebatan kepada risikonya yang konon terkawal dan sejuga mengelakkansmasalah-masalah sebenar dalam percubaannya untuk menepis

penentangan awam terhadap operasi.

"Tapi hasil percubaan Lynas ini tidak selamat digunakan kerana ia mengandungi bahan-bahan yang tercemar dengan pelbagai jenis bahan radiasi dan toksik. Oleh sebab ini, Lynas tidak lagi boleh memasukkan sisa WLP ke dalam produk sam-pingan di Malaysia," katanya.

Dalam pada itu, Fuziah berkata Australia adalah sebuah negara yang luas dan besar dan lombong Lynas di Mt Weld di Western Australia terletak di kawasan hampir gurun yang jarang penduduknya.

Justeru, katanya, Lynas perlu meneruskan permohonan dengan pihak berkuasa yang berkaitan di Australia untuk menghantar balik kesemua sisanya sebelum tempoh lesen penstoran un-

tuk sisa ini tamat.

"Ini adalah langkah permulaan yang baik untuk memastikan Lynas mengambil langkah proaktif untuk membersihkan sisa-sisanya secara berterusan. Kita perlu merhatikannya," katanya.

Selain itu, beliau turut memuji Bee Yin yang berani dan komited dalam menerangkan manifesto PH dengan mengutamakan kesihatan awam dan alam sekitar.

"Saya ucapan terima kasih kepada Jawatankuasa Eksekutif kerana berusaha menyelesaikan isu yang dihadapi di Kuantan. Saya amat berterima kasih kepada rakyat atas kesabaran dan sokongan mereka dalam usaha untuk memantau Lynas sepanjang tahun ini, serta pihak yang mengambil bahagian dalam proses penilaian ini."

katanya.

**LAMPIRAN 8**  
**BERITA HARIAN (BISNES): MUKA SURAT 49**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**



**Projek Solar Berskala Besar milik TNB di Mukim Tanjung 12, Sepang, bermula tengah malam 23 November lalu.**

# Projek solar terbesar Malaysia mula operasi

→ LSS di kawasan 98 hektar jana tenaga lebih mesra alam

Oleh Mohd Zaky Zainuddin  
zaky@nstp.com.my

**P**rojek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor sudah mula beroperasi

dan menyumbang tenaga boleh baharu (RE) ke grid nasional bermula tengah malam 23 November lalu.

LSS terbesar pertama negara, di kawasan seluas 98 hektar itu menjana elektrik menggunakan 230,000 panel solar.

Penjanaan dengan kapasiti 50MWac meningkatkan kapasiti RE TNB ke grid nasional kepada 73.2 MW sejajar agenda kerajaan memperkasakan penjanaan tenaga yang lebih mesra alam.

Projek di bawah Rancangan Malaysia ke-11 (RMK-11) yang dimenangi secara bidaan kompetitif bernilai lebih RM300 juta itu, dibangunkan oleh TNB Sepang Solar Sdn Bhd (TSSSB), sebuah anak syarikat milik

penuh TNB mulai tahun lalu.

LSS itu mencapai tarikh awal operasi (IOD) dengan penjanaan awal sebanyak 2.4 MW, Oktober lalu.

#### Jana sumber RE

Mula tugas LSS berkenaan menyumbang kepada usaha kerajaan menuju sasaran penjanaan 20 peratus daripada sumber RE menjelang 2030.

TNB dalam kenyataan semalam berkata, syarikat komited mendukung usaha menyarkan sumbangannya terhadap kapasiti penjanaan daripada RE sebanyak 1,700MW menjelang 2025.

Projek LSS dimulakan pada Julai tahun lalu di atas tanah

berkeluasan 98 hektar di Kuala Langat.

TNB Engineering Corporation Sdn Bhd pula adalah rakan kongsi kejuruteraan, perolehan dan pembinaan (EPC) bagi projek itu.

Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim menetapkan sasaran bahawa 20 peratus daripada tenaga elektrik negara akan dijana menerusi sumber boleh diperbaharui menjelang 2030.

Kira-kira 53 peratus janaan kuasa di Semenanjung adalah daripada arang batu, manakala 42 peratus daripada gas asli dan lima peratus adalah hidro dan bentuk RE.

## LAMPIRAN 9 THE STAR (NATION): MUKA SURAT 10 TARIKH: 6 DISEMBER 2018 (KHAMIS)

# I told you so, says an emotional Fuziah

By FATIMAH ZAINAL  
fatimah@thestar.com.my

**KUALA LUMPUR:** Kuantan MP Fuziah Salleh was emotional, choking on her words at times while relating how radioactive waste from the Lynas Advanced Materials Plant (LAMP) has harmed her constituency and its people.

Fuziah, who has been a critic of Australian rare earth miner Lynas, said she had often insisted that the radioactive waste should not have been allowed to be there as it was harmful to the environment and

the people's health.

This was proven when the executive committee report on the operations of LAMP published on Tuesday noted that there was an increase in heavy metal concentration such as nickel, chromium, lead and mercury in the ground water, she said.

Nickel and chromium, she added, were carcinogenic substances.

Fuziah said this proved that the storage of radioactive waste at the LAMP site had contaminated the ground water.

"I am angry, sad and disappointed. Imagine, for so long we have

allowed them to store their waste on site and now it is proven that their waste has migrated into the water.

"We don't want (to see) 20 years down the road that there's a sudden increase in cancer cases. Who will pay for it?" she asked during a press conference yesterday.

She stressed that Lynas must keep its promise, made in 2012, to send the residue from its rare earth plant in Gebeng back to Australia.

Since the plant was given a temporary operating licence (TOL) and allowed to operate in 2012, it has yet

to set up a site for permanent disposal facility to dispose of the radioactive residue.

"The review committee managed to do the findings because there was a baseline study in 2007 where the (nickel concentration) reading was very low and there was a jump after Lynas began operations," she said, adding there was a risk of radioactive waste leaching into the ground when kept in open storage.

"They should send the waste back to Australia immediately. The monsoon season is here and there will be a lot of rain," Fuziah said.

# Lynas to proceed with facility

We intend to follow recommendations as much as possible, says CEO

By ONG HAN SEAN  
hansean@thestar.com.my

**KUANTAN:** Lynas Corporation will still forge ahead with the development of a permanent disposal facility (PDF) for water leach purification (WLP) residue.

This is in spite of the Energy, Science, Technology, Environment and Climate Change Ministry's decision to impose a pre-condition for Lynas to remove the WLP residue from Malaysia.

Lynas chief executive officer Amanda Lacaze (*pic*) said the executive review committee's report was sensible and scientific, thus the company would follow the recommendations as much as it possibly could.

"The PDF is one of the most significant recommendations in the review committee's report and we feel it is important to do that with confidence."

"We have progressed significantly on this part and have even constructed a demonstration design of what the PDF may look like in terms of radiation safety."

"The next part is finalising where to locate the PDF," she said when contacted yesterday.

She said the state government

had also given an undertaking some years ago to site the PDF in Pahang should it be required.

In its report released on Tuesday, the review committee recommended that the rare earth materials producer identify and build a PDF, otherwise it should be prepared to remove the WLP from the country if the PDF's location could not be identified or approved.

However, the ministry said in a statement on the same day that it would not allow the unlimited accumulation of residue at the Lynas Advanced Materials Plant (LAMP) in Gebeng here.

Asked whether it was feasible to remove the 451,564 metric tonnes of WLP residue from Malaysia, Lacaze said Lynas was assessing ways it could do this.

"This matter requires further discussions. It is still too early to say what that may look like but we will try to work through it with the minister and the ministry," she said.

In a statement yesterday, Lynas said they were surprised with the ministry's decision that did not follow the process outlined in October,



was inconsistent with the science, inconsistent with the expert review committee's recommendations and contrary to international best practice.

Lynas said the ministry's intention to impose new conditions contradicted its own media statement issued on Oct 30 which stated that the Cabinet would review the committee's report before any decision was announced.

The company said the potential construction of a PDF for WLP residue had always been part of its planning.

