

STAR METRO INFO BASE

GOVERNMENT DEPARTMENT

ARKIB NEGARA	03-6209 0600
BANK NEGARA	03-2698 8044
CUSTOMS	03-7806 7200
FIRE & RESCUE	03-8892 7600
IMMIGRATION	03-8880 1000
INCOME TAX	1-800-88-5436
JABATAN ALAM SEKITAR	03-8889 1972
JAKIM	03-8886 4000
JPA	03-8000 8000
JPN (KL)	03-6201 1106
JPN (PJ)	03-7956 2634
JPI (KL)	03-4145 0800
JPI (SELANGOR)	03-5566 9595
JKR (PETALING)	03-78392400
JKR (FT)	03-92875436
KLSE - BURSA M'SIA	03-2026 5099
MANPOWER DEPT - JTR	03-8886 5555
METEOROLOGY	03-7967 8000
MIDA	03-2267 3633
MIMOS	03-8995 5000
POS MALAYSIA	1-300-300-300
REG OF BUSINESS	03-4043 0811
REG OF COMPANIES	03-2299 4400
ROYAL CUSTOMS	03-8776 6575
SIRIM	03-5544 6000
SOCSCO	03-4264 5000

EPF

HEAD OFFICE	03-2694 6566
CALL CENTRE	03-8922 6000
CHERAS	03-9200 3304
GOMBAK	03-6185 0780
KAJANG	03-8737 5223
KEPONG	03-6258 9521
KLANG	03-3325 1626
PETALING JAYA	03-8922 6000
PUDU	03-2078 6788
WANGSA MAJU	03-4149 9499
SHAH ALAM	03-5519 2155

