

# Energy efficiency law to cut carbon emission

By May Robertson  
mayrobertson@mmail.com.my

PUTRAJAYA — An Energy Efficiency Bill will be introduced next year to help Malaysia cut carbon emission by 45 per cent by 2030 in compliance with the Paris climate accord.

Energy, Green Technology, Science and Climate Change Minister Yeo Bee Yin said the target was not too far from sight and it would continue to be a priority for the Pakatan Harapan government.

"Former prime minister Datuk Seri Najib Razak's pledge to reduce carbon emission is something the government believes in, and we want to implement this as well," she said in an interview with *Malay Mail*.

"To facilitate the reduction of carbon intensity, we have an energy efficiency Bill coming next year. It is still in the Attorney-General's Chambers and it still has to be reviewed.

"This is among our efforts to reduce carbon dioxide emission intensity, we are not too far from the 2030 target, and I think we have a conservative plan because Malaysia can do more."

Under the 2015 Paris accord signed by 195 countries, governments agreed to keep global temperatures "well below 2°C

Yeo says as Malaysia reduces its carbon emission, it should also build the green industry.

— Picture by Zuraneeza Zulkifli



above pre-industrial levels and, ideally, aim to limit the increase to 1.5°C.

President Donald Trump notified the United Nations last year the United States planned to withdraw

from the Paris agreement.

Yeo, who is also the Bakri MP, stressed that the notion of being a "green country" was a necessary move to progress economically.

"Carbon dioxide reduction is not a 'save the world' thing, but nearly all countries have signed the Paris agreement and that means a lot of countries will need low carbon products, industries or technologies, so I think Malaysia can move towards that direction," she said.

"Malaysia is a small emitter of carbon dioxide comparatively. If you look at how we reduce global warming, Malaysia, being such a small country, will not contribute much to the reduction no matter how we try.

"That's why we should approach

it differently. As we reduce emission, we should also build the green industry, then we create jobs and experts in the industry so that when there is a demand for this in the world, we will not be left behind."

In 2015, Malaysia's recorded carbon emission was down by 33 per cent compared to 2005.

Najib had previously said Malaysia was determined to be carbon neutral by 2050.

To be carbon neutral indicates that there is zero net carbon emission released into the atmosphere.

Climate change, or global warming, is the damaging effects of greenhouse gasses emitted from human activity like the burning of fossil fuels and agriculture.

# MDEC, AXIATA INK CYBERSECURITY MoU

Public-private partnership set to strengthen talent development, future-proof Malaysia's digital economy

FARAH ADILLA  
KUALA LUMPUR  
bt@mediaprima.com.my

**M**ALAYSIA Digital Economy Corporation (MDEC) and Axiata Group Bhd have signed a memorandum of understanding (MoU) to boost the nation's cybersecurity industry by strengthening talent development and future-proofing innovation.

In a statement, MDEC said the

partnership would benefit institutions of higher learning, the startup community and government agencies.

The public-private partnership was established due to the fast-growing opportunities in the digital economy.

MDEC chief operating officer Datuk Ng Wan Peng said efforts to strengthen the cybersecurity industry was crucial to the country's digital economy.

"It is essential to drive partnerships, especially with one of

the leading telecommunications groups in Asia. Axiata's 350 million customers make it a good testbed to future-proof cybersecurity innovation," she said.

Axiata president and group chief executive officer Tan Sri Jamaludin Ibrahim said the MoU highlighted the group's commitment to work with MDEC to drive the transformation of the country into a world leader in cybersecurity and digital resiliency.

"Axiata will leverage our regional knowledge pool of experts

and innovators to impact national policies, build capacity, develop local talents, share solutions and exchange information."

Jamaludin said Axiata was committed to talent development and would support MDEC's initiatives in creating cybersecurity talents through industrial and upskilling internships as well as mentorships.

MDEC said to become a high-income nation, Malaysia needed to maintain its economic growth momentum with a focus on the

digital economy, which contributed 18.2 per cent to the country's gross domestic product in 2016.

The International Data Corporation forecasts Malaysia's security services market to grow from RM1 billion in 2016 to RM2.5 billion by 2021 at a compound annual growth rate (CAGR) of 21.1 per cent.

The security services market in Southeast Asia is expected to reach RM10 billion by 2021 at CAGR 22.28 per cent.



UNITED NATION STUDY

## Malaysia ranks 3rd in 2017 Global Cybersecurity Index

**MALAYSIA** is ranked third, behind Singapore and the United States, in the Global Cybersecurity Index (GCI) 2017, the Dewan Rakyat was told yesterday.

Minister in the Prime Minister's Department Datuk Liew Vui Keong said in the Asia-Pacific region, Malaysia was ranked second behind Singapore, while Australia was third.

"GCI, which was conducted by International Telecommunication Union (ITU), a body under the United Nations, measures the commitment of countries to cybersecurity.