Lynas said its licence conditions explicitly stated that residues should be recycled, and if that fails, then they should be stored in a PDF.

"Export should only be considered if a PDF is not possible. The recommendations of the review committee are consistent with this sequence of events," it said.

Lynas emphasised that it was one of a number of industries in Malaysia with feedstock that produces residues with low-level radioactivity.

"Malaysia has strict regulations

in place for residue management and there should not be one rule for other industries and one rule for Lynas," said the company.

Lynas said it would consider all available options to achieve an appropriate outcome prior to its licence renewal on Sept 2, 2019, including legal options.

Lacaze said any regulatory decisions on the business should be based on science.

"This appears to be policy based on politics, not policy based on science. It is very disappointing to receive this on the same day that the review committee's report was released," she said.

As to whether it was still viable for Lynas to operate in the country after this new set of hurdles from the authorities, Lacaze said the company remains committed to Malaysia and would meet its duties as a foreign direct investor.

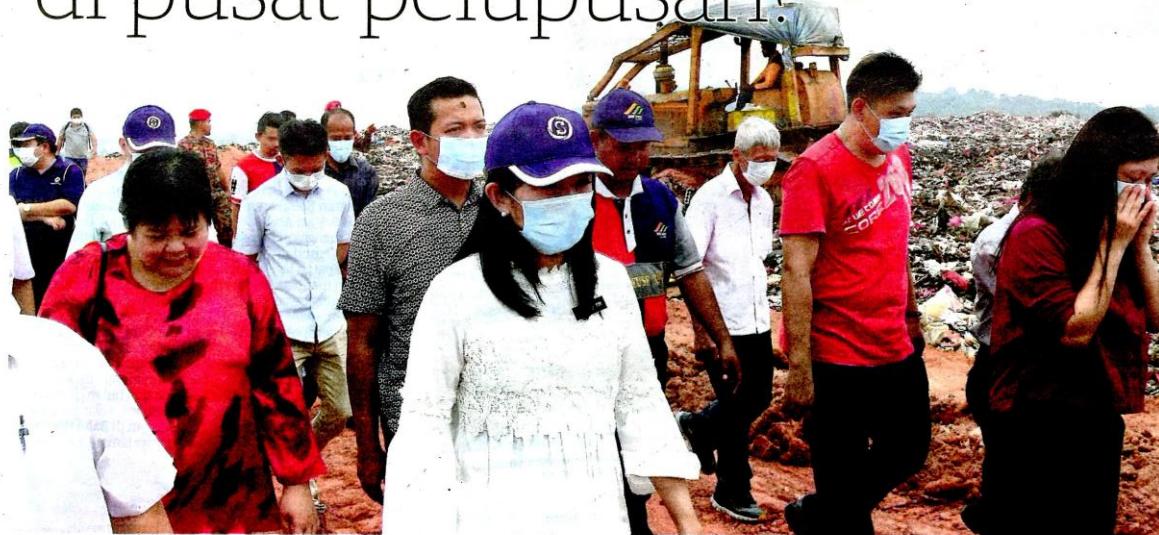
"This is the eighth time people have reviewed the Lynas business. Scientific and legal experts have consistently come to the conclusion that our operations are low risk."

"There are certain parties which continue to say bad things about Lynas but what they say is not based on facts. It is very frustrating," she said.

**LAMPIRAN 10**  
**UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 24**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

**Laporan Khas (siri 3)**

# Sisa sampah bersatu di pusat pelupusan?



**B**EBERAPA tahun lalu cukup hebat kempen mengenai amalan 3R dibuat menerusi kaca televisyen, corong mahupun iklan dalam media cetak.

Sayangnya usaha itu diilahit sekadar separuh jalan apabila kini sepi manakala mentaliti majoriti masyarakat masih di takut lama apabila enggan mengamalkan 3R dalam aktiviti harian mereka.

Baru-baru ini heboh seketika dalam media sosial dan di dada akbar apabila timbunan sampah di tempat pelupusan sampah menggunakan seperti bukit. Bukan itu sahaja, kelusuan tanah yang diperlukan juga tidak mencukupi.

Ini kerana menurut Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTEC), **Yeo Bee Yin**, sisa-sisa yang diasingkan di peringkat isi rumah dicampurkan semula di tempat pelupusan sampah.

Seperti yang difahami, setiap tempat pelupusan sampah tidak boleh digunakan lebih daripada 100 tahun.

## MUKADIMAH

Selain sukar mengamalkan pengasingan sampah, satu lagi isu yang boleh dianggap bukti kegagalan 3R (*Reuse, Recycle, Reduce*) adalah sampah yang sudah diasingkan dikatakan bercampur semula di tempat pelupusan. Kenyataan Menteri Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTEC), **Yeo Bee Yin** mengesahkan perkara tersebut. Laporan khas siri 3 oleh **Aqilah Mior Kamarulaid, Noor Intan Suhana Che Omar** dan **Laupa Junus** adalah berkaitan lauhan Bee Yin yang sekali gus menceritakan kegagalan tersebut.

kerana memberi kesan kepada kesihatan dan alam sekitar.

Peliknya, mengapa sisa sampah yang boleh dikitar semula dilonggokkan kepada sisa sampah lain? Perkara itu tidak selari dengan pendidikan 3R yang disampaikan kepada rakyat.

Persoalannya, tiadakah peruntukan undang-undang khas di pusat pelupusan sampah yang membenarkan sisa mudah terurai sahaja dilupuskan?

Lebih memburukkan keadaan apabila tindakan China menarik semula kemasukan sisa pepejal negara ke negara

itu. Adakah ini bermakna Malaysia akan ‘kaya’ dengan lambakan sampah?

Bee Yin berkata, bagi memastikan perkara itu, kerajaan mengambil langkah drastik dengan memperkenalkan prosedur operasi standard (SOP) dan peraturan baharu bagi permohonan lesen import sisa pepejal seterusnya membatalkan serta-merta lesen kesemua 114 pengusaha sebelum ini.

Katanya, pengusaha perlu memohon semula lesen melalui Jabatan Pengurusan Sisa Pepejal Negara di bawah

Kementerian Perumahan dan Kerajaan Tempatan melalui SOP dan kriteria baharu bagi memastikan tiada pelanggaran standard dan peraturan.

Langkah itu sekali gus menandakan MESTEC komited membantu pembangunan teknologi dan sistem dalam kitaran ekonomi.

“Contohnya seperti plastik, daripada bahan mentah dapat hasilkan plastik dan jika dikitar semula dapat menghasilkan plastik lain atau dijadikan limen.

“Caru itu dapat mengurangkan sisa pepejal kerana bahan sama digunakan semula,” katanya.

Bahkan usaha tersebut membantu Malaysia mencapai pengurangan 40 peratus sisa pepejal ke tapak pelupusan dan mengurangkan gas rumah hijau dari sisa pepejal sekiranya menggunakan teknologi baharu pelupusan sampah.

Selain itu jelasnya,

kementerian akan membantu Kementerian Perumahan dan Kerajaan Tempatan dalam program jelajah pada tahun depan bagi memberi pendidikan dan pendedahan berhubung amalan 3R sekali gus memperkasakannya di setiap peringkat usia.

“Kita menyasarkan di peringkat awal untuk melibatkan sekolah-sekolah kerana kanak-kanak seperti kain putih yang lebih mudah dibentuk untuk menyintai alam sekitar dengan amalan 3R.

“Jika mereka berjaya lakukan di sekolah, berkemungkinan besar amalan itu akan diteruskan di rumah atau di mana-mana sahaja.

“Ini kerana saya percaya agak sukar mengubah mentaliti golongan dewasa.

“Pendedahan dan pendidikan bermula di peringkat awal usia akan melahirkan generasi bijak menguruskan sisa pepejal,” jelasnya.



**YEO BEE YIN**

**LAMPIRAN 11**  
**UTUSAN MALAYSIA (MEGA SAINS): MUKA SURAT 25**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## Tiada lagi penyedut minuman plastik

**D**ENGAN tidak menolak kenyataan bahawa rakyat perlu memainkan peranan jika mahu Malaysia dilihat standing negara maju lain, Yeo Bee Yin menyuruh orang ramai untuk menetapkan hati dan minda ke arah kesejahteraan serta kemajuan negara.