HOSPITALS

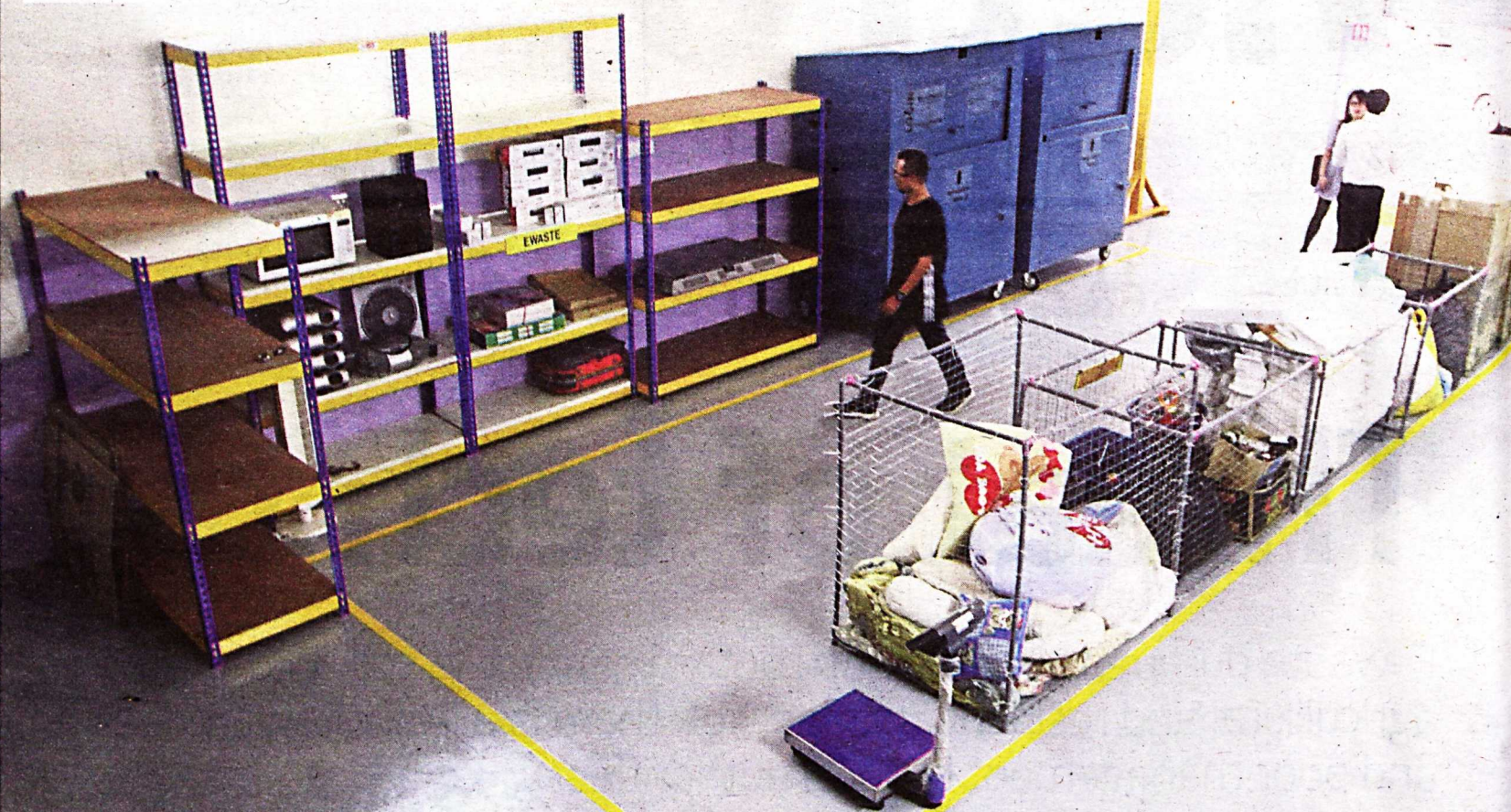
TUN HUSSEIN ONN NATIONAL EYE HOSPITAL	03-7718 1488
UM MEDICAL CENTRE	03-7949 4422
SERDANG HOSPITAL	03-8947 5555
PUTRAJAYA HOSPITAL	03-8312 4200
TENGGU AMPUAN RAHIMAH HOSPITAL	03-3375 7000
INSTITUT JANTUNG SHAH ALAM HOSPITAL	03-2617 8200
SHAH ALAM HOSPITAL	03-5526 3000
GHKL	03-2615 6391
INSTITUT JANTUNG NEGARA	03-2617 8200
SELANGANG HOSPITAL	03-6126 3333

RADIO/TAXI SERVICE

PUBLIC CAB	03-6259 2020
COMFORT	03-8024 0507
KLTEKSI	017-2733372
RADIO TAXI SAUJANA	03-9221 7600
SAUJANA	03-2162 8888
SUPERCAB	1-300-888-294
SUNLIGHT	03-9057 5757
CITYLINE	03-9222 2828
TELETAXI	03-9131 8080
WIRA CAB	03 2144 3630

POLICE STATIONS

PETALING JAYA HQ	03-7966 2222
BUKIT AMAN HQ	03-2266 2222
DAMANSARA UTAMA	03-7722 2222
SEA PARK	03-7874 2222
SELANGOR POLICE HQ	03-5514 5222
SHAH ALAM	03-5520 2222
SG BULOH	03-6156 1222
KOTA DAMANSARA	03-6142 2222
TAMAN TUN DR ISMAIL	03-7728 6222
SG WAY	03-7875 2222
AMPANG	03-4289 7419
BRICKFIELDS	03-9051 6222
CHERAS	03-9284 2222
DANG WANGI	03-2070 2222



A glimpse into Terra Phoenix's warehouse in Putrajaya where recyclables collected from iCycle blue bins are further sorted. (Inset) Scan the QR code for a link to iCycle's carbon stores and blue bins locations. — Photos: AZLINA ABDULLAH/The Star

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# E-waste harming the environment

## Malaysia still far behind in proper disposal of mobile gadgets and other electrical appliances, says expert

SO FAR, no local authority in the Klang Valley has done anything effective in managing e-waste, despite the environmental problem it is causing, says e-waste expert Dr Tan Ching Seong.