"The index was based on five pillars — legal, technical, organisational, capacity-building and cooperation," he said in reply to a question by Datuk Seri Reezal Merican Naina Merican (BN-Kepala Batas).

Liew said the achievement was attributed to the government's efforts in establishing an effective governance in cybersecurity management.

He said Malaysia's involvement in spearheading initiatives at regional- and international-levels contributed to the success.



*Cyber threats come in many forms due to the evolution of the global information and communications technology. FILE PIC*

"Improvements in cybersecurity did not stop there and will be improved."

This, he said, was because of the dynamic nature of cyberse-

curity management environment as cyber threats came in various forms due to the evolution of the global information and communications technology.

**LAMPIRAN 4**  
**BERITA HARIAN (DEWAN RAKYAT): MUKA SURAT 15**  
**TARIKH: 20 JULAI 2018 (JUMAAT)**

## **Malaysia di tempat ketiga senarai GCI 2017**

**Malaysia** disenaraikan di kedudukan ketiga senarai terbaru Indeks Keselamatan Siber Global (GCI) 2017.

Menteri di Jabatan Perdana Menteri, Datuk Liew Vui Keong berkata, kedudukan Malaysia itu di belakang Singapura dan Amerika Syarikat.

Katanya, di peringkat Asia Pasifik, Malaysia berada di kedudukan kedua, di belakang Singapura, manakala Australia di tangga ketiga.

"GCI adalah penanda aras kepada komitmen sesebuah negara dalam bidang keselamatan siber yang dikeluarkan oleh International Telecommunication Union (ITU), kesatuan di bawah Pertubuhan Bangsa-Bangsa Bersatu (PBB).

"Indeks berkenaan diukur berdasarkan lima kategori iaitu perundangan, teknikal, organisasi, pembangunan keupayaan dan rangkaian hubungan kerjasama," katanya dalam jawapan bertulis kepada soalan Datuk Seri Reezal Merican Naina Merican (BN-UMNO Kepala Batas) di Dewan Rakyat, semalam.

### **Pencapaian cemerlang**

Vui Keong berkata, pencapaian cemerlang itu adalah berdasarkan usaha kerajaan dalam mewujudkan tadbir urus berkesan dalam pengurusan keselamatan siber di negara ini.

Katanya, pembabitan aktif Malaysia serta kesediaan negara dalam menerajui inisiatif di peringkat serantau dan antarabangsa turut menyumbang kepada kejayaan berkenaan.

"Usaha penambahbaikan pengurusan keselamatan siber negara tidak terhenti dengan pencapaian itu sahaja sebaliknya akan diteruskan dan dipertingkatkan.

"Persekitaran pengurusan keselamatan siber adalah berisfat dinamik dengan cabaran perubahan ancaman keselamatan siber pelbagai bentuk baharu ekoran evolusi teknologi komunikasi dan maklumat global," katanya.



**GCI adalah  
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Bersatu (PBB)"**

**Liew Vui Keong,**  
Menteri di Jabatan Perdana Menteri



# Transformasi 'kolar baharu' TVET

**G**lobalisasi ekonomi dunia dan transformasi perindustrian bergerak menuju era megatrend dan Revolusi Perindustrian 4.0 (IR 4.0). Mahu tidak mahu, fenomena pelbagai peringkat menimbulkan cabaran dan peluang bagi perkembangan dunia perniagaan masa kini untuk bergerak pada momentum lebih pantas.

Sejauh manakah perkembangan dan transformasi ini akan memberi kesan positif? Persoalan itu perlu diteliti kerana ketika ini kita berada dalam revolusi teknologi yang mengubah rutin kehidupan, kaedah bekerja, pemikiran masa depan dan semakin membolehkan mesin dan perisian menggantikan manusia.

Perusahaan dan individu yang agresif merebut peluang yang ditawarkan oleh kemajuan digital akan mendapat manfaat sementara mereka yang duduk selesa, akan kehilangan segala-galanya. Justeru, perlu ada peluang baharu bagi kreativiti tenaga kerja, sekali gus meningkatkan standard tenaga kerja mahir.

Automasi akan terus memacu dan berkembang pada dekad yang mendatang. Kemajuan teknologi membentuk kategori pe-

## Komentari



**Dr Mohamad Rozi Hassan**

Pensyarah Kanan, Fakulti Pengurusan Industri, Universiti Malaysia Pahang dan Ketua Pegawai Eksekutif UMP Advanced

kerjaan baharu, ekoran inovasi dalam kecerdasan buatan, robotik, *Internet of Things*, kenderaan elektrik, percetakan tiga dimensi, nanoteknologi, bioteknologi, sains bahan, penyimpanan tenaga dan robotik mudah alih yang canggih, semuanya memacu perkembangan ini.

### Potensi manusia

Berbillion-bilion manusia dihubungkan dengan peranti mudah alih, kuasa pemerosesan, kapasiti penyimpanan dan akses terhadap ilmu pengetahuan yang tidak pernah berlaku sebelum ini, memberikan

potensi yang tidak terbatas.

