

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

Bil	Berita	Media	Capaian Berita Penuh
1.	<u>The future for energy consumption</u>	The Star	Rujuk Lampiran 1 – 2

**TEMPATAN**

Bil	Berita	Media	Capaian Berita Penuh
2.	<u>M'sia to push for Asian Tiger Status</u>	The Star	Rujuk Lampiran 3
3.	<u>Phasing out single-use plastics</u>	The Star	Rujuk Lampiran 4

**ANTARABANGSA**

Bil	Berita	Media	Capaian Berita Penuh
4.	<u>Sumatra School shut as haze fires return</u>	The Star	Rujuk Lampiran 5
5.	<u>Grim task awaits rescuers</u>	The Star	Rujuk Lampiran 6

LAMPIRAN 1
THE STAR (NATIONAL): MUKA SURAT 8
TARIKH: 15 OKTOBER 2019 (SELASA)

The future of energy consumption

ELECTRICITY plays a vital role in our daily lives. In the last decade, however, energy consumption has increased as a result of higher living standards and global population growth.

The Energy Commission of Malaysia has reported that in 2016, electricity consumption grew 21.7% from 15.9% in 1996.

According to Tenaga Nasional Berhad's 2018 Annual Report, energy generation in peninsular Malaysia comes mainly from three sources – 40.17% from natural gas, coal (55.86%) and hydropower (3.89%).

However, Malaysia has to pursue alternative sources and look to renewable energy. One such alternative is solar energy.

Harnessing the sun's rays

The popularity of solar energy has risen as an alternative source for fossil fuels because it is the cleanest and most abundant renewable energy source available in Malaysia.

Technology currently used to harness solar energy in Malaysia is the photovoltaic (PV) system, where sunlight is directly converted to electricity with the use of solar panels. According to Energy, Science, Technology, Environment and Climate Change Minister Yeo Bee Yin, there are more than 4.12 million buildings with solar rooftop potential

> TURN TO PAGE 10



LAMPIRAN 2
 THE STAR (NATIONAL): MUKA SURAT 10
 TARIKH: 15 OKTOBER 2019 (SELASA)



Challenging, but not impossible

> FROM PAGE 8

in peninsular Malaysia, which can generate a massive 34,194Mw of electricity at any one time compared with 24,000Mw, which is the country's current total electricity production.

A newly revamped Net Energy Metering (NEM) scheme has certainly helped site owners adopt a new approach to both help the environment and profit from their long-term investment. The Government has done well in introducing the Feed-in-Tariff (FiT) system and NEM over the years but more action is needed. This includes both continuous technological pushes spearheaded by tech companies and the Government as well as boosting general acceptance by the public.

Of course, implementation of a new energy source is not as easy as it sounds. What currently hinders solar power is its price. Generating electricity from the sun is still five to 11 times more costly than coal, hydro or nuclear sources. Solar panels use costly semiconductors to produce electricity from sunlight, but semiconductor factories

require a "clean" production environment and are therefore costly to build and sustain.

Other than that, the process of applying for NEM can be quite tedious and confusing. While it is possible to submit the application online, NEM approvals can take up to 30 days and that is from just one organisation. Authorities should review their processes to make it easier for adopters.

There are quite a few countries that have extensively adopted solar energy. Japan, for instance, has pledged to increase its percentage of energy from renewable sources from 15% to 24%, including boosting adoption of wind and solar energy by 2030. India, meanwhile, has achieved its initial target of 20Gw capacity of solar energy four years early and has quickly become the lowest-cost producer of solar power in the world.

While Malaysia is still new to solar power, it is possible for us to stop relying on fossil fuels and begin adopting renewable energy as part of our energy mix. While we have taken our initial steps, the road to clean power generation is still long.

LAMPIRAN 3
THE STAR (NATION): MUKA SURAT 2
TARIKH: 15 OKTOBER 2019 (SELASA)

M'sia to push for Asian Tiger status

Industry 4.0 to be platform to propel nation forward, says PM

By SIRA HABIBU
sira@thestar.com.my

PETALING JAYA: Malaysia aims to be the hub for Industry 4.0 in South-East Asia to regain its status as an Asian Tiger.

Prime Minister Tun Dr Mahathir Mohamad said there was no choice but to be aggressive in adopting Industrial Revolution 4.0 in view of the accelerated speed in which new technologies evolved.

"With our National Policy on Industry 4.0 (Industry4WRD) launched last year, we aim at driving Malaysia towards becoming the Industry 4.0 hub in SEA," he said.

He said this in his keynote address at the International Conference on Industry 4.0: A Global Revolution Towards Business, Technology and Productivity at Segi University yesterday.

"Our Industry4WRD policy aims at increasing productivity in the manufacturing sector per person in Malaysia by 30% from RM106,647.