As the populace chases after technological advancement, disposal of e-waste has reached an all-time high, but the issue has only been met with lukewarm concern from the public and the local councils.

Dr Tan said the country urgently needed a regulatory framework for e-waste management and implementation of a mandatory take-back system was vital to prevent a looming crisis.

The current mechanism to take back e-waste relies on consumers' voluntary efforts, coupled with a lack of collection points and public awareness.

"Compulsory waste separation at household levels imposed in Kuala Lumpur, Putrajaya and several other states has failed to address e-waste.

"If one cares to take a look at our landfills, it is obvious that so much e-waste ends up there," he lamented.

Dr Tan, who is an associate professor with Multimedia University's Engineering Faculty, warned of the weight of the problem.

"We have never seen such heavy use of mobile phones in history.

"Naturally, collection is going to be a huge problem but we do not have any effective solution in sight in our country," he said.

Aside from mobile devices, the amount of light bulbs discarded has also reached a peak, globally, as consumers replace them with energy-saving LED lamps.

"Light bulbs are one of the most toxic waste from households because of the mercury contained in it," Dr Tan explained.

Showing how far behind Malaysia was in e-waste awareness, Dr Tan said European countries and the US began addressing e-waste collection in the 1980s.

Japan has an effective household



Terra Phoenix warehouse manager Farid Baharin sorting out e-waste collected.

waste segregation system to take back e-waste, Hong Kong will begin charging consumers for e-waste collection next year while Singapore has many e-waste collection points in place.

### Damage done

In Malaysia, e-waste is grouped into nine major categories – air-conditioners, fans, washing machines, refrigerators, televisions,

desktops, batteries, light bulbs and small appliances, which include mobile phones and laptops.

However, Dr Tan said the United Nations lists out 57 categories of e-waste, showing that the Malaysian system is not well-defined.

He added that e-waste was highly hazardous if discarded indiscriminately and it is already harming us.

A 2015 Universiti Putra Malaysia

report of soil contamination in several non-sanitary landfills in the Langat Water Catchment Area showed that heavy metal contamination was high at not only the landfills, but also in nearby agricultural and residential land.

Cadmium (Cd) and Zinc (Zn), found to be in significant amounts at the sites, are typical minerals used in electronic gadgets.

Electrical and Electronics Association of Malaysia assistant



Multimedia University students from the Faculty of Engineering sorting out e-waste collected at their campus.

## Compulsory waste separation at household levels imposed in Kuala Lumpur, Putrajaya and several other states has failed to address e-waste.

Dr Tan Ching Seong



executive secretary N. Thila said most residents discard light bulbs into rubbish bins, but added that it was not entirely their fault.

"Through our public roadshows, we learn that most consumers know they cannot throw e-waste anywhere they like but they do not know where to dispose of it.

"There are only a few e-waste collection points," she said.

Also, most recycling points in town do not have separate compartments for e-waste to ensure safer storage, while some are even exposed to the sun and rain, which causes the e-waste to release toxin into the environment.

She also said the association's efforts to increase collection points were dampened by the difficulty in obtaining licences from the local authorities, even with endorsement from the Department of Environment (DOE).

"Also, in Malaysia, you actually need to pay a large sum to discard e-waste properly due to logistics.

"Therefore, most consumers do not bother and we see all those e-recyclables dumped in landfills," she said.

### Rewards-driven solutions

Dr Tan said the DOE had, in 2014, announced that it had drafted regulatory framework for e-waste management, but it was yet to be tabled.

The country currently depended on voluntary collection provided by several parties to take back e-waste.

The Malaysian Communications and Multimedia Commission

(MCMC) collects old mobile phones while Selangor and Perak have also launched campaigns to encourage safe disposal.

The Malaysia International Commission on Illumination (MycIE) is also organising a campaign to instil better e-waste habits by rewarding responsible consumers, with support from the Selangor state government, Philips, Giant and KewPump.