Automasi bukan sahaja memberi kesan pekerjaan kolar biru, namun juga memberi ancaman kepada pekerjaan kolar putih. Ada beberapa jenis pekerjaan baharu yang belum wujud pada masa ini sudah mewujudkan klasifikasi pekerjaan yang berbeza yang dikenali sebagai 'kolar baharu', pekerjaan tenaga mahir dengan kemungkinan tidak memerlukan graduan lepasan universiti untuk mengisi kekosongan spektrum itu.

Sarah Boisvert dalam bukunya *The New Collar Workforce*, ada menyebut: "Kami mengalami perubahan mendadak yang menjejaskan keseluruhan ekosistem dan strategi pembuatan dan pengeluaran. Pemikiran radikal diperlukan untuk menjambatani jurang kemahiran yang masih ada di kebanyakan sektor pembuatan".

Evolusi pekerjaan tradisional kolar biru ke dalam pekerjaan yang berfikir digital yang bekerja secara simbiotik dengan robot dan teknologi pintar akan menjadi kunci kepada pertumbuhan mampan. Kerangka pekerjaan kolar baharu yang kini tersedia menyebabkan syarikat mencari tenaga kerja yang lebih

berkelayakan dan kompetitif.

### Permintaan tinggi

Pekerjaan kolar baharu mendapat permintaan yang tinggi dalam industri pembuatan, dengan pekerjaan kemahiran rendah yang sebelum ini dikategorikan sebagai pekerja kolar biru, kini diautomasikan oleh robot dan jentera berat.

Memandangkan mesin inovatif terus berkembang pesat, ada keperluan bagi pekerja terlatih untuk membina, menyelenggara, mengemas kini dan membekalkan bahagian untuk teknologi ini.

Mengorak ke depan bercirikan perspektif industri negara dan bersesuaian dengan semangat kerja Malaysia Baharu, pelantikan Ahli Parlimen Permatang Pauh, Nurul Izzah Anwar yang memperkerusakan Jawatankuasa Pemerkasaan Pendidikan dan Latihan Teknikal dan Vokasional Malaysia (TVET), memberi harapan besar supaya jawatankuasa itu dapat mendepani tuntutan pekerjaan kolar baharu.

Mungkin boleh dimulakan inisiatif 3P (private-public-partnership) di antara institusi latihan awam dan swasta serta pihak industri, mewujudkan program ni-

lai tinggi bagi menyediakan dan madankan tenaga kerja kolar baharu dengan pekerjaan sektor pembuatan maju.

Sebagai contoh, pekerjaan kimpalan hari ini memerlukan kemahiran peringkat tinggi, terutama dalam matematik dan teknologi. Jadi, pekerja boleh menyelesaikan masalah berkaitan mesin. Ia mungkin memerlukan tenaga kerja mahir ini mendaftar dalam program pensijilan profesional atau kompetensi melalui Pendidikan Sepanjang Hayat (PSH).

Sesetengah industri yang secara aktif merekrut pekerja kolar baharu juga merancang laluan pendidikan mereka sendiri yang menyediakan pekerja untuk pekerjaan dalam syarikat mereka.

Ia juga dalam rangka mendorong pertumbuhan dan pengembangan penyediaan tenaga kerja kolar baharu yang kompeten, berfikir digital yang bekerja secara simbiotik dengan robot dan teknologi pintar.

Ini sekali gus memberdayakan masyarakat sekitar menjadi tenaga kerja industri, sehingga dapat meningkatkan kesejahteraan masyarakat dan mencegah munculnya isu sosial, selain mendepani cabaran globalisasi IR 4.0.



DR ADHA  
SHALEH

EDUCATION

## LET'S NOT NEGLECT THE SOFT SKILLS



To thrive in the 21st century, universities must engage, and students must participate

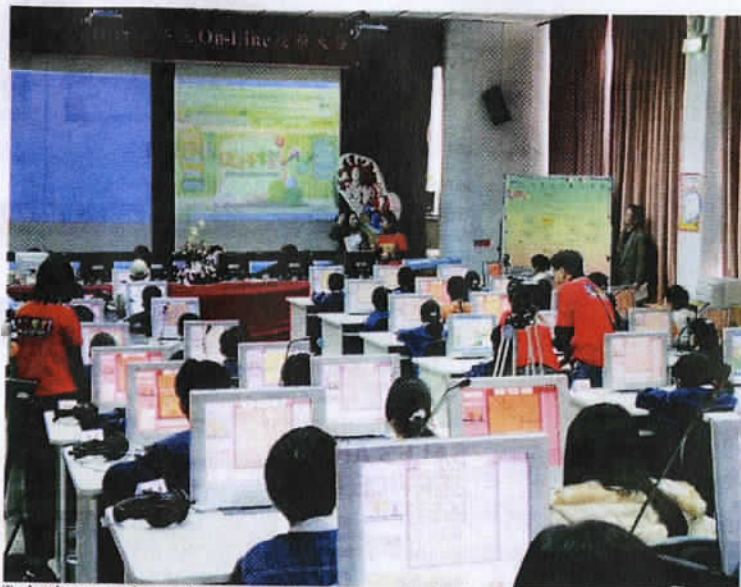
**G**IVEN that the discussions about the future of education have shifted to world ranking, means of learning, and students' mastery of languages, this writer forecasts a surge in commitment to improving these areas in the coming years.

Perhaps, this could be a step forward in harnessing the latest technological revolution, in addition to stressing teacher's hard work and commitment, and student's participation in current initiatives.

In recent years, this writer has noticed that the tech industry and its cumulative impacts on today's education are proliferating via the nuances of "digitalisation". How technology continuously barges its way into sales, marketing, and supply chains is also not a "fleeting" thing. The McKinsey Global Institute estimates that applying Artificial Intelligence (AI) on businesses could create an economic value of US\$2.7 trillion (RM39.4 trillion) over the next 20 years. Many fret that it could wipe out jobs, and take over the psychical and cognitive aspects of labour. Hence, it is not a mere historic event. Technology is playing out to assert its supremacy in education in the 21st century. This writer is certain that there will be more clarity than conviviality in technology than education.

**Nevertheless, banking too much on technology makes one less familiar with education. In reality, technology might not be helping students to acquire the much needed social skills and emotional intelligence.**

Nevertheless, banking too much on technology makes one less familiar with education. In reality, technology might not be helping students to acquire the much needed social skills and emotional intelligence. Technological advancement causes disruption, and to depart from being held a captive of technology, this writer calls for the mastering of humanities, civic literacy, global awareness, cross-cultural skills, cultural diversity and ecological literacy.



Technology can do wonders in providing a great educational experience; 21st century education requires universities to engage and students to participate. REUTERS PIC

Life is remarkably complex as society matures through human inter-relationships, behaviours, attitudes, norms, and foremost, social factors – they all play a central role in shaping our intellectual capabilities. These human trajectories eventually dictate the development of society. The essence of education involves nurturing students with "real skills". It is because of the following fundamental difference – in AI, the key word is "artificial", while the human being is "real".

So, how does education help a student acquire the other essentials? The rule is to re-route intellectual commitment to "engagement" in education. Many are already clamouring that the issue in today's education is more than just revolutionising the means of teaching and learning. Rather, at the heart of learning is engagement. In principle, engagement influences the process of teaching, and is the key to innovation.

Acknowledging the significance of "engagement", Profes-

sor Andrew Walker of Monash University said, "Engagement is the key to what universities do. We are perfectly situated to engage with industries, and to shape a research agenda that will meet the productivity challenges of industry in the new Malaysia".

Clearly, the goal of higher education should be consistent with literature that supports the view that, to thrive in the 21st century, universities must engage, and students must participate. This vision of education can be enhanced by:

**EXPERIENTIAL** entrepreneurial education, in which students take up a year internship at startups overseas; and,

**SERVICE** learning, in which students engage with local communities to create distinctive solutions to social problems.

The goals of such initiatives commensurate with the long-term agenda of nurturing global leaders with amazing social skills, socio-ecological intelligence and leadership. In a similar vein, it facilitates research.

This writer envisions the 21st century education in the following ways: for scholars, it means the overall work of the academy moves towards increasing participation involving broader public discourses. For students, it will mean nurturing creative thinking and empathy. For communities and the public, it will mean they simply cannot be detached from the higher education discourse. The further reality is education's role in sharing knowledge between learners and for learning from the masses.

Hence, it is called a cross-fertilisation of facts. And, for that reason, a multi-disciplinary approach to research and teaching via engagement warrants an attention. This writer has greatly benefited from embracing diversities through engagement. Why not others from all sections of society?

[adha@iais.org.my](mailto:adha@iais.org.my)

The writer is a research fellow at Institute of Advanced Islamic Studies



LAMPIRAN 7  
THE STAR (WORLD): MUKA SURAT 30  
TARIKH: 20 JULAI 2018 (JUMAAT)

## Baptism at sea for first women to join France's nuclear subs

**ILE LONGUE (France):** Drinking a bowl of seawater followed by a glass of champagne, four French officers stood out during the traditional "baptism" to mark their inaugural submarine patrol: the first women to join a crew in the country's nuclear-powered fleet.

"I'm proud to have become part of the submarine family," said Harmonie, a 27-year-old security specialist on *Le Vigilant*, after returning from her first 10-week mission on the sub.

"I'm ready to go out again," she added.

France has become just the third country to bring women on board

its nuclear-powered subs, which operate much longer and isolated missions than traditional vessels, after the US and Britain.

And officials hope the four women will inspire others to join them.

"The navy needs recruits. Today women make up 15% of its ranks, they're an asset for us and we want to keep recruiting them," said Captain Christian Houette, commander of the four nuclear-powered, nuclear-armed subs in France's dissuasion force, based on the Ile Longue peninsula near the western city of Brest.

The nuclear subs were the last

element of the French navy to exclude women, reflecting concerns about the sacrifices required for long missions, as well as difficulties in adapting personnel quarters in such tight spaces.

"Some crew members were a bit reluctant, with questions that were largely practical, they wanted to know if it would disrupt their routines: sleeping quarters, bathrooms," said Mathieu, second-in-command on the *Vigilant*.

Like most crew members, he could give only his first name in line with navy rules.

Officials also had to take into account the concerns of sailors'

wives, Mathieu added, diplomatically.

"In the end, their integration has been extremely smooth. Having proved their qualifications, these women have earned their place aboard."

The *Vigilant* packs in 110 people whose only contact with the outside world is a 40-word message from family members once a week.

The sub keeps radio transmissions to a strict minimum and only the captain knows the destination and other details of each mission — stealth and secrecy are the watchwords for France's underwater nuclear arsenal.

"The thing that's different, compared to a ship, is the one-way link to the outside," Camille, a 29-year-old recruit, said.

She and the three other women underwent two years of specialised training for their posts.

Pauline, the vessel's 31-year-old doctor, had to develop her surgery and dentistry skills to avoid any emergency evacuations which would compromise the mission.

But getting women on France's other nuclear-powered submarines is not on the cards, since they are much smaller vessels which would be harder to reconfigure for mixed crews. — AFP

LAMPIRAN 8  
THE STAR (FAMILY): MUKA SURAT 7  
TARIKH: 20 JULAI 2018 (JUMAAT)

# AIR CONDS THAT COOL AND CLEANSE

With its proprietary nanoe technology, Panasonic's new Aero and Sky series air conditioners not only cool down rooms efficiently, they also remove harmful micro-organisms and pollutants.

By RUBY LIM  
rubiylim@the-star.com.my  
Photos by PANASONIC

AMONG the basics that we cannot live without are water, food and, of course, air.

Because water and food are simply visible to us, we always ensure their cleanliness before consumption. But what about the air we breathe?

Even though a person breathes in an average 18kg of air every day, many are not aware of the importance of clean air. The fact is, what you don't see can actually hurt you, and air pollution can certainly adversely affect one's well-being.

When talking about air pollution, the images that usually pop into the mind are those of vehicle exhausts, dusty streets and the urban outdoors. They make you want to stay indoors, which we often think of as the safest place to be.

However, the air quality in your office or home may be just as polluted or worse, and this is something most of us tend to overlook. Indoor air quality is a significant concern in healthy living as people on average spend more time indoors than outdoors, whether it be at work, in school or at home.

Our living spaces are filled with all kinds of allergens, such as house dust mites, fungi, and pet dander. As we breathe, we also inhale large amounts of these allergens that are circulating in the air or adhere to indoor surfaces. This can cause allergy and asthma.

While some symptoms from this may seem mild, they may escalate and become complex health complications.

Air pollution is not likely to go away, but you can protect yourself. To improve the comfort of your home and your overall health, you need quality air, and one solution towards this end is Panasonic's air conditioners, which deliver more than just cooling or heating solutions.

## nanoe Technology

With nanoe technology, Panasonic is able to provide total air solutions that offer quality indoor air to create fresher and cleaner living spaces for the well-being of your family.

nanoe is a nano-sized water particle generated from moisture in the air, and contains highly reactive components known as hydroxyl (OH) radicals. Its effectiveness on bacteria, viruses and odour compounds depends on the number of OH radicals, which is generated at the rate of 480 billion per second.

Apart from offering cooler and cleaner air, Panasonic air conditioners with nanoe technology also help you to retain the moisture of hair and skin.



nanoe X is much smaller than a steam particle so it can deeply penetrate into cloth fabrics to inhibit allergens, bacteria and viruses.



nanoe bubble



nanoe X deactivating allergens, bacteria and viruses.

In addition, the nanoe technology air purification system is able to function even when the cooling mode is turned off. It can operate on fan mode, consuming only 25W with the nanoe mode on, which is equivalent to the power requirement of a LED light bulb.

## nanoe-G

nanoe-G, Panasonic's original air purifying and filtering system, has been well received in South East Asia, mainly due to increasing concern over air pollution especially during haze situations.

Its generators release three trillion negative ions and has been proven to be 99% effective in removing airborne dust particles as small as PM2.5, which can easily enter our lungs, posing potential health risks.

These particles include bacteria, viruses and mould.

The air purification system also deactivates adhesive micro-organisms and deodorises adhesive odours. This prevents mould growth in surrounding surfaces and the trapped particles are deactivated by the positively charged filter.

## nanoe X

Panasonic's unwavering commitment to improving its customers'

quality of life continues with the introduction of an improved nanoe technology in 2016 - nanoe X. This unique technology is a revolution in air purification system that is not only effective in dust removal, but is able to deodorise and prevent the growth of bacteria and viruses.

The latest innovation produces 10 times (or 4.8 trillion) more OH radicals, resulting in outstanding performance in combating bacteria, viruses and allergens, while deodorising strong and unpleasant odours.

Equipped with nanoe technology, Panasonic's Sky and Aero Series air conditioners are set to create a fresher and cleaner living space by removing up to 99% of pollutants, leaving you with cool, clean air.

## Sky Series

Equipped with the new Skywing, the Sky Series air conditioner features an innovative top flap design which maximises airflow for consistent cooling experience.

It has 12 vanes and is 53% wider in size to better distribute cool air to a broader area. With the Radiant Cooling feature, the

air conditioner's multi-directional arm can be adjusted to better direct cool air towards the ceiling and walls, and is able to cool a room without direct airflow wider airflow to remove trapped heat.

The Sky Series also sports an additional dust sensor, which constantly monitors air quality and automatically activates nanoe technology when a high level of dust particle concentration is detected.

## Aero Series

The Aero Series uses Aerowings with twin flaps, controlled by two independent motors and dual independent flaps, to deliver concentrated airflow across the room through direct (fast cooling) and indirect (cooling tower cooling) airflow.

When the Aerowings angle downwards, the concentrated airflow cools instantly at startup, and when they angle upwards, cool air is spread over a wider area, then showers down evenly across the room after reaching a set temperature.

## OTHER FEATURES

### Energy Saving & Precise Temperature Control

A conventional non-inverter air

conditioner can only operate at a constant speed that is too powerful to maintain the set temperature. Thus, it switches the compressor on and off repeatedly. This results in wider temperature fluctuations leading to wasteful consumption of energy.

Panasonic's inverter reduces power consumption by varying the speed of the compressor according to temperature changes with the aim of minimising the temperature fluctuations for consistent cooling comfort.

### Enjoy Ultimate Comfort With Energy Savings

Econavi is a high precision sensor technology that detects where energy is usually wasted and then adjusts cooling power according to room conditions and activity levels.

### Sustainable Refrigerant

Committed to healthier lifestyles and to reducing environmental footprint, Panasonic's air conditioners have increasingly been adopting the more eco-friendly R32 refrigerant. The R32 has low global warming potential and yet it is an excellent heat transfer medium, which leads to greater energy efficiency and cost effectiveness.



Panasonic's Sky Series radiant cooling feature promises a healthier way to enjoy cooling comfort.



## Astronomers spot star munching on planet

**WASHINGTON:** Astronomers may have caught a relatively nearby star munching on a planet or mini-planets.

A NASA space telescope noticed that the star suddenly started looking a bit strange last year. The Chandra X-Ray Observatory spotted a 30-fold increase in iron on the edge of the star, which is 10 million years old, along with pronounced dimming.

MIT scientist Hans Moritz Guenther says he's never seen anything quite like this before.

He looked at other possible explanations, and of the two that make sense, he prefers the planet-munching one.

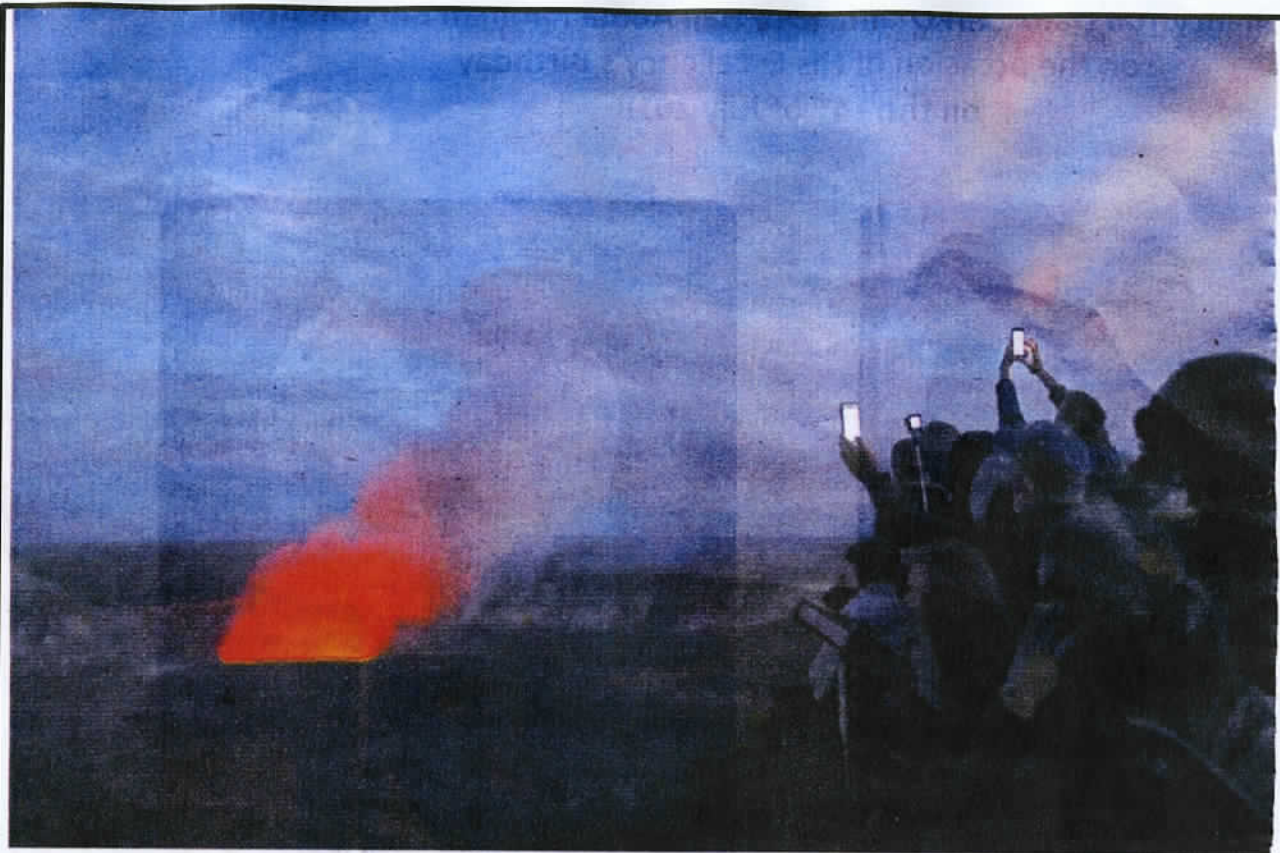
Computer simulations show it can happen, but it has never been seen before, he said.

Outside experts say that's possible, but the evidence is circumstantial.

Astronomers have been watching the star for decades and iron levels weren't high in 2015.

The star is 450 light-years away. A light-year is 5.9 trillion miles.

The study is in Wednesday's *Astronomical Journal*. — AP



Drawn to danger: Visitors taking pictures as Kilauea's summit crater glows red in Volcanoes National Park, Hawaii. — AP

## Hawaii searches for safe lava viewing spots

HONOLULU: Stunning images of Hawaii's erupting Kilauea volcano have captivated people around the world. But ironically it's nearly impossible for residents and visitors on the ground to see the lava – a fact that's squeezing the tourism-dependent local economy.

Authorities on the Big Island want to set up a lava viewing site to help, but they're finding it difficult to do while keeping people safe.

The risks posed by the volcano came into sharp focus this week when lava flowing into the ocean triggered an explosion that sent a hot rock crashing through the roof of a tour boat, hurting nearly two dozen people.

Diane Ley, Hawaii County's director of research and development, said she's been working on setting up a lava viewing site for nearly two months, consulting with federal scientists and the county's civil defence administrator. The injuries from the tour boat only validate the county's caution, she said.

**There's nothing that can be done to save it (my business) ... unless they stop criminalising people for wanting to see lava.**

John Tarson

"That's a challenge – to find us a site that is safe from volcanic hazards, emissions and can afford the ability for large numbers to be able to come in and view," she said.

Still, pressures are mounting from businesses on the Big Island, where Kilauea is a major draw.

Tourism to parts of the island has plummeted since the volcano began erupting in a residential neighbourhood in May.

The small, rural town serves as a gateway to Hawaii Volcanoes National Park, which is normally the state's most popular tourist attraction but has closed indefinitely because of dangers to staff and visitors.

Currently, only helicopter and boat-tour passengers – paying about US\$250 (RM1,013) each – are able to see the lava in person.

The area where lava is bursting from the ground is under a mandatory evacuation order.

Residents nearby may go to their homes, but the county restricts access for everyone else except scientists, authorities and a handful of escorted media.

Officials have cracked down on violators, issuing citations to more than 80 people for loitering in a restricted disaster area.

John Tarson, owner of Epic Lava Tours, said the current restrictions are crushing him.

"They've effectively cut my business' legs off. And there's nothing

that can be done to save it unless they reopen the tourism industry, unless they stop criminalising people for wanting to see lava," he said.

He argues guides like himself have years of experience and can continue to take tourists to see lava safely.

Instead, his customers are cancelling reservations into the new year because they don't believe they'll be allowed to see molten rock.

Hawaii County Councilwoman Eileen O'Hara said the county should contract several tour companies to operate shuttle buses from the centre of Pahoa town to Leilani Estates, where lava is coming up through the ground.

She said the bus could circle around to let passengers take photos but keep them inside, protected from any volcanic gases.

State Rep Joy San Buenaventura also advocates using shuttle buses.

She also urged the county to act fast, "because the businesses are suffering". — AFP



## Vietnam warns of floods after tropical storm Son Tinh hits

**HANOI:** Vietnam has warned of floods and landslides triggered by heavy rains after tropical storm Son Tinh made landfall in northern coastal areas, although no casualties were reported.

A long coastline makes Vietnam prone to destructive storms and flooding, with 389 people last year in natural disasters such as floods and landslides, the General Statistics Office said.

Son Tinh weakened to a tropical low pressure event by the time it reached Vietnam late on Wednesday, curbing fears of immediate and widespread damage, but raising concerns of flooding.

"Heavy rain is forecast to continue in northern and central provinces, and threatens to cause flash floods and landslides in Hoa Binh, Son La, Lai Chau and Lang Son provinces," the national weather forecaster said yesterday.

The South-East Asian country had ordered vessels back to port and prepared evacuation plans ahead of the storm.

Heavy rain of up to 350mm flooded some coastal provinces, affecting nearly 64,000ha of rice and 3,200ha of cash crops yesterday, the government's disaster management agency said. — Reuters

LAMPIRAN 12  
HARIAN METRO (GLOBAL): MUKA SURAT 84  
TARIKH: 20 JULAI 2018 (JUMAAT)



HELIKOPTER membawa air di ruang udara ladang sawit di Ogan Komering Ilir, Sumatera Selatan. - Reuters

## 29 titik panas di Sumatera

**Palembang:** Kerajaan Indonesia mengesan 29 titik panas di Riau, Sumatera, sejak dua hari lalu dan sudah menghantar beberapa helikopter untuk memadamkan kebakaran sebelum Sukan Asia 2018 bermula di sini, dan Jakarta, Ogos depan.

Agensi Geofizik, Cuaca

dan Meteorologi Pekanbaru (BMKG) melaporkan bahawa bacaan satelit menunjukkan 29 kawasan panas di Riau.

Daripada jumlah itu, 15 di kesan di Dumai, tujuh lagi di kawasan Rokan Hilir, enam di Bengkalis dan satu lagi di Siak.

"Daripada semua kawa-

san panas itu, 24 daripadanya mencatat suhu melepasi 70 peratus yang bermakna kawasan panas mungkin kebakaran," kata Ketua Penerangan dan Data BMKG Pekanbaru, Marzuki.

Katanya angka itu lebih tinggi berbanding awal pagi Isnin lalu apabila hanya

12 kawasan panas dikesan.

Di Sumatera, Riau mencatat jumlah kawasan panas tertinggi. Semalam, satelit mengesan 15 lagi kawasan panas di Lampung, satu di Sumatera dan Bangka Belitung, serta satu di Sumatera Utara dan Bengkulu. - Agensi



**LAMPIRAN 13**  
**UTUSAN MALAYSIA (LUAR NEGARA): MUKA SURAT 12**  
**TARIKH: 20 JULAI 2018 (JUMAAT)**

## Imej Neptun paling jelas dirakam

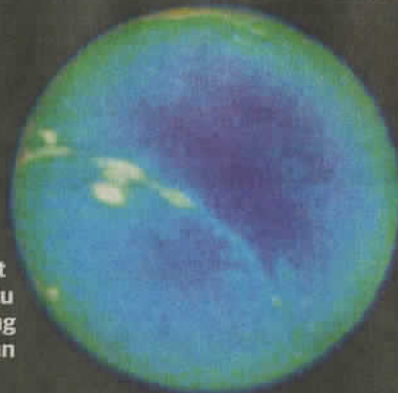
**LONDON 19 Julai** - Imej planet paling jauh dari matahari iaitu Neptun berjaya dirakam paling jelas dan gambarnya didedahkan kepada umum.

Lapor *Dailymail*, gambar planet yang dirakam secara terperinci itu amat mengagumkan apabila pakar kaji bintang menaik taraf teleskop paling berkuasa menggunakan laser.

Teknik tersebut membetulkan kesan gelora atmosfera di kawasan pencerapan, berpangkalan di padang pasir di utara Chile.

Pakar dari Balai Cerap Selatan Eropah (ESO) berjaya merakam imej berkenaan menggunakan Very Large Telescope (VLT).

Naik taraf susunan tersebut, terdiri daripada empat teleskop, membolehkan penyelidik menggunakan pakai proses yang dikenali sebagai kemudahan bintang panduan laser pada VLT Unit Te-



**PLANET** Neptun dirakam dengan jelas menggunakan UT4. - AGENSI

lescope 4 (UT4).

Ini akan membolehkan pengimejan lebih jitu dalam medan pandangan yang lebih luas, merakam gugusan bintang di langit ketika malam serta butiran cakerawala dan angkasa secara berasingan.

Dengan keupayaan baharu ini, teleskop UT4 sepanjang lapan meter mencapai had ketajaman imej dan tidak terbatasi akibat kekaburan atmosfera.

Sebelum ini, ia amat sukar untuk dicapai dan UT4 membolehkannya menghasilkan imej setanding dengan ketajaman Teleskop Angkasa Hubble. - AGENSI