Katanya, salah satu usaha adalah ke arah menjadikan Malaysia sebagai sebuah negara sifar plastik menjelang 2030.

Usaha itu secara tidak langsung mampu melindungi dan memelihara alam sekitar kerana sifat plastik itu sendiri sukar terurai secara semula jadi dan mengambil masa yang lama untuk diluluskannya.

Masih ingatkah anda tentang reaksi berbeza dan tidak kurang juga dengan kecaman yang diterima oleh Kementerian Tenaga, Sains, Teknologi, Alam Sekitar dan Perubahan Iklim (MESTECC) apabila menyuarakan pengharaman penggunaan penyedut minuman plastik di Wilayah Persekutuan bermula 1 Januari 2020?

Sebenarnya pengharaman penyedut minuman plastik bukan perkara baharu, sebaliknya beberapa negara turut melakukan perkara sama seperti United Kingdom, Kanada, Taiwan dan beberapa negara lain.

Walaupun menjadi bahan gurauan orang awam, menteri muda itu tidak berganjak dengan pendirian untuk menggalakkan penghasilan



penyedut minuman alternatif daripada bahan biodegrasi, besi tanah karat, dan sebagainya.

Pengharaman itu jika dilihat dari sudut lain memberi kesan positif kepada alam sekitar dan hidupan laut.

Ini kerana proses pelupusan plastik memakan masa selama 100 tahun, malah menurut Konservasi Maklumat dan Data Sisa Laut Untuk Pendidikan dan Penyelesaian 2018, penyedut minuman plastik berada di tangga ke-11 yang paling banyak ditemukan di laut.

"Malaysia merupakan pengeluar sisa plastik kelapan terbanyak dalam 193 negara pesisiran. Lebih 100 juta hidupan marin mati disebabkan pencemaran plastik di lautan, menjelaskan 267 spesies di seluruh dunia termasuk 86

peratus penyu, burung dan mamalia," ujarnya.

Sekiranya tiada usaha drastik diambil, akan lebih banyak plastik di lautan berbanding ikan pada 2050.

"Salah satu cara untuk mengatasinya adalah dengan menggunakan bioteknologi untuk menghasilkan bioplastik daripada atau disintesis oleh mikrob sama ada biodegradasi atau terhasil daripada sumber boleh baharu atau kedua-duanya," jelasnya.



LONGGOKAN plastik terpakai yang belum diproses ini boleh menjadi masalah kepada alam sekitar jika tidak diurus dengan baik.



BARANGAN yang dikitar semula untuk dijadikan produk bernilai.

## Buka peluang majukan perniagaan

**J**ANGAN sekadar memandang ringan usaha kerajaan, sebaliknya komitmen tersebut membuka peluang kepada pemain industri untuk melihat peluang perniagaan baharu.

Pemain industri boleh menghasilkan penyedut minuman alternatif menggunakan barang kitar semula atau daripada bahan organik yang lebih menguntungkan.

Inovasi tersebut secara tidak langsung akan menjadi pilihan peniaga dan pengusaha kedai makan di seluruh dunia.

Malah, industri lain juga boleh terus berkembang maju sekiranya mereka bijak mengambil peluang daripada amalan kitar semula.

Seperti perabot, pengusaha atau pengilang boleh

“

Pemain industri boleh menghasilkan penyedut minuman alternatif menggunakan barang kitar semula atau daripada bahan organik yang lebih menguntungkan.”

menghasilkan inovasi baharu menggunakan kayu palet terbuang, begitu juga hasil buangan plastik yang boleh dijadikan pelbagai bahan hiasan rumah.

■ Siri 4 (Akhir) – Khamis depan Mengapa sampah perlu diuras?



## LAMPIRAN 12

### NEW STRAITS TIMES & THE STAR: MUKA SURAT 5

### TARIKH: 6 DISEMBER 2018 (KHAMIS)



Salam Sejahtera,

On the 2nd October I wrote a letter to the people of Malaysia.

Today, I am writing to you again to inform you that the Review Committee has completed its review of the Lynas Malaysia operations.

We welcome the publication of their report and take this opportunity to restate our commitment to Malaysia.

Terima Kasih,

Amanda Lacaze  
CEO & Managing Director, Lynas Corporation Limited

**Lynas**  
CORPORATION LTD

#### REVIEW COMMITTEE REPORT

Lynas Malaysia is pleased to advise that the Review Committee report in respect of Lynas Malaysia was posted online on Tuesday. You can access a copy of the report via the MESTECC website, [www.mestecc.gov.my](http://www.mestecc.gov.my).

The report finds Lynas Malaysia's operations are low risk and compliant with applicable laws. This is consistent with our 'Zero Harm' philosophy and with the findings of all 7 previous reviews in Malaysia (comprising 2 IAEA reports, a Parliamentary Select Committee and 4 court challenges).

Lynas CEO Amanda Lacaze said: "We thank the Review Committee for its diligent and thorough approach. I would like to thank all our employees who have demonstrated their resilience and their commitment to Lynas Malaysia, to our communities, and to our high standards of safety and performance. I would also like to thank our local communities in the Gebeng area for their ongoing support of Lynas Malaysia."

The Review Committee conducted an extensive tour of Lynas' operations, reviewed data from Lynas' monitoring, relevant regulators and peer-reviewed research, and met with regulators, independent experts and local community members.

The Review Committee identified many positive aspects of Lynas Malaysia's operations, including:

- The operations are based on controlled technologies and procedures with low risk.
- Lynas Malaysia voluntarily adopts international standards and practices.
- Lynas Malaysia meets quality investment criteria of high technology industries, with an emphasis on R&D and creating high-performance jobs with skills and knowledge-intensive jobs.
- Employees' exposures to radiation and non-radiation hazards were below the permitted level and occupational health surveillance does not show any disparity in health status.

We regard any review as an opportunity to improve and we will seek to voluntarily implement the Review Committee's recommendations. The recommendations include for Lynas to:

- Prepare and build safe storage sites for NUF residues and prepare an Environmental Impact Assessment (EIA) for this purpose.
- Determine the location and build a permanent disposal facility (PDF) for the WLP residue, including identifying sites for PDF construction before the renewal of the next licence.
- Be prepared to export WLP residues from Malaysia if the PDF location is not identified or approved.
- Continue all studies on recycling of NUF residue.
- Carry out studies to reduce the residues produced by looking at process

improvement and modification to reduce waste generation based on residual waste management hierarchy that specify the reduction of waste as a primary criteria.

- Conduct groundwater monitoring and conduct studies on the Balok River aquatic ecosystem including biological monitoring.
- Devise more effective communication strategies to provide the public and NGOs with more accurate and up-to-date facts.

The Review Committee also provided the following recommendations for implementation by the government:

- Establish an independent Research and Development (R&D) Committee funded by Lynas. The scope of the R&D to be carried out should be expanded to include the development of downstream industries as well as other areas covering health, social sciences, socio-economic, entrepreneurship and others.
- Create a community health surveillance system.
- Establish a monitoring committee including relevant ministries/departments, experts in the identified field, representatives from non-governmental organizations, local representatives, Lynas management and other stakeholders.

The Review Committee noted the general public's confusion in assessing the impact of radiation from a Rare Earths plant processing material containing Naturally Occurring Radioactive Material (NORM) versus a nuclear plant.

The Review Committee also noted that high-tech industries that use NORM are the industries that will grow rapidly in the future. It recommended that the government look at the development of the industry holistically to create appropriate ecosystems supported by legislation, governance, education, human capital development, R&D&I (research and development and innovation) and ethics that meet the latest international standards to achieve sustainable development and investment.

#### MINISTRY STATEMENT

The Minister for Energy, Science, Technology, Environment and Climate Change (MESTECC) also released a statement on 4 December relating to the decision of the Ministry to subject Lynas Malaysia to two new pre-conditions for its licence renewal on 2 September 2019 and future permission renewals in relation to residue management (detailed below). The statement is available via the MESTECC Twitter page.