As part of this effort, consumers who drop off their e-waste from now until May 31 at any of the 50 Giant outlets listed will receive shopping vouchers.

Meanwhile, Dr Tan also introduced a reward-based collection system that he reckoned could become self-sustainable in the long run.

He started developing the system four years ago when he was frustrated by the mess resulting from the use of an incinerator at his hometown in Pulau Pangkor.

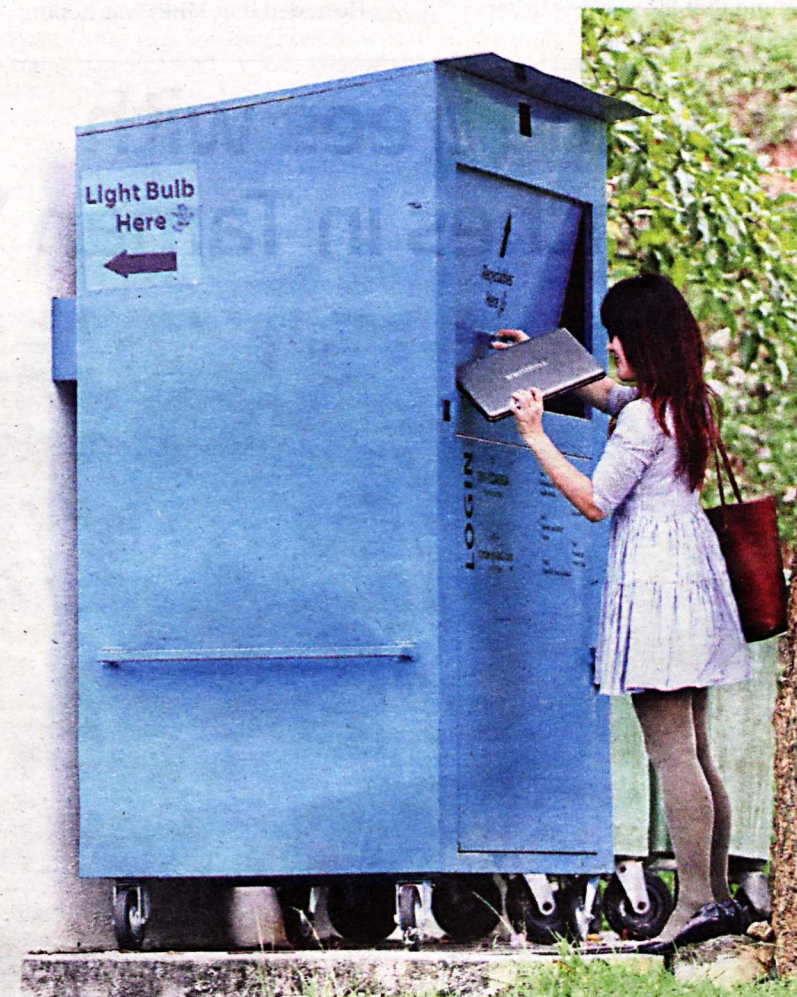
"The incinerator often broke down, the hill of rubbish it created came crumbling down and blocked the island's only ring road, it was such a mess," he recalled.

It prompted him to run a campaign that successfully made villagers separate waste as they could redeem rewards through it.

The mechanism was then gradually developed into a full-fledged model in March last year, and commercialised into social business Terra Phoenix, a start-up under MMU.

It received grants and investments from those who saw its effectiveness.

Under the model, called iCycle,



The iCycle system using this blue bin has collected 2.6 tonnes of light bulbs and 100kg of batteries.

registered consumers placing recyclables in the designated blue bins will receive "brownie points" which they can collect to redeem gifts.

Those registered will receive stickers posted to them, to be pasted on their recyclables to accumulate points.

The blue bin was designed by Dr Tan to include compartments for batteries and light bulbs and there are 60 blue bins in the country so far.

iCycle has about 6,000 members now and the model has been adopted in six states – Selangor, Perak, Penang, Negri Sembilan, Malacca, KL and Sarawak.