"This would elevate the absolute contribution of the manufacturing sector to our economy by 54% from RM254bil to RM392bil," he said.



All smiles: Dr Mahathir (centre) sharing a light moment with SEGi University & Colleges group managing director Tan Sri Clement Hii Chii Kok (right) at SEGi University. Looking on is SEGi University chancellor Tan Sri Syed Anwar Jamalullail. — Bernama

Dr Mahathir said while new technologies could be disruptive, it also boasts exciting prospects and challenges.

Following consolidation of Operation Technology and Information Technology, data analytics, process understanding, and the ability to work with disruptive technologies, Industry 4.0 would transform the labour market into a skill-centric force.

Technologies such as the Internet of Things, Advanced Robotics, Artificial Intelligence and Additive Manufacturing are contributing factors to generate an increase in net productivity, he said.

"These transformations will not take effect unless we take the first step and our strategy has to be right.

"We need to take the Industry 4.0 transformation seriously. That way we can remain competitive and rel-

evant in the international equation," he said.

Malaysia is poised to succeed, as it boasts 40 years of experience in the manufacturing sector, apart from having created a good business ecosystem.

Malaysia could capitalise on its existing supply chain, access to the global market, and pool of talented multi-racial and multi-cultural community, said Dr Mahathir.

"For Malaysian businesses to remain competitive, they need to change their business strategy.

"We are sometimes too operational oriented to deliver results.

"Often, we are too conservative to venture into business diversifications and product development.

"This kind of business mentality and culture has to change," he said.

Dr Mahathir called on Malaysian businesses to seriously look into investing much more in Research and Development (R&D) to upgrade products and services, apart from improving business processes and embracing integrated technologies.

Dr Mahathir also called on universities to focus on developing their R&D capabilities in solving real industry problems.

There must be a push towards innovative thinking and multi-disciplinary knowledge, as Malaysia aimed to increase its high-skilled workforce from 18% to 35% by the year 2020.

Watch the video thestartv.com



LAMPIRAN 4
THE STAR (NATION): MUKA SURAT 07
TARIKH: 15 OKTOBER 2019 (SELASA)

Phasing out single-use plastics

Penang aims to enforce complete ban from July 2021

By IMRAN HILMY
imran@thestar.com.my

GEORGE TOWN: It will be totally no-go for single-use plastic here in Penang from July 2021.

"Penang will implement a full enforcement exercise from then onwards," state environment committee chairman Phee Boon Poh said yesterday.

"The move is in line with the Federal Government's efforts to encourage eco-friendly products to substitute single-use plastics under the Roadmap Towards Zero Single-Use Plastics 2018-2030."

Phee, however, said the compound for the ruling had not been decided yet as the state was still doing public engagement.

"The Penang Green Council is overseeing the process and we will take advice from them," he added.

The implementation of no single-use plastic will begin with an educational enforcement exercise in January, next year followed by a verbal enforcement exercise next July before it goes fully operational in 2021.

Phee said in January 2021, the state would start with a mild enforcement exercise on the ruling

before the full enforcement takes effect on July 1, 2021.

"I think in the span of 18 months, public awareness of the ruling would increase. This should suffice," he said.

Earlier, Phee gave his opening speech during the launch of Training Sessions on Learning Circularity from Penang and Penang's Good Practices for Waste Management at Cititel Hotel.

Seventy-two participants from Asean countries took part in the three-day event, which started yesterday.

"Penang has been chosen as a

centre of excellence for waste management and we are humbled to share our experience with all delegates and participants in this programme," he said.

The programme is part of Asia-Pacific Urban Forum (Apuf-7), which runs from today to Thursday.

Participants will get to visit the Batu Maung Waste Transfer Station, Tzu Chi Recycling Centre in Taman Sri Nibong, Black Soldier Flies Farm in Juru, Taman Bagan Lalang Environment Resource Centre, Berapit Secondary School Recycling and Composting Project and Juru Auto-City.



LAMPIRAN 5
THESTAR (STARASEAN): MUKA SURAT 26
TARIKH: 15 OKTOBER 2019 (SELASA)

Sumatra schools shut as haze from fires return

PALEMBANG: Thick, noxious haze from new deliberately set fires blanketed parts of Indonesia's Sumatra island on Monday after days of improving air quality, causing school closings and flight delays.

National Disaster Mitigation Agency spokesman Agus Wibowo said nearly 1,200 fires were burning, more than double the number in past weeks as authorities managed to seed clouds to induce rain in several affected areas on Sumatra and Borneo islands.

Wibowo said South Sumatra

province had the largest number of detected fires, with nearly 700 hot-spots, prompting authorities to shut most schools in Palembang, the province's capital, to protect children.

Ari Subandri, the general manager of Airnav Indonesia in Palembang, said poor visibility caused delays at the city's main airport.

Haze from Indonesian fires, often set to clear land for planting, is an annual problem for Southeast Asia.

The fires are often started by

smallholders and plantation owners to clear land for planting.

Many areas of Indonesia are prone to rapid burning because of the draining of swampy peatland forests for pulp wood and palm oil plantations.

Wibowo said seven helicopters dropped 66 million litres of water yesterday over South Sumatra province.

He said firefighting measures included 14 tons of salt to induce rain in anticipation of worsening fires.

This year alone, at least 52 helicopters have dropped more than 371 million litres of water and 255 tons of salt for cloud seeding as part of the firefighting efforts in six provinces that have declared emergencies.

The provinces have a combined population of more than 23 million.

Record Indonesian forest fires in 2015 spread haze across a swath of Southeast Asia, and according to a study by Harvard and Columbia universities, hastened 100,000 deaths. — AP

LAMPIRAN 6
THE STAR (STAR WORLD): MUKA SURAT 29
TARIKH: 15 OKTOBER 2019 (SELASA)

Grim task awaits rescuers



Nature's wrath: Aerial view showing flooded homes beside the collapsed bank of the Chikuma river in Nagano prefecture, Japan. (Inset) Two vehicles are submerged in floodwaters in the Nagano area due to Typhoon Hagibis onslaught. — AFP/AP



Japan searches for survivors after Typhoon Hagibis kills 56

TOKYO: Tens of thousands of rescue workers in Japan battled on to find survivors of a powerful typhoon that killed at least 56 people, as fresh rain threatened to hamper efforts.

Typhoon Hagibis crashed into the country on Saturday night, unleashing high winds and torrential rain across 36 of the country's 47 prefectures, and triggering landslides and catastrophic flooding.

"Even now, many people are still unaccounted for in the disaster-hit area," Prime Minister Shinzo Abe told an emergency disaster meeting yesterday.

"Units are trying their best to search for and rescue them, working day and night."

But even as rescuers, including troops, combed through debris, the country's weather agency forecast rain in central and eastern Japan that it warned could cause further flooding and new landslides.

"I would like to ask people to stay fully vigilant and continue watching for landslides and river flooding," Chief Cabinet Secretary Yoshihide Suga told a special news conference in Tokyo.

In Nagano, one of the worst-hit regions, rain was already falling and was expected to intensify.

“Even now, many people are still unaccounted for in the disaster-hit area.”

Shinzo Abe

“We are concerned about the impact of the latest rain on rescue and recovery efforts,” local official Hiroki Yamaguchi told reporters.

“We will continue operations while watching out for secondary disasters due to the current rain.”

By late afternoon yesterday, national broadcaster NHK said the toll had risen to 43 dead, with 16 others missing and over 200 people injured.

The government gave lower figures but was continuing to update its information.

The dead included a municipal worker whose car was overcome by floodwaters and at least seven crew from a cargo ship that sank in Tokyo Bay on Saturday night, a coast guard spokesman said.

Four others from China, Myanmar and Vietnam, were rescued when their boat sank and the coast guard was still searching for a last crew member.

While Hagibis, one of the most powerful storms to hit the Tokyo area in decades, packed wind gusts of up to 216 kph, it was the heavy rains that caused most damage.

A total of 142 rivers flooded, mainly in eastern and northern Japan, with river banks collapsing in two dozen places, local media said.

In central Nagano, a levee breach sent water from the Chikuma river gushing into residential neighbourhoods, flooding homes up to the second floor.

As water slowly and finally receded in the afternoon yesterday, television footage showed patients being transferred by ambulance from a Nagano hospital where some 200 people had been cut off by flooding.

Elsewhere, rescuers used helicopters to winch survivors from roofs and balconies, or steered boats through muddy waters to reach those trapped.

But by afternoon, some 75,900 households remained without power, with 120,000 experiencing

water outages.

The disaster left tens of thousands of people in shelters, with many unsure when they would be able to return home.

"Everything from my house was washed away before my eyes, I wasn't sure if it was a dream or real," a woman in Nagano told NHK during a special interview programme seen yesterday.

"I feel lucky I'm still alive."

The storm brought travel chaos over the holiday weekend, grounding flights and halting commuter and bullet train services.

However, most subway trains had resumed service, along with many bullet train lines, and flights had also restarted yesterday.

The storm also brought havoc to the sporting world, forcing the delay of Japanese Grand Prix qualifiers and the cancellation of three Rugby World Cup matches.

But a crucial decider pitting Japan against Scotland went ahead, with the hosts playing their very best game and dedicating their stunning 28-21 win to the victims of the disaster.

"To everyone that's suffering from the typhoon, this game was for you guys," said Japan captain Michael Leitch. — AFP