This is disappointing as the Ministry's intention to impose new conditions contradicts a media statement issued on 30 October 2018 by MESTECC which stated that Cabinet would review the Review Committee's report before any decisions were announced. This process does not appear to have been followed.

The statement issued on Tuesday refers to the management of the 2 solid residues, WLP and NUF. Lynas stores these residues in approved facilities that meet international best practice to ensure the safety of our people, surrounding communities and the environment. We also note that this material is high in moisture i.e. Malaysian water represents over 40% of the volume of materials quoted in the Ministerial statement.

According to the statement, the two new pre-conditions are:

1. The export of Water Leach Purification (WLP) residue before 2 September 2019.
- This pre-condition is inconsistent with the Review Committee's recommendation that Lynas Malaysia should determine the location of and build a permanent disposal facility (PDF) for the WLP residue, including identifying sites for PDF construction, before the renewal of the licence. The Review Committee noted that Lynas should be prepared to export WLP residues from Malaysia only if the PDF location is not identified or approved.

Lynas' PDF planning Framework and Site Selection Plan have already been approved by the AELB and the Pahang State government has given an undertaking to site the PDF in Pahang, should it be required.

The potential construction of a PDF for WLP residue has always been part of our planning. It is provided for in our financial statements and by way of the PDF bond in excess of US\$34 million that is held by the Malaysian regulator.

Lynas has complied with all AELB licence conditions. These conditions were developed after extensive reviews by Malaysia's Atomic Energy Licensing Board (AELB), with the help of the International Atomic Energy Agency (IAEA), and are monitored by the AELB.

Lynas' licence conditions explicitly state that residues should be recycled, and if that fails, then they should be stored in a PDF. Export should only be considered if a PDF is not possible.

The recommendations of the Review Committee are consistent with this sequence of events.

In addition, Lynas is one of a number of industries in Malaysia with feedstock that produces residues with low level radioactivity. Malaysia has strict regulations in place for residue management and there should not be one rule for other industries and one rule for Lynas.

We will consider all options available to us to achieve an appropriate outcome prior to 2 September 2019, including legal options.

2. Submission of an action plan on the disposal of NUF (current approval valid until 15 February 2019).

Lynas has already submitted an action plan and we will seek to accelerate our work with the Department of Environment to allow the execution of this plan including having the Lynas Malaysia plant designated as prescribed premises for the management and disposal of the NUF residue.

#### OUR CONTRIBUTION AS A FOREIGN DIRECT INVESTOR

The Review Committee's report states that Lynas' investment meets quality investment criteria of high technology industries, including establishing value chains for industries, capital-intensive, export-oriented, high value-added products, emphasis on R&D and creating high-performance jobs with skills and knowledge-intensive jobs.

In addition to ensuring the safety of our operations, we recognise our duty as a foreign direct investor to provide employment opportunities for our local communities, and to successfully create economic value for Malaysia. To date, Lynas Malaysia has created over 1000 direct jobs and over 4000 local jobs in total. 97% of our staff are Malaysian and our employees benefit from skilled jobs that pay 4 times the average salary in Pahang, and 2.5 times the national average salary.

Since 2008, Lynas has contributed RM2.6Bn in Foreign Direct Investment, including capital investment in our state-of-the-art plant. In addition, our suppliers have made capital investments of RM300m. We have established a capable supply chain that can be used to develop further downstream local industries.

Our people are active members of our local communities and we contribute to improved education and health outcomes for local community members. We offer school, intern and graduate programs and many of our employees are involved as supporters and volunteers for local community services.

#### SUMMARY

Lynas is pleased that the Review Committee's report finds Lynas Malaysia's operations are low risk and that Lynas Malaysia complies with applicable laws. We welcome the opportunity to continue to improve our business based on the Review Committee's recommendations.

We are surprised with the Ministry's decision to impose a pre-condition that does not follow the process outlined in October, and which is inconsistent with the science, inconsistent with the expert Review Committee's recommendations and is contrary to international best practice.

"This appears to be policy based on politics, not policy based on science. It is very disappointing to receive this on the same day that the Review Committee report was released" commented Amanda Lacaze, Lynas MD & CEO. "However, we are confident we are well placed to manage potential changes and our long term investment thesis remains strong."

Lynas is recognised as a global leader in the Rare Earths industry. We have a strong commitment to Malaysia and we are continuing to explore opportunities to grow with the markets in which we operate.

**LAMPIRAN 13**  
**NEW STRAITS TIMES (NATION): MUKA SURAT 64**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## UMP, Japanese firm to develop flood-mitigation technology

**KUANTAN:** Universiti Malaysia Pahang's (UMP) Centre for Earth Resources Sustainability Centre (ERAS), together with Japanese firm Asahitechno Co Ltd Japan, has embarked on technology-sharing collaboration in addressing flood problem in the state.

The cooperation also involved Universiti Yamaguchi, the state Economic Planning Unit (EPU) and Drainage and Irrigation Department.

UMP received RM130,000 grant from Japan International Cooperation Agency (JICA) to carry out researches led by ERAS' director Associate Professor Dr Muzamir Hasan.

Muzamir said Asahitechno placed its faith on UMP due to its capabilities in terms of professionalism, skills and expertise shown in previous collaborations.

He said the latest venture would hopefully address the frequent floods in Pahang, especially Sungai Isap through the Super Well Point (SWP) technology.

"Our aim is to reduce the water level at the Sungai Isap retention pond prior to a downpour or whenever flood is forecasted."

"The project, which will be broken down to several phases, is expected to be completed by 2021 with the first phase study to be ready by March."

"The technology has the potential to address the issues faced in areas with high level of ground-



*Universiti Malaysia Pahang vice-chancellor Professor Datuk Seri Dr Daing Nasir Ibrahim (second from left) receiving a RM130,000 grant from a Japan International Cooperation Agency representative at the university in Pekan yesterday. With them is Associate Professor Dr Muzamir Hasan (left). PIC COURTESY OF UNIVERSITI MALAYSIA PAHANG*

water," he told the New Straits Times Press yesterday.

He said equipment from Japan was being transported to Malaysia and was expected to arrive in January to facilitate the study.

"ERAS would host a mini symposium and demonstration to introduce the technology to government agencies and engineering firms involved (with the project).

"The community would benefit

from the project which also included transfer of technology and innovation to the local manpower as agreed by both parties (UMP and Asahitechno) in the agreement signed on Oct 17," he said.

**LAMPIRAN 14**  
**UTUSAN MALAYSIA (BISNES): MUKA SURAT 37**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Projek solar terbesar beroperasi

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■ KUALA LUMPUR 5 DIS.

**P**ROJEK solar terbesar di Malaysia milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor telah mula beroperasi dan menyumbang tenaga boleh diperbaharu (RE) ke Grid Nasional pada tengah malam 23 November lalu.

TNB dalam kenyataannya berkata, Projek Solar Berskala Besar (LSS) terletak di kawasan seluas 98 hektar yang menjana

elektrik menggunakan 230,000 panel solar.

Katanya, penjana dengan kapasiti 50 mW meningkatkan kapasiti RE TNB ke Grid Nasional kepada 73.2 mW sejajar agenda kerajaan memperkasakan penjanaan tenaga yang lebih mesra alam.

"Projek di bawah Rancangan Malaysia ke-11 berkenaan bermai� lebih RM300 juta yang telah diperoleh secara bidaan kompetitif.

"Ia dibangunkan oleh TNB



Sepang Solar Sdn Bhd (TSSSB) iaitu sebuah anak syarikat milik penuh TNB bermulai tahun lalu," katanya di sini hari ini.

Tambah TNB, LSS mencapai tarikh awal operasi (IOD) dengan penjanaan awal sebanyak 2.4 mW pada Oktober lalu.

Menurutnya, mula tugas LSS menyumbang kepada usaha kerajaan untuk menuju sasaran penjanaan 20 peratus daripada sumber RE menjelang 2030.

"Projek Solar Berskala Besar (LSS) terletak di kawasan seluas 98 hektar yang menjana elektrik menggunakan 230,000 panel solar."