Other cities, including Dubai,

Zurich and Guangzhou have expressed an interest in adopting the 100% Malaysian model and a corresponding app is also being developed.

Since introduced unofficially in June 2015, the model has managed to collect 2.6 tonnes of light bulbs and 100kg of batteries.

"It is a win-win situation for everyone and society benefits from it," he said.

The model is supported by 40 collectors at the back end.

"We trust that our collectors will treat the e-waste responsibly, however, we still need the regulatory framework to ensure that all collectors do so to really protect our environment," Dr Tan added.



### PIPE RELOCATION WORKS

Several areas in Kuala Langat will experience temporary water interruption during pipe relocation works along Jalan Dengkil, Bukit Changgang, Sepang from 9pm tomorrow until 5am on April 24.

The affected areas are Bandar Seri Ehsan, Taman Langat Utama, Taman D'Menara, Taman Murnimas and RTB Bukit Changgang. Consumers are advised to store sufficient water supply before the works begin on April 23. For details, visit [www.syabas.com.my](http://www.syabas.com.my)

### MOTIVATIONAL TALK

Harith Iskander will give a motivational talk called "Transform Through Laughter" which is especially for students. The talk will take place at 5pm tomorrow, at The Bee, Publika. Tickets are priced at RM45 for adults and RM35 for students. For details, visit [harithiskander.peatix.com](http://harithiskander.peatix.com), KLICFest 2017 Facebook page or Whatsapp 011-2802 0559.

### ENTREPRENEURSHIP SEMINAR

A free seminar by Malacca Biotechnology will be held at the Tiara Rim Ballroom, Royale Bintang. The event is meant to share tips on successful entrepreneurship and limited to 100 seats only. The event will showcase tips on managing cosmetic, food and beverage, healthcare businesses for budding entrepreneurs. For details call, 013-342 2006 (Wanna), 017-680 8218 (Amal) or 019-817 4119 (Zainul).

### MBSA MOBILE COUNTER

Shah Alam on Wheels by Shah Alam City Council will be at the parking area of Plaza Shah Alam, Section 9 today from 11am to 5pm for services such as payment of assessment rates, parking compounds and complaints.

### PALLIATIVE CARE

In conjunction with Palliative Care Awareness Month 2017, a free charity art session will be conducted by Malaysian international artist Phillip Wong, tomorrow from 2pm to 5pm, at National Art Gallery. Children and parents are welcomed to walk to join the fun in drawing the logo for palliative care and Hospis Malaysia. There will also be an art and craft session. Materials will be provided. For details, call 012-3989 608 (Wong).

### SALE OF ORGANIC PRODUCTS

Metro Point Complex in Kajang is having events themed "Ku Lihat Hijau" until April 23 from 10am to 10pm. Natural organic vendors are selling homemade healthy food and beverages, organic fruits and vegetables, plants, flowers, organic baby products and organic cosmetics. For details, [www.facebook.com/metropoint/](http://www.facebook.com/metropoint/)

### TALK ON MANAGING CANCER

There will be a free talk on "Balancing Immunity - A New Dimension In Managing Cancer" at Block 5 and 7, Level 10, The Boulevard Mid Valley City, on April 26 from 8pm to 9.30pm. It will be conducted by two cancer survivors on how to overcome cancer and remain a long-term cancer survivor. To register, SMS your name and email address to 016-608 6083 or 012-209 0437.

### FREE EYE SCREENING

In collaboration with One Sight Foundation, The Rotary International District 3300 Action Group on Blindness Prevention and Lions International will dispense 3,000 pairs of spectacles to needy Malaysians. Eye screening will be carried out at the Petaling Jaya Hockey Stadium tomorrow from 8.30am to noon. Those in need of spectacles during the free eye-screening procedure will be shortlisted and referred to the Tun Hussein Onn National Eye Hospital. For details, call 012-267 2799 (Dr Hari Yanasakaran), 016-276 7123 (V Thillainathan) or 012-239 9588 (Chow Chee Ping).