

# Waste management starts with us

Experts weigh in on best ways for sustainable environmental preservation through tried models



Thy Wuey Ping (left) teaching her neighbour to weave baskets out of discarded food packaging. — Filepic

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WHAT will the next 10 years look like in terms of waste management in Malaysia?

Waste experts and environmentalists have stressed that the only sustainable waste management model is where people voluntarily take responsibility over ways they dispose of their rubbish.

StarMetro spoke to a few experts on the subject, including environment and waste management expert Dr Theng Lee Chong on what the next decade holds in our country's environment preservation.

Dr Theng said the waste to wealth concept, where rubbish is converted from an exhausted utility to a valuable or desirable level, had been promoted in recent years, but was not sustainable in the long run.

"The waste to wealth model is not advisable if people only focus on the monetary rewards," said Theng. He cited a case in China where farmers surrendered their solid waste to an energy plant for free, and they later demanded that they be compensated.

Theng said the energy plant could not sustain its operations costs and was eventually shut down.

"The public must take responsibility over their consumption and the waste they generate. All waste management involves costs and environmental impact.

"We must understand and act accordingly based on our own self-conscience," he said.

The waste to wealth model has adverse impact towards the environment, such as emission of greenhouse gases.

For example, persistent pollutants from the plastic recycling process can bioaccumulate (collection of substances in living things) in land and marine food chains. It could also cause air and ash pollution and impact local communities.

Greenpeace Malaysia campaigner Heng Kiah Chun said the vast bulk of plastics manufactured were produced from fossil carbon reserves, primarily oil, and incinerating them was essentially different from burning fossil fuels.

"Burning enables poorly designed products to continue being produced, wasting valuable resources that would be better reused or recycled," he said.

He cited the Global Alliance for



Dr Theng says the waste to wealth concept is not sustainable in the long run.



Sumiani says effective waste management plan is possible only when people take responsibility.

Incinerator Alternatives' (GAIA) view that governments in many parts of the world have, knowingly or unknowingly, walked into the trap of accepting energy from waste as a form of "renewable" energy.

"However, the majority of the heat and energy for electricity generation or heating comes from non-recycled plastics in waste.

"This is along with other combustibles that can be separated and recycled such as paper, wood and textiles.

"Waste to energy incineration will not make any progress towards goals of zero waste.

"In simple terms, instead of burning more waste such as plastics to

### Tips for effective waste management beyond 2020

- Prioritise reduction**
  - Go beyond the reduction of single use plastics of food and cup containers.
  - Have mandatory target of plastic reduction at source by 50% in 2025 and by 80% in 2030.
  - Commit to phase out single-use plastics especially those used for packaging.
  - Minimise and create alternatives to problematic and unnecessary plastics that are frequently littered or harmful to human health, despite recyclability claims.
- Extended producer responsibility (EPR)**
  - Encourage EPR through user and corporate obligation.
  - Product producers must engage with retailers to pilot alternative delivery systems.
  - Companies must track and annually disclose their use of plastic, including the number, composition, and weight of items containing single-use plastics.
  - Companies should review the policies taken by their trade associations and either work to ensure those associations act in accordance with their values or sever their relationships.
- Invest in innovative, alternative delivery systems**
  - Promote and aid research and development for eco-friendly products.
  - Companies to collaborate with consumers for green innovation.
  - Encourage flexibility and creativity to meet a variety of consumer needs.
- Raise awareness, shifting mindset and encourage eco living**
  - Changing attitudes and mindsets towards non acceptance of throwaway culture.
  - Encourage use of items multiple times such as bottles and bags.
- Economic incentives targeting consumption**
  - Create more economic incentives such as tax, waivers for companies that are involved in creating green alternatives for consumer products.
- Transparency in labelling items**
  - Improve transparency on the chemicals contained in plastic items for the purpose of remanufacturing and recycling of waste.
  - Personal care and cosmetics products to indicate if it contains plastics.
  - Products to reveal plastic composition and the duration it would take to degrade, especially in the marine environment.

Source: Greenpeace Malaysia

generate energy, we must avoid producing more waste," he said. Theng said a better option would be the waste to welfare concept, common among Japanese communities.

"Neighbourhood waste is turned into energy and returned to the community it originated.

"The Japanese community understands its responsibilities and work towards a goal instead of depending on monetary rewards, and we should promote this concept," added Theng.

Universiti Malaysia Institute of Ocean and Earth Sciences (IOES) director Professor Dr Sumiani Yusoff said based on studies conducted, about 40% of our population showed negative attitudes over recycling programmes.

"This reflects the urgency to continue educating the public on solid waste management to alleviate the environmental and health impacts from poor waste management," said Sumiani.

She echoed Theng's view that an effective waste management plan was possible only when people took responsibility.

Theng said waste must be tackled at source and the government should carry out active enforcement where possible.

The focus should also be in extended polluter responsibility (EPR) where producers and con-

sumers of waste must be ready to pay for the rubbish they have created.

"EPR can only be executed with government intervention," he said. Theng said plastic straws was not a big problem compared to toxic waste disposed of into a majority of our landfills.

"Fluorescent lamps dumped in landfills contain mercury which pollutes the environment.

"There must be some initiative to ensure these lamps don't end up here.

"With EPR, solid waste can be managed safely," he said.

Sumiani said non-scheduled waste disposal from fast-moving consumer goods (FMCG) manufacturers were regulated by the Solid Waste and Public Cleansing Management Act 2007 (Act 672).

This is implemented in the Federal Territories (Kuala Lumpur, Putrajaya), Johor, Melaka, Negri Sembilan, Pahang, Kedah and Perlis.

"Enforcement for the existing laws needs to be intensified.