TNB

yasarkan sumbangan terhadap kapasiti penjanaan daripada RE sebanyak 1,700 mW menjelang 2025," katanya.

Loji dengan 230,000 panel solar dan gentian kabel optik sepanjang 10 kilometer (km) dengan kuasa 132 kilovolt (kV) adalah projek LSS pertama yang terbesar di Malaysia se-takat ini.

Kira-kira 53 peratus penjanaan kuasa di Semenanjung adalah daripada arang batu manakala 42 peratus daripada gas asli dan lima peratus adalah hidro dan berbentuk RE.

"TNB komited mendukung usaha berkanaan dan men-



PROJEK Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor.

**LAMPIRAN 15**  
**SINAR HARIAN (BISNES): MUKA SURAT 42**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

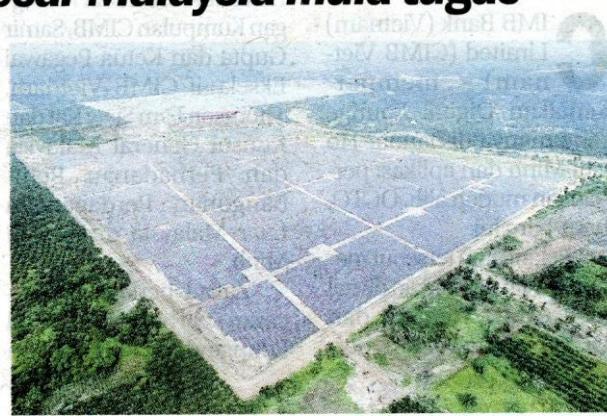
## **Solar terbesar Malaysia mula tugas**

**PROJEK** Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor memulakan tugasnya dan menyumbang tenaga boleh baharu (RE) ke grid nasional pada tengah malam 23 November lalu.

TNB dalam kenyataannya berkata, LSS terbesar pertama negara, di kawasan seluas 98 hektar itu menjana elektrik menggunakan 230,000 panel solar.

"Penjanaannya, dengan kapasiti 50MWac meningkatkan kapasiti RE TNB ke grid nasional kepada 73.2 MW sejajar agenda kerajaan memperkasakan penjanaan tenaga yang lebih mesra alam," katanya.

Katanya, projek dibawah Rancangan Malaysia ke-11



**LSS menyumbang tenaga boleh baharu ke grid nasional pada tengah malam 23 November lalu.**

yang dimenangi secara bidaan kompetitif bernilai lebih RM300 juta itu, dibangunkan TNB Sepang Solar Sdn Bhd (TSSSB), sebuah anak syarikat milik penuh TNB mulai tahun lalu.

Untuk rekod, LSS mencapai tarikh awal operasi

(IOD) dengan penjanaan awal 2.4 MW, Oktober lalu.

"LSS menyumbang kepada usaha kerajaan menuju sasaran penjanaan 20 peratus daripada sumber RE menjelang 2030 dan TNB komited mendukung usaha itu," katanya.

**LAMPIRAN 16**  
**NEW STRAITS TIMES (BUSINESS): MUKA SURAT 20**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**



*Tenaga Nasional Bhd's large-scale solar (LSS) project in Mukim Tanjung 12, Sepang, Selangor, boast 23,000 solar panels across 98ha and is currently the country's largest LSS project.*

#### RENEWABLE ENERGY

## TNB contributes 73.2MW to national grid

**KUALA LUMPUR:** Tenaga Nasional Berhad (TNB) is contributing 73.2MW of renewable energy (RE) to the national grid, in line with the government's target of generating 20 per cent of RE resources by 2030.

In a statement yesterday, TNB said its large-scale solar project

(LSS) in Mukim Tanjung 12, Sepang, Selangor, began contributing RE nationally as of November 23.

The Mukim Tanjung 12 LSS boast 23,000 solar panels across 98ha and is currently the country's largest LSS.

It is one of the main projects

under the 11th Malaysia Plan.

The project, with a more than RM300 million price tag, was won after a competitive bidding process and developed by TNB's wholly-owned subsidiary TNB Sepang Solar Sdn Bhd.

TNB is targeting to generate 1,700MW of RE by 2025.

**LAMPIRAN 17**  
**HARIAN METRO (BISNES): MUKA SURAT 42**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

**Kuala Lumpur**

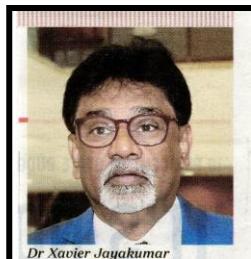
### Projek LSS mula beroperasi



**PROJEK LSS pertama yang terbesar di Malaysia dibina di Kuala Langat.**

Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor sudah mula beroperasi dan menyumbang tenaga boleh baharu (RE) ke grid nasional bermula tengah malam 23 November lalu. LSS terbesar pertama negara di kawasan seluas 98 hektar itu menjana elektrik menggunakan 230,000 panel solar. Penjanaan dengan kapasiti 50MWac meningkatkan kapasiti RE TNB ke grid nasional kepada 73.2 MW sejajar agenda kerajaan memperkasakan penjanaan tenaga yang lebih mesra alam. Projek di bawah Rancangan Malaysia ke-11 (RMK-11) yang dimenangi secara bidaan kompetitif bernilai lebih RM300 juta itu dibangunkan oleh TNB Sepang Solar Sdn Bhd (TSSSB), sebuah anak syarikat milik penuh TNB mulai tahun lalu.

**LAMPIRAN 18**  
**NEW STRAITS TIMES (NATION): MUKA SURAT 64**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**



*Dr Xavier Jayakumar*

**URGENT NEED**

## 'Nation needs to groom experts in biodiversity, climate change'

**SERDANG:** The country needs to have continuity in grooming experts in climate change and biodiversity, or it will keep going back to retraining new individuals.

Water, Land and Natural Resources Minister Dr Xavier Jayakumar said his ministry had discussed the matter with Prime Minister Tun Dr Mahathir Mohamad, adding that the latter understood the urgent need for this.

"Often times, when we get an experienced subject matter person, they move position or are promoted to a different field. After that, it's a whole new process to train someone else. This has to change, as there is no continuity."

"The prime minister understands that we need to have a group of people who are subject matter specialists, who could form a committee."

Xavier was referring to the importance of being in a better position to defend Malaysia's stance in relation to climate change and biodiversity.

He said this after launching the National Seminar on Physical Modelling Application and Technology (PHYMAT) and Hydraulic Invention and Innovation Show (HYDRAULIIS) 2018 at the National Hydraulic Research Institute of Malaysia (NAHRIM).

During the event, NAHRIM announced its entry into the *Malaysia Book of Records* for having the "Largest Rainwater Harvesting System for Laboratory".

Present at the event were NAHRIM deputy director Mohd Fauzi Mohamad and Energy, Green Technology and Water Ministry deputy secretary-general Datuk Dr Tan Yew Chong.

Xavier said Malaysia had to build these subject matter specialists so that they could concentrate on their individual fields.



**LAMPIRAN 19**  
**THE STAR (NEWS): MUKA SURAT 4**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## TNB completes solar power job

**PETALING JAYA:** Tenaga Nasional Bhd (TNB) has completed its 50MW solar power project in Sepang, Selangor – the largest solar project in the country.

In a statement, TNB said the large scale solar project uses 230,000 solar panels installed on 98 hectares of land in Mukim Tanjung 12, Sepang. The project, won in a competitive bidding by TNB's subsidiary, TNB Sepang Solar Sdn Bhd, would increase TNB's renewable energy capacity to the national grid to 73.2MW.

**LAMPIRAN 20**  
**THE SUN (SUNBIZ): MUKA SURAT 16**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## TNB starts operations of Malaysia's largest solar plant

**PETALING JAYA:** Tenaga Nasional Bhd (TNB), which commenced operations of the country's largest Large-Scale Solar (LSS) photovoltaic plant on Nov 23, expects the plant to generate 1,700 megawatts (MW) of renewable energy by 2025.

The RM300 million project, which came under the 11th Malaysian Plan, was secured by TNB's wholly owned subsidiary TNB Sepang Solar Sdn Bhd through a competitive bidding process.

TNB said in a statement that the LSS, which was developed on an area measuring 98ha in Sepang, started operations at mid-



night on Nov 23.

The LSS, which has a capacity of 50MWac, utilises 230,000 solar panels to generate electricity.

With its 50MWac capacity, the LSS will in turn increase TNB's renewable energy capacity in the national grid to 72.3MW.

This said TNB is in line with the government's national agenda to increase the generation of green energy.

The LSS is expected to help the government hit its 20% RE target by 2030, through the generation of 1,700MW by 2025.

The LSS achieved its initial operation date in October by generating 2.4MW of electricity.

**LAMPIRAN 21**  
**THE STAR (VIEWS): MUKA SURAT 29**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Conscience in age of big data

THE past industrial revolutions tested our skills and resilience to combat labour challenges. This time, we are faced with a greater challenge – our conscience.

Big data, the main driver of the Fourth Industrial Revolution, which is also known as the stealer of redundant jobs, will play a bigger and more entrenched role in society.

If the previous industrial revolutions gave rise to Luddites, then big data, if left unchecked, would result in a greater anarchy.

Data analysis is capable of triggering specific reactions but if curated strategically, it also has the power to win elections.

The 2016 presidential election in the United States is proof of this. The data analysis company, Cambridge Analytica, fell under heavy scrutiny when it was exposed for using personal data to manoeuvre contents in the users' social media accounts to incite politically-motivated reactions.

Before the advent of social media, we received our information through newspapers, TV and radio news channels, and perhaps gossip. Now, we are being constantly bombarded with the latest news and updates through our smartphones.

Social media is more than a platform; it serves as a reservoir of news and information. With big data manipulation, the news and information we receive becomes targeted to create designed reactions that benefit certain groups. Hence, it is up to us in these situations to uphold our conscience and not act too rashly to the information being delivered to us via our digital devices.

In his debut novel *This Side of Paradise*, F. Scott Fitzgerald wrote about the influence of media contents on the public in general with reference to newspapers. "For two cents the voter buys his politics, prejudices and philosophy. A year later there is a new political ring or a change in the paper's ownership, consequence: more confusion, more contradiction, a sudden inrush of new ideas, their tempering, their distillation, the reaction against them – "

The situation is not very different with social media. If anything, it has gone a little out of control. With many platforms available to access information, people are bound to be overwhelmed by the many different opinions.

In this situation, it is more common to be part of the herd, where we conform our views and opinions with the majority without thinking of the repercussions. This can be dangerous if the majority has been indoctrinated emotionally to believe something, and could lead to the harming of others.

The information we process becomes part of us and our thinking, and would be reflected in our actions and beliefs. Since we are constantly inundated with news and information, our conscience has a greater role to play.

Our conscience is the moral compass in discerning between right and wrong, acting rationally based on the right information and never resorting to violence.

It is imperative for individuals to be mindful of what they view and read online and to critically and prudently assess the information being shared.

These past few weeks in Malaysia have been

incredibly testing for our nation as many provocative and insensitive contents aiming to incite unrest have been gaining traction to a disturbing level. These hate speeches should be viewed seriously.

Former US First Lady Michelle Obama in one of her speeches said: "When someone is cruel or acts like a bully, you don't stoop to their level. No, our motto is, when they go low, we go high."

I hope that we, as a society, heed these words and make them our motto as well.

We must not cave in to bullies and embolden them further to vilify others. We should maintain our peace and show that we stand with solidarity. We have come too far since our independence to let sinister propaganda tear the unity of our society.

Anyone has the privilege to put his or her thoughts on social media platforms. But this freedom of speech comes with great responsibility. We should always be mindful of what we do not hurt people and trigger unwanted reactions.

One of the best methods I have come across is the "Three Gates of Speech" by Rumi which advises us to consider three things before saying anything to avoid conflicts and be more tactful in our conversations and actions:

"Before you speak, let your words pass through three gates:  
At the first gate, ask yourself, 'Is it true?'  
At the second gate ask, 'Is it necessary?'  
At the third gate ask, 'Is it kind?'

JASMINE KAUR  
Kuala Lumpur

**LAMPIRAN 22**  
**KOSMO! (NEGARA): MUKA SURAT 13**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Projek solar terbesar negara mula beroperasi di Sepang

**KUALA LUMPUR** — Projek Solar Berskala Besar (LSS) milik Tenaga Nasional Berhad (TNB) di Mukim Tanjung 12, Sepang, Selangor telah mula beroperasi dan menyumbang tenaga boleh diperbarui (RE) ke grid nasional pada tengah malam 23 November lalu.

Projek LSS terbesar di Malaysia yang terletak di kawasan seluas 98 hektar itu menggunakan 230,000 panel solar untuk menjana tenaga elektrik.

TNB dalam satu kenyataan tersebut, LSS berkenaan menyumbang kepada usaha kerajaan menceapai sasaran penjanaan 20 peratus daripada sumber RE menjelang 2030.

"Projek yang menjana tenaga dengan kapasiti 50 megawatt (MW) itu telah meningkatkan kapasiti RE TNB ke grid nasional sebanyak 73.2 MW, sejajar dengan agenda kerajaan untuk memperkasaakan penjanaan tenaga lebih mesra alam.

"LSS tersebut mencapai tarikh awal operasi dengan penjanaan awal sebanyak 2.4 MW pada Oktober lalu," katanya.

Menurut kenyataan tersebut, LSS berkenaan menyumbang kepada usaha kerajaan menceapai sasaran penjanaan 20 peratus daripada sumber RE menjelang 2030.

"TNB komited mendukung usaha tersebut dan menyasarkan sumbangan terhadap kapasiti penjanaan daripada RE sebanyak 1,700 MW menjelang tahun 2025," katanya.



PROJEK LSS terbesar di Malaysia yang terletak di kawasan seluas 98 hektar ini menggunakan 230,000 panel solar untuk menjana tenaga elektrik.

**INFO**

**Projek LSS Mukim Tanjung 12**

- Melibatkan pelaburan RM300 juta
- Seluas 98 hektar
- Menggunakan 230,000 panel solar
- Kapasiti janaan tenaga 50 MW
- 53 peratus penjanaan kuasa di Semenanjung adalah daripada arang batu, 42 peratus gas asli dan lima peratus adalah hidro dan RE

**INFO**

**Solar**

- Solar berfungsi menggunakan panel solar yang boleh menukarcah cahaya matahari kepada tenaga elektrik
- Kaedah pertukaran cahaya matahari terus kepada tenaga elektrik dikenali photovoltaic (PV)
- Panel solar menghasilkan voltan arus terus
- China mempunyai tenaga solar yang dipercayai terbesar di dunia
- Ladang solar terbesar di Malaysia terletak di Mukim Tanjung 12, Kuala Langat, Selangor
- Ladang Agri-Solar terbesar di dunia terletak di Kampung Wal, Kuala Perlis

**LAMPIRAN 23**  
**THE STAR (NEWS): MUKA SURAT 4**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

# Import of recyclable plastics to go on

Selangor government will be fair to factories that comply with DOE's regulations and procedures



Hee says the Selangor government had no jurisdiction to stop imports of plastic waste.

SELANGOR assemblymen are unhappy that the state will not stop the import of recyclable plastics indefinitely despite the Federal Government's pro-green efforts.

Dr Idris Ahmad (PH-Ijok) asked the state if it had the political will to totally ban the import of plastics considering the amount of plastic waste and the danger it posed in Selangor.

State Environment, Green Technology, Consumer and Non-Islamic Affairs Committee chairman Hee Loy Sian said the government had to be fair to factories that had spent millions of ringgit.

"We don't have the jurisdiction to stop the import because it falls under the Federal Government, but we have suggested that the state should control imports.

"This was done by freezing imports for three months until Oct 23," Hee said.

He added that the Housing and Local Government Ministry was responsible for giving out licences relevant to imports to local factories.

"We need to be fair to factories that have complied with all the regulations and procedures set out by the Department of Environment as well as invested millions to address any environmental issues."

Hee said the factories had a right to import recyclable plastics.

In the case of illegal factories, Hee said the local authorities were taking drastic action against them by shutting down premises and issuing compounds.

"We are making sure that the import is



done with a higher levy and only clean, high quality plastic waste can be imported," he added.

**LAMPIRAN 24**  
**HARIAN METRO (SETEMPAT): MUKA SURAT 26**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

**Kuantan:** Penyelidik Universiti Malaysia Pahang (UMP) terus mendapat kepercayaan daripada pihak antarabangsa bagi menjalankan penyelidikan bagi menghasilkan inovasi atau sistem memberi manfaat kepada rakyat.

Terbaru, UMP menerusi Pusat Kelestarian Sumber Bumi (ERAS) menjalinkan kerjasama dengan syarikat dari Jepun, Asahitechno Co Ltd Japan bagi perkongsian teknologi menangani masalah banjir di negeri ini.

Kerjasama turut memba-

## **UMP kaji teknologi tangani banjir**

bitkan Universiti Yamaguchi, Bahagian Perancang Ekonomi Negeri Pahang dan Jabatan Pengairan dan Saliran (JPS) Pahang.

ERAS UMP turut menerima geran RM130,000 daripada Agensi Kerjasama Antarabangsa Jepun (JICA) bagi menjalankan penyelidikan yang akan diketuai Pengarah ERAS, Prof Madya Dr Muzamir Hasan.

Muzamir berkata, Asahi-

techno memberi kepercayaan kepada UMP kerana kemampuan universiti itu dari segi profesionalisme, kemahiran dan kepakarannya menerusi beberapa siri kerjasama sebelum ini.

Katanya, kerjasama terbaru itu diharap dapat mengatasi banjir yang sering berlaku di Pahang khususnya di Sungai Isap, di sini, menggunakan kaedah telaga super tumpu (SWP).



<sup>+</sup> NAIB Canselor UMP, Prof Datuk Seri Dr Daing Nasir Ibrahim (lima dari kanan) dan Prof Madya Dr Muzamir (tiga dari kanan) bergambar bersama wakil Asahitechno Co. Ltd Japan dan agensi lain.

**LAMPIRAN 25**  
**HARIAN METRO (SETEMPAT): MUKA SURAT 26**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**



## Penapis air sistem solar

■ Empat profesor cipta alat mudah alih bantu bekal air bersih pada musim banjir

Garret Dawum  
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Kuala Lumpur

**K**etidaan dan kekurangan air bersih akibat banjir di Kelantan pada 2015 menjadikan ilham kepada pensyarah Universiti Malaysia (UM), Profesor Dr Mohd Azlan Hussain membangunkan Sistem Penapisan Air Ultra Mudah Alih Berkursa Solar. Paling membanggakan, alat ciptaannya bersama Profesor Dr Mohamed Kheireddine Ben Taieb Aroua, Dr Mohd Usman Mohd Junaidi dan Rustam Ramlan memenangi Kategori Air di Anugerah Global Institusi Kejuruteraan Kimia 2018 di Manchester, United Kingdom, baru-baru ini.

Menurut Mohd Azlan, alat berkenaan kini dipasang di lima kawasan pedalaman dengan dua di Sarawak dan

masing-masing satu di Pahang, Kelantan dan Perak. "Ia berfungsi secara automatik sebagai penapis air kotor termasuk sumber lain seperti air sungai, telaga, tasik serta air hujan yang mampu menampung sehingga 700 liter air bersih pada setiap jam."

"Malah penggunaannya juga akan menamatkan kos perbelanjaan air kerana sistem ini secara automatik mampu mengelstrak dan menapis air daripada sumber semula jadi dengan menghasilkan air bersih pada kos kurang 20 sen per meter padu," katanya.

Mohd Azlan berkata, kelebihan pemasangan sistem penapisan air itu adalah menggunakan tenaga solar sebagai punca tenaga utama

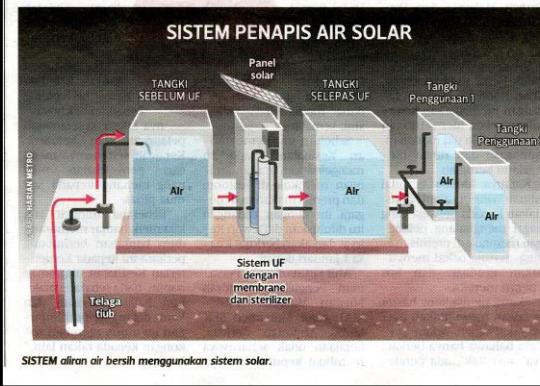
selain set generator membuatkan sistem ini sesuai digunakan di kawasan pedalaman.

"Alat ini sangat canggih dan ia hanya sebesar kabinet dapur dan mampu melakukan pembersihan secara automatik apabila tersumbat. Semua kotoran yang terdapat pada air dapat ditapis dengan baik."

"Selain itu, ia juga membantu dalam sistem hijau dengan impak sosio-ekonomi yang tinggi selari matlamat keselamatan air bersih."

"Namun kita perlu mengingat bahawa sumber air adalah terbatas dan menjadi tanggungjawab semua untuk memastikan penggunaan air dengan bijak serta mengelakkan pembaziran sumber yang berharga ini," katanya.

**FAKTA**  
Cetus idea ketika ketidadaan air bersih sekurangnya banjir di Kelantan pada 2015



**LAMPIRAN 26**  
**NEW STRAITS TIMES (LETTERS): MUKA SURAT 18**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

REDUCE, REUSE AND RECYCLE

# OUR ATTITUDE CAN SAVE THE ENVIRONMENT

SOLID waste is one of the three major environmental problems in the country. According to SWCorp Malaysia, a government agency dealing with solid waste, Malaysians generate about 38,000 tonnes of waste per day.

With rapid development and population increase, the amount of waste generated will increase. We need to find a way to address this problem before it becomes critical.

Sanitary landfill is one of the most common methods of waste disposal. Landfills are where waste is isolated from the environment until it is safe (the waste is completely degraded biologi-

cally, chemically and physically). Landfills, if not managed, can be hazardous to the environment.

Last year, the then natural resources and environment minister Datuk Seri Dr Wan Junaidi Tuanku Jaafar said there were six solid waste landfills with recurring leachate problems.

When landfill waste degrades and rain rinses through solid waste, leachate is formed. The black liquid contains organic and inorganic chemicals, heavy metals, as well as pathogens that can pollute groundwater, soil and air. Leachate is toxic to the environment and poses a health risk.

Landfills are not designed to break down waste, only to store



Landfills have tonnes of toxic waste.

it. The bacteria in waste produces methane gas, which is highly flammable and dangerous if allowed to collect underground.

The 3R principle of reduce, reuse and recycle is a great way to protect our environment and stimulate the economy.

The 3R programme in solid waste management is to help re-

duce the amount of garbage going into landfills.

This is done to protect and conserve our environment. However, public awareness of 3R is low due to weak enforcement.

We should change our attitudes and play our part in helping to reduce, reuse and recycle garbage to protect our environ-

ment. If there is less trash produced, less of it ends up in the ocean. Reducing the amount of trash that goes into the landfills can reduce pollution.

**NOR AZIZAH CHE AZMI**  
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**LAMPIRAN 27**  
**NEW STRAITS TIMES (LETTERS): MUKA SURAT 17**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

HERCULEAN TASK

# SNAG IN THE CRUSADE AGAINST GLOBAL WARMING

Grim future awaits humanity if we fail to act decisively on the matter; countries must refocus on carbon-capturing technologies, writes **S. MUBASHIR NOOR**

**F**RANCE has turned into a litmus test for how steep the battle to lower carbon dioxide emissions worldwide will be. And the results, thus far are not heartening.

In late November, thousands of French protesters, labeled the "yellow vests" by local media, besieged city centres across the country to protest a hike in fuel prices.

French President Emmanuel Macron had recently raised taxes on diesel fuel even as prices fell globally to fund raise for France's wholesale migration to green energy sources. He has refused to roll back the levy even as Paris turned into a battlefield where police clashed violently with the protesters.

Nothing was sacred for the agitators who had snuck into the protests as they defaced the iconic Arc de Triomphe monument with graffiti. Incensed at the scale of vandalism, Macron is mulling a state of emergency for France.

The "yellow vests" movement is as spontaneous as they come and naturally sired by social media. It brings together French citizens of all political persuasions with their middle-class credentials, the only tangible link.

This is a worrying development for the global crusade against global warming. If France's relatively affluent middle class can grind the country to a halt over a mere fuel tax, how will their more impoverished equals in states like India, China and Russia react to similar government initiatives?

Forget that, how will the rest of



Chimneys at the Bayswater coal-powered thermal power station in Muswellbrook, Australia. Carbon capture technologies are needed to fight climate change. REUTERS PIC

the European Union (EU), currently number three on the list of biggest global polluters, stick by its responsibility to keep the rise in global temperatures below two degrees Celsius from pre-industrial levels?

Poland, for instance, generates 80 per cent of its electricity from carbon-dense coal and has refused to cut down consumption. It is, hence, ironic that this year's COP24 global conference on climate change is underway there from early to mid-December.

Three years ago, in Paris, the G7 leaders had promised to create a US\$100 billion (RM413.24 billion) climate change fund by 2020 for developing countries to incrementally give up fossil fuels and develop indigenous green technologies.

Yet those promises have fallen prey to a tectonic shift in global geopolitics where America, the world's number two polluter, pulled out of the Paris Agreement this year citing "unfair" conditions.

Next, a slew of EU member states gripped by the rising tide of nationalism that is sweeping the continent, elected deeply conservative leaders that blame globalism for their domestic problems.

A grim future awaits humanity should we continue failing to act decisively on global warming. As Petteri Taalas, Secretary-General of the UN's World Meteorological Organisation (WMO), recently warned:

"We are the first generation to fully understand climate change

els below two degrees Celsius is a bridge too far. Consequently, the comity of nations must refocus its energies on carbon capturing technologies.

That said, such technologies are still in their infancy and will require dramatic cost reduction and huge government subsidies to be adopted universally, especially in developing countries.

Another means of atmospheric carbon reduction that scientists are presently toying with involves a naturally occurring mineral volcanic rock basalt. When employed as a fertiliser instead of the carbon-dense artificial variety, it has a great capacity for trapping carbon in the soil where it can then enrich crops.

While convincing giant agribusinesses to change their supply chains won't be easy, experiments with basalt that prove a marked improvement in crop yields should over time persuade them to embrace the eco-friendly alternative.

Experts say some other options are cracked rocks in open mines and "slag", the byproduct of iron works industries. Both effectively trap carbon.

Still, hoovering roughly 12 billion tonnes of carbon dioxide every year from the atmosphere for the foreseeable future is a herculean task to say the least.

But things could change for the better. With scientists suggesting Asian and African cities will be worst hit when global temperatures rise above 1.5°Celsius, India and China should sober up to the gravity of the situation and prioritise the lives and livelihoods of their citizens in the long-term over short-term profitability.

Additionally, the World Bank has pledged US\$200 billion in funding for states that actively seek to reduce their carbon footprint.

The UN has warned the "world is at a crossroads" where failure to take decisive action against global warming in the next two years could be fatal for humanity. Will world leaders heed its clarion call?

The writer is an Ipoh-based independent journalist

**LAMPIRAN 28**  
**KOSMO! (DUNIA): MUKA SURAT 48**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## Gempa kuat melanda New Caledonia

**NOUMEA, New Caledonia** – Pihak pentadbir New Caledonia semalam mengarahkan pengosongan di kawasan pesisir pantai susulan satu amaran tsunami selepas kejadian gempa bumi kuat bawah laut berukuran 7.6 magnitud.

Gempa itu berpusat pada kedalaman 10 kilometer (km) dan kira-kira 155km dari tenggara Pulau Loyalty, menurut Pusat Amaran Tsunami Pasifik (PTWC).

Pihak berkuasa di wilayah Pasifik Selatan menggesa orang ramai

supaya berpindah ke lokasi lain yang jaraknya lebih 300 meter (m) dari pantai dan pada ketinggian 12m dari aras laut.

“Kami membunyikan penggera di luar New Caledonia, namun kami masih belum mempunyai sebarang penilaian awal mengenai potensi kerosakan,” kata seorang jurucakap Direktorat Perlindungan Sivil dan Pengurusan Risiko.

“Ömbak tsunami mampu mencecah ketinggian 1m hingga 3m berbanding aras air pasang di

beberapa pantai di New Caledonia dan Vanuatu,” menurut PTWC sambil menambah potensi sama juga berkemungkinan berlaku di beberapa kawasan di Fiji.

Seorang operator kilang besi Doniambo di Noumea, Eramet mengaktifkan proses amaran tsunami, kata jurucakap kumpulan perlombongan dan keluli Perancis.

“Prosedur ini meminta orang yang bekerja dekat laut berpindah ke tempat yang lebih tinggi,” katanya. – Reuters



GAMBAR yang tersebar di laman sosial menunjukkan orang ramai berkumpul di luar bangunan di Noumea, New Caledonia semalam. REUTERS

**LAMPIRAN 29**  
**THE STAR (WORLD): MUKA SURAT 27**  
**TARIKH: 6 DISEMBER 2018 (KHAMIS)**

## Siberian region fights to preserve permafrost as planet warms

**YAKUTSK:** Eduard Romanov points to a spot on a block of flats where a major supporting beam has sagged and begun to crack, destabilising the nine storeys of apartments above.

In Russia's Siberian city of Yakutsk, one of the coldest on Earth, climate change is causing dangerous melting of the frozen ground, or permafrost, on which the buildings stand.

"Since the year before last, the building has started to list and has tilted about 40cm," says Romanov, a construction worker and environmental activist.

"There is a danger that it will tilt even more," he says, as labourers perform emergency welding on the structure, the temperature around -35°C.

Average temperatures in Yakutsk have risen by 2.5°C over the past decade, say scientists at the Melnikov Permafrost Institute located here, the world's only such research centre.

Most Soviet-era apartment blocks



**On thin ice:** People passing by a cracked panel apartment in Yakutsk. Many houses here stand on stilts to ensure ventilation of the building's underbelly, and prevent it from heating the permafrost. — AFP

in Yakutsk are made of concrete panels and stand on stilts to ventilate the building's underside and prevent it heating the permafrost, a layer of soil cemented together with

water that is only stable as long as it stays frozen.

Rising summer temperatures can destroy the solid permafrost. As the ice melts, the clay or sand

simply sinks together with whatever is on top of it – a road, a building, a lake or a layer of fertile "black earth" for agriculture.

Permafrost covers almost the whole of Yakutia – a northeast Siberian region bordering the Arctic Ocean, an area five times the size of France.

In total, around 65% of Russian territory is covered by permafrost.

With a population of about 300,000, Yakutsk is the world's largest city built on permafrost, and it could be especially in danger from the melting that Romanov and many residents fear.

Older buildings were not constructed with a warming climate in mind.

In the 1960s, the norm was to drive stilts 6m deep into the solid permafrost, which is no longer sufficient today as the surface warms, Romanov says. Some buildings in Yakutsk have already had to be demolished while others are full of cracks.

"All of Yakutsk is in danger. The

owners face losing their property, and nobody is ready for this," Romanov says.

"These problems will multiply in the future, so we need to start addressing this today."

As an Arctic country, Russia is warming about two-and-a-half times faster than the rest of the world.

In Yakutsk, locals say that two decades ago, schools would be closed for weeks on end when temperatures dropped to -55°C, but such spells of extreme cold are now rare.

Russia's environment ministry said in a report this year that deterioration of permafrost poses many risks to people and nature.

It affects water, sewage and oil pipes as well as buried chemical, biological and radioactive substances, the report said.

Melting permafrost enables any pollutants to spread faster and more widely, seeping through previously solid ground, the report said. — AFP