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TARIKH: 7 APRIL 2016 (KHAMIS)**

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Planes ready to seed but no clouds in sight so far

KOTA KINABALU: Royal Malaysian Air Force aircraft are on standby in Labuan to carry cloud-seeding in Sabah, but the weather is not being cooperative.

Chief Minister Datuk Seri Musa Aman said the absence of cumulus clouds over the state has prevented any such operation.

"We can only wait and hope for such clouds," he said, while urging religious bodies to hold special prayer sessions for divine intervention to alleviate Sabah's prolonged dry spell.

Cumulus clouds are suitable for cloud-seeding operations.

In the tropics, cloud-seeding is an attempt to induce rain by dispersing substances into the air that serve as points where condensation can occur.

In a related development, Science, Technology and Innovation Minister Datuk Wilfred Madius Tangau said the Meteorological Department had provided the salt solution needed for cloud-seeding.

"However, satellite imagery over the past several days has shown the absence of cumulus clouds over Sabah's west coast districts," he said in a statement.

Meanwhile, Musa said firemen, with the aid of other authorities including Forest Department rangers, had been working round the clock to put out bush and forest fires.



Farmers Urged To Venture Into Beekeeping

By Rashidah Abdul Rahim

ALOR GAJAH, April 6 (Bernama) -- More farmers should venture into beekeeping to help meet rising local and overseas demand, said Flora Bee Hive Enterprise Sdn Bhd executive advisor Yan Hashim.

"Our plant in Kamunting, Perak can process about 5,000 metric tonnes of honey a year, but we have so far been able to produce only about 200 metric tonnes of honey supplied by local contract beekeepers, just enough to meet domestic demand, so we have to import honey from Chiang Mai, Thailand.

"But it's difficult for us to export processed honey if we use imported honey as its quality is lower than local honey," he told Bernama here.

Honey is in high demand in the food, healthcare and beauty care sectors for its health benefits and long shelf life, besides being a substitute for sugar to combat diabetes, he said.

Yan said his company, one of the country's largest honey producers, is collaborating with Malaysian Biotechnology Corporation Sdn Bhd (BiotechCorp) to help train Malaysians keen on commercial honey production nationwide.

They will need to have a 0.4 hectare (one acre) piece of land planted with acacia and 'gelam' (Melaleuca or tea tree), he said, pointing out that this area can accommodate 3,000 honey bee boxes, each of which can produce 10 to 35 kg of honey in 45 days.

If things go as planned, the company may open a new factory in Sabah, he said.

Meanwhile, BiotechCorp Chief Executive Officer Datuk Dr Mohd Nazlee Kamal said its collaboration with the company in its Bioeconomy Community Development Programme (BCDP) via the **Ministry of Science, Technology & Innovation's (Mosti) Social Innovation Fund** aims to raise local honey production for the local and overseas markets.

He said last year, 23 BCDP projects were implemented, including in herb and mushroom cultivation, oyster culture and honey bee farming, involving some 300 farmers who earned an average of RM4,300 a month.

He said BiotechCorp aims to implement 56 BCDP projects involving 3,500 farmers over the next five years.

-- BERNAMA



Perlis Government Requests For Immediate Cloud Seeding

KANGAR, April 6 (Bernama) -- The Perlis government has requested for the federal government to immediately conduct cloud seeding in the state, as the water in the Timah Tasoh Dam reached critical level.

Menteri Besar Datuk Seri Azlan Man said the water level in the dam had declined from 26.42m yesterday to 26.40m today, which is below the critical level of 26.50m.

He said the few hours of rainfall three days ago was not enough to raise the water level of the dam.

"Cloud seeding is the best way to raise the water level due to the current extreme hot weather," Azlan said when contacted here today.

Meanwhile, Perlis Department of Irrigation and Drainage director Abdul Najib Abdullah when contacted by Bernama said cloud seeding was the best option at the moment.

"If the condition persists, the water supply in the Timah Tasoh Dam is expected to last only for another month. Before that, the water may have to be rationed," he said, adding that continuous rainfall was the only way for the water level to rise.

Yesterday, Energy, Green Technology and Water Minister Datuk Seri Dr Maximus Ongkili said six dams in four states including Timah Tasoh saw their water-levels dropped below 30 per cent.

In SABAH, the **Minister of Science, Technology and Innovation (Mosti) Datuk Seri Madius Tangau** has directed the Malaysian Meteorological Department (MetMalaysia) to conduct cloud seeding operations (CSO) immediately to curb the haze situation in the state.

He said the directive was a proactive response to address the haze issue which had been plaguing Sabah for the last few days.

"However, the success of the CSO depends on ideal natural factors. CSO cannot produce rain without the existence of appropriate clouds, and its formation is determined by the absolute natural process, which is beyond human control or even technology," he said in a statement.

-- BERNAMA



Lebih Ramai Usahawan Digesa Ceburi Bidang Penghasilan Madu Lebah

Oleh Rashidah Abdul Rahim

ALOR GAJAH, 6 April (Bernama) -- Lebih ramai pihak terutama usahawan tempatan digesa menyertai bidang penghasilan madu bagi menampung permintaan tinggi dari dalam serta luar negara.

Penasihat Eksekutif Flora Bee Hive Enterprise Sdn Bhd, Yan Hashim, berkata syarikat itu yang juga antara pengeluar madu lebah terbesar negara, memerlukan bekalan lebih besar bagi menampung permintaan tempatan.

Antara sektor yang memerlukan madu adalah makanan, kesihatan dan kecantikan selain tindakan orang ramai menjadikan madu yang tiada had jangka hayatnya sebagai pengganti gula.

"Kilang kami di Kamunting, Perak hanya mampu memproses kira-kira 5,000 tan metrik madu setahun manakala kira-kira 200 tan metrik madu setahun diperolehi daripada penternak komersial secara kontrak di seluruh negara.

"Kita juga terpaksa mengimport dari Chiang Mai, Thailand namun agak sukar mengeksport hasil menggunakan madu import kerana kualitinya berbeza daripada madu tempatan yang lebih baik," katanya kepada Bernama di sini.

Menurut Yan, pihaknya turut melakukan pelbagai usaha termasuk bekerjasama dengan Malaysian Biotechnology Corporation Sdn Bhd (BiotechCorp) bagi menarik masyarakat menceburi bidang penternakan lebah secara komersial.

Bantuan disalurkanannya adalah dari segi kepakaran dan latihan kepada peserta terbabit.

Syarikat itu turut menyatakan kesediaannya untuk bekerjasama dengan kerajaan-kerajaan negeri bagi menceburi industri penternakan komersial dengan menyediakan tanah seluas sekurang-kurangnya 0.4 hektar (1 ekar) dan mempunyai pokok akasia dan gelam sebagai sumber makanan lebah.

"Setiap 0.4 hektar boleh menampung 3,000 kotak lebah yang mampu menghasilkan kira-kira 2,000 tan metrik madu setahun," katanya.

Beliau turut mengingatkan, penternakan lebah madu memerlukan komitmen tinggi penternak walaupun tidak memerlukan banyak masa bagi pemantauan.

Sementara itu, Ketua Pegawai Eksekutif BiotechCorp Datuk Dr Mohd Nazlee Kamal berkata kerjasama dengan Flora Bee Hive adalah menerusi Program Pembangunan Komuniti Bioekonomi (BCDP) melalui dana Inovasi **Sosial Kementerian Sains, Teknologi dan Inovasi (MOSTI)** bagi meningkatkan pengeluaran madu tempatan bagi pasaran dalam negara dan antarabangsa.

"Agak sukar bagi kita melihat (produk) madu tempatan di pasar raya dan kebanyakannya adalah madu import.

"Oleh itu, antara peranan BiotechCorp adalah menambah penghasilan madu yang tidak hanya dapat meningkatkan taraf hidup dan ekonomi peserta, malah pendapatan negara," katanya.

Mengulas program BCDP, beliau berkata sebanyak 23 projek bioteknologi dilaksanakan termasuk penanaman herba, cendawan, ternakan tiram dan lebah madu.

Bagi penternakan lebah, ia melibatkan lebih 300 petani dan mampu menambah purata pendapatan peserta sebanyak RM4,300 sebulan.

Pihaknya turut menyasarkan 56 projek lagi menerusi BCDP yang melibatkan 3,500 petani dalam tempoh lima tahun, mulai tahun ini.

-- BERNAMA



Pimpinan Tertinggi CyberSecurity Kini Adalah C|CISO Bertauliah

KUALA LUMPUR, 6 April (Bernama) -- CyberSecurity Malaysia telah berjaya melatih barisan pemimpin maklumat tertingginya dalam satu daripada program persijilan keselamatan maklumat tahap-C terkemuka dunia, EC-Council Certified CISO (C|CISO).

Latihan itu adalah sebahagian daripada usaha untuk meningkatkan tahap keselamatan maklumat kerajaan Malaysia melalui kepimpinan yang berkesan, kata **CyberSecurity**, sebuah agensi di bawah **Kementerian Sains, Teknologi dan Inovasi** dalam satu kenyataan di sini Rabu.

"Inisiatif CyberSecurity Malaysia ini adalah penting dalam sebuah negara di mana terdapat kekurangan bagi ketua pegawai keselamatan maklumat (CISO) atau pemimpin keselamatan maklumat yang berwibawa di mana majoriti pertubuhan yang strategik kini beroperasi tanpa seorang CISO sebagai sebahagian daripada hieraki syarikat mereka," katanya.

C|CISO adalah satu program untuk menangani tentang bagaimana untuk menjajarkan keselamatan maklumat dengan matlamat perniagaan atau menganjurkan dengan berkesan bagi mewujudkan program keselamatan yang penting kepada kejayaan perniagaan atau organisasi.

Ketua Pegawai Eksekutif CyberSecurity Dr Amiruddin Abdul Wahab berkata program ini membantu untuk melengkapkan dan meningkatkan kemahiran dan pengetahuan pekerja serta keupayaan untuk bekerja dengan penuh yakin dan berkesan.

"Pekerja yang mempunyai kemahiran keselamatan siber adalah kritikal untuk melindungi infrastruktur digital. Kita perlu mereka yang profesional dalam keselamatan siber yang memahami apa yang boleh dilakukan mengikut amalan dan secara teori.

"Dengan negara menghadapi risiko baru dan dinamik, ancaman dan kelemahan, tenaga kerja keselamatan siber berkemahiran tinggi yang mampu bertindak balas kepada cabaran amat diperlukan lebih daripada biasa," katanya.

Sementara itu, Pengarah Eksekutif EC-Council Global Services Danish Arshad menegaskan bahawa cabaran yang paling besar di negara-negara ASEAN kini adalah kekurangan pemimpin yang fokus untuk keselamatan maklumat dalam organisasi.

Beliau berkata kekurangan CISO juga mewujudkan individu yang silo dalam organisasi di pelbagai jabatan di mana semuanya menyumbang kepada maklumat keselamatan namun bekerja secara berasingan.

Katanya keadaan ini juga membawa kepada jurang dalam ekosistem keselamatan maklumat yang boleh dieksploitasi penjenayah siber.

'Hot and dry spell to ease'

MUCH RELIEF:

Inter-monsoon season to kick in with heavy rain expected, says MMD chief

**THARANYA ARUMUGAM
AND HASHINI KAVISHTRI KANNAN**
KUALA LUMPUR
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THE current hot spell and heatwave are expected to end soon as the inter-monsoon season kicks in.

The Malaysian Meteorological Department (MMD), however, cautioned that heavy rainfall might cause flash floods.

Its director-general, Datuk Che Gayah Ismail, said the hot and dry weather was expected to ease with the onset of the inter-monsoon season, where rain and thunderstorms are expected in the evening.

She said the inter-monsoon season would continue until the end of next month before the southwest monsoon season began.

"We will be experiencing a wet season, especially in the west coast.



"The winds (during the inter-monsoon season) will be mild and variable, and heavy rainfall is expected nationwide.

"The heatwave in other parts of the country has started to abate, as well as temperatures returning to normal (minimum average of between 23°C and 25°C and maximum average of between 32 and 34°C).

"However, some places still record temperatures above 37°C.

"The heatwave will continue to ease with the expected rainfall," she told the *New Straits Times* yesterday.

Che Gayah, however, cautioned people in urban areas to brace themselves for floods because of the heavy rain.

"Usually, when there is a heavy rainfall, we can expect flash floods to occur in cities like Kuala Lumpur."

On the haze, Che Gayah said the situation was worse in Sabah, where thick smoke from open burning and bushfires was enveloping districts, especially in the west.

The hot spell and drought in Malaysia had taken a toll on the daily lives of the people and on local produce, where vegetables from Cameron Highlands, such as tomatoes and cabbages, have seen a price hike.

MMD had declared a heatwave in the northern part of the peninsula early last month after five straight days of above-normal temperatures.

The worst-hit states were Kedah, Perlis and Penang with Chuping, Perlis, recording 38°C, the highest in the country.

The Education Ministry had instructed schools in worst-hit states, like Kedah and Perlis, to close as temperatures rose to above 37°C.

The extreme dry and hot weather had dried up water reserves in certain areas like Timah Tasoh Dam in Padang Besar, Perlis.

Meanwhile, MMD has been instructed to carry out cloud-seeding operations to clear the haze in Sabah.

Science, Technology and Inno-

vation Minister Datuk Seri Wilfred Madius Tangau said in Putrajaya that the success of the operations would depend on ideal conditions.

"The operations will not work without the presence of right clouds.

"The formation of these clouds is determined by natural processes, which are beyond our control."

The instruction was given following the worsening haze situation, especially in the west coast of Sabah.

On Monday, Sabah Chief Minister Datuk Seri Musa Aman directed the state Disaster Relief Committee and district level committees to be on the alert and report any open burning activities.

In the operation to be conducted by the department and Royal Malaysian Air Force, Tangau said, salt water solution would be sprayed into cumulus clouds to produce rain.

"Based on radar and satellite images in the past two days, we have not detected any towering cumulus clouds."

Tangau said once the condition became viable, the operations would take off from the air force base in Labuan, covering areas in Penampang, Beaufort and Tuaran.



**Datuk Che
Gayah Ismail**

KERATAN AKHBAR
NEW STRAITS TIMES (PRIME NEWS) : MUKA SURAT 10
TARIKH : 7 APRIL 2016 (KHAMIS)

More rain expected in Sabah, says Met official

KOTA KINABALU: Rain brought relief to several districts in the west coast and interior of Sabah as the government looks into ways to assist those affected by the long drought.

State Meteorological Department acting director Lim Ze Hui said more rain was expected in the coming weeks.

"Rain was observed in Beaufort, Tambunan, Kota Belud and Tuaran on Tuesday afternoon, while it rained at night in Papar, Kota Kinabalu and Penampang. Some areas experienced a downpour while in others, it just drizzled."

Because of the rain, cases of open fires had reduced by 50 per cent.

On Tuesday, the Fire and Rescue Department received only 33 calls on bushfires compared with the daily average of 60.

The department had received more than 2,000 calls on open fires since January, including 255 calls this month.

Meanwhile, a 200ha area of the Binsuluk Forest Reserve in Beaufort was still burning while the fire in the Kimanis/Bongawan and Jalan Membakut/Bongawan forest areas were put out yesterday morning.

Natural Resources and Environment Minister Datuk Seri Dr Wan Junaidi Tuanku Jaafar said the fire, which destroyed 50ha of the jungle in the Padas Damit Forest Reserve,

Motorists experience low visibility in Bongawan, Papar, yesterday because of a **peat fire** in Jalan Bongawan-Papar. Pic by Izhari Ariffin

had been put out.

"Those fires were caused by farmers who carried out open burning that spread to the forest reserves"

A Department of Environment spokesman said the Air Pollutant Index in Beaufort, Papar and Kuala Penyu had fallen to a moderate level

and was expected to drop further.

Meanwhile, Chief Minister Datuk Seri Musa Aman said the government would provide assistance to those affected by the dry spell, including farmers.

"I have instructed state Agriculture and Food Industry Minister

Datuk Seri Yahya Hussin to assess crop yield, including padi and fruits, and table it at the cabinet meeting.

"I have asked the Forestry Department, Fire and Rescue Department, Meteorology Department and district officers to be alert and vigilant in tackling fire incidents."

KOMITMEN MALAYSIA TERHADAP NUKLEAR



GERBANG GLOBAL

AZMI HASSAN

MUNGKIN ramai juga rakyat Malaysia bertanya-tanya apakah keperluan Malaysia sebagai sebuah negara kecil turut terlibat dalam Sidang Kemuncak Keselamatan Nuklear (NSS) yang baharu sahaja berakhir di Washington, Amerika Syarikat (AS)? Malaysia pada persidangan yang dihoskan oleh Presiden Barack Obama diwakili oleh Timbalan Perdana Menteri, Datuk Seri Dr. Ahmad Zahid Hamidi.

Begitu juga apabila NSS kali pertama dianjurkan pada 2010, Malaysia turut dijemput menghadiri persidangan tersebut dan senario yang serupa berlaku di mana ada pihak yang sangsi dengan penglibatan Malaysia dalam persidangan yang besar seperti itu bersama-sama dengan negara yang mempunyai senjata nuklear seperti Rusia, India, Pakistan, United Kingdom dan juga AS. Dalam ASEAN, selain Malaysia, hanya Singapura, Thailand, Indonesia, Vietnam dan Filipina yang turut dijemput.

Kemusykilan yang paling popular, apakah Malaysia mampu menyumbang kepada matlamat NSS iaitu memperkukuhkan dan memastikan keselamatan bahan nuklear terjamin? Ungkapan keselamatan dalam hal ini lebih menjurus untuk menghindari bahan nuklear jatuh ke tangan pihak yang tidak bertanggungjawab seperti penganas.

Sekilas pandang matlamat tersebut hanya ditujukan kepada negara yang mempunyai kemampuan nuklear dan Malaysia serta lima negara ASEAN lain sebenarnya tidak mempunyai peranan yang kritikal.

Menarik juga dipetik ucapan Ahmad Zahid ketika perbincangan semasa majlis makan malam yang dihoskan oleh Obama di mana beliau menegaskan isu ancaman penganas nuklear bukan sahaja menjadi kepentingan sesebuah negara malah kepentingan sejagat kerana



DELEGASI Sidang Kemuncak Keselamatan Nuklear (NSS) pada sesi pleno pertama di Walter E. Pusat Konvensyen Washington di Amerika Syarikat, baru-baru ini. -REUTERS

keselamatan global adalah perkara yang penting.

Ini adalah kerana walaupun Malaysia sebagai sebuah negara yang tidak mempunyai kemampuan nuklear tetapi mempunyai peranan penting untuk menyekat penularannya. Umpamanya pada tahun 2004 Malaysia terpalit apabila dituduh sebagai salah sebuah negara yang terlibat dalam rangkaian pasaran gelap nuklear Abdul Qader Khan dari Pakistan.

Kesemua kes tersebut berlaku kerana akta kawalan eksport sedia pada ketika itu tidak mampu menangani isu yang agak kompleks terutama sekali yang melibatkan teknologi dwi-penggunaan iaitu teknologi tersebut boleh digunakan sama ada untuk industri seperti minyak dan gas atau pun boleh digunakan untuk membangun senjata nuklear.

Malaysia mengambil iktibar dari episod tersebut kerana pada 2010 Malaysia telah memperkenalkan Undang-Undang Perdagangan Strategik 2010 yang secara khusus dapat memastikan tiada lagi kekaburan apabila berhadapan dengan isu teknologi dwi-penggunaan.

Tetapi dalam NSS 2016 paling menarik yang perlu diungkit adalah kenyataan Ahmad Zahid semasa sidang pleno di mana beliau menegaskan perlu gandakan usaha ke arah

mencapai matlamat bagi perlucutan senjata pemusnah besar-besaran (WMD), khususnya senjata nuklear, secara umum dan sepenuhnya.

Kenyataan tersebut disifatkan sebagai agak berani kerana ia ditujukan kepada tuan rumah NSS iaitu AS dan satu lagi kuasa besar iaitu Rusia. Secara gabungan kedua-dua kuasa besar ini memiliki lebih dari 90 peratus jumlah senjata nuklear global dan dunia tidak akan merasa selamat selagi perlucutan dan pengurangan senjata nuklear tidak dilakukan.

Ahmad Zahid sebenarnya menegur tingkah laku kedua-dua kuasa besar ini kerana tidak menepati perjanjian perlucutan senjata nuklear yang lebih dikenali sebagai Perjanjian Strategik Pengurangan Senjata (START). Secara asasnya, perjanjian ini menuntut kedua-dua kuasa besar ini mengurangkan jumlah senjata nuklear yang dimiliki kepada separuh.

Tetapi yang amat membimbangkan lagi adalah jumlah senjata nuklear yang dimiliki kedua-dua negara yang sepatutnya berkurangan bermula ketika START berkuat kuasa pada 2010 tetapi anehnya hari ini jumlah senjata nuklear yang dimiliki AS dan Rusia menjadi semakin bertambah.

Washington dan Moscow saling menuding jari akibat proses START

yang terbantut pada ketika ini. Moscow menuduh Washington sengaja menggagalkan START dengan menggunakan alasan isu Ukraine dan Crimea sementara Washington pula menyelar Moscow yang sentiasa menambah senjata nuklear dan bukan mengurangkannya.

Ahmad Zahid juga menekankan Malaysia, sebagai negara pihak dalam Perjanjian Pengawasan Senjata Nuklear (NPT) dan negara anggota Agensi Tenaga Atom Antarabangsa (IAEA) telah mengambil pelbagai langkah dan komited sepenuhnya dalam menyokong usaha-usaha untuk mencapai keselamatan nuklear global.

Malah pada 2014, Malaysia mengambil pendekatan yang agak tidak konvensional dengan menyertai program yang diketuai AS iaitu Inisiatif Keselamatan Pengawasan Senjata (PSI) yang menandakan komitmen Malaysia menangani isu penulanan WMD terutama sekali yang membabitkan nuklear.

Sebab itu, kritikal bagi Malaysia untuk memperjuangkan isu keselamatan nuklear bukan sahaja untuk mengelak jatuh ke pihak yang tidak bertanggungjawab tetapi juga mengesakan supaya proses perlucutan dan pengurangan senjata nuklear dapat dilaksanakan tanpa pilih kasih. Jika negara kuasa besar dapat menjalin perjanjian dengan Iran mengenai pembangunan nuklear yang lebih bertanggungjawab, maka Malaysia juga berpendapat negara yang sudah memiliki senjata nuklear perlu melaksanakan tanggungjawab mereka demi kestabilan global.

Malaysia juga berpegang kepada prinsip pematuhan perundangan antarabangsa dan sebab itu turut terlibat dalam NPT, IAEA dan PSI. Dalam hal ini, Malaysia juga akan terus memperjuangkan keadilan dalam memiliki teknologi nuklear bukan untuk membangun senjata tetapi untuk manfaat penyelidikan dalam bidang perubatan, tenaga atau pemakanan. Ini kerana satu hari nanti tidak dapat dielakkan Malaysia akan memiliki program pembangunan nuklear.

PENULIS ialah Geostrategis Institut Geospasial dan Sekolah Perdana UTM.

KERATAN AKHBAR
MALAY MAIL (CLUTCH) : MUKA SURAT 27
TARIKH : 7 APRIL 2016 (KHAMIS)

DESIGNDRIVE

DESIGNING ATTAINABLE BEAUTY, THE PROTON WAY



THE way a car looks is just as crucial to its appeal as the way it drives. Even though the consensus seems to be that design is a subjective matter, few can deny the fact that there are clear examples of good designs out there in the motoring world. Cars like the Jaguar E-Type and Mercedes W113 'Pagoda' are practically art pieces on wheels. But of course good design isn't that difficult to achieve when you throw a lot of money at the problem.

What about mass market cars? Here things get extremely complex as margins and budgets are far smaller. Furthermore, cars that sell in the tens of thousands need to appeal to a broad audience while being unique enough to convey a strong sense of identity. For Azlan Othman, PROTON's Chief of Design, overcoming these obstacles comes down to having established principles, a skilled team and of course, the right tools.

At PROTON's Design wing, all three come together to shape cars that Malaysians can be proud of, whether they come to own one or not. The company's designs have been steadily improving ever since its first car, the Waja, was made. The Suprima S and Preve are great examples of the kind of work carried out by the team but their undisputed masterpiece is of course the Iriz.

For a car as well sorted, priced and equipped as the Iriz, most of the praise it gets is from the way it looks. In fact, it has been awarded 'Best Industrial Design 2015' by Malaysia Intellectual Property Organisation and the 'Malaysia Good Design Mark Award 2014' from the Malaysia Design Council. The team was also named Autodesk's Inventing the Future honouree for January 2015 and shortlisted for the Inventor of the Year Award going against teams from Canada, Sweden, USA and Italy. We spoke to Mr Azlan about how PROTON approaches design to find out the secret of their success.

"We have plenty of advanced tools here of course, from Wacom tablets for each of our designers to a what is essentially a huge CNC Machine/Digitiser that allows to both create prototypes within the facility as well as reverse engineer competing designs to learn new things. Having these tools allows us to minimise cost as most of the initial changes to the final design can be done virtually

given how much detail the software lets us see on screen," he explained.

PROTON's Design department is indeed one that is properly equipped for the task at hand. There's even an area called 'The Hall' that employs some of the latest lighting and multimedia technology to help management make important design decisions. It's an extremely impressive facility, especially when you consider that PROTON is Malaysian through and through. But Azlan insists that it's the Malaysians behind the process that are the real stars of the show.

"More important than any of the advanced tools and machines we have here is the team behind it. We have a relatively small but extremely dedicated team here at PROTON. This team is our biggest asset and they consist of people who love automotive design, so it's great that the company gives them the opportunity to pursue their passions," said Azlan during his presentation.

Their work is guided by the four pillars of design that shape each and every one of our products since 2005. These are Proportions, Surfacing, Posture and Details. The first of these is perhaps the easiest to understand. To a large degree, the type of car you build dictates the general shape — but understanding Proportions allows the team to decide on the subtler things that influence the final product. It's closely related to Posture — which deals with how the design sits when placed on actual wheels. Posture can convey things like a sense of stability which is usually only felt on a more subconscious level.

Surfacing is just as important of course. Here the team examines how the material and finish influences the experience of the final product. This is the part of design work most closely related to the customer experience as the touch & feel heavily influences the perceived quality.

Finally, there's the Details. Get them right and there's design harmony. Get it wrong and everyone notices that something isn't quite right. This can be the most difficult part of design as small changes can pose large technical challenges.

Take the Perdana's new front grille for instance. Smack in the centre sits PROTON's

new logo. To most eyes, the biggest change here is the omission of the company's name but take a closer look and it's clear the design team have gone the extra mile. The tiger's head and the ring surrounding it are crafted in 3D, with every graceful, natural bulge and depression painstakingly brought to life in chrome.

"Usually when you see chrome on cars, it's gone through a process called 'chrome-dipping'. It wouldn't have worked for the logo, as it would be impossible to capture the sharp but minute details," he elaborated.

Instead of using the traditional method, PROTON used a process that involved physically stamping the chrome film onto the substrate using pressure. "This allowed us to really flesh out our work and add value for the customer at the same time."

It's exactly this kind of dedication to the job that leads to great designs like the one on the Iriz. PROTON's design team have been instrumental in elevating the brand's status. In terms of progress, few car companies can claim to have achieved since its first car a decade ago, and for that we ought to be proud of what they have accomplished.

PROTON
It's in the Drive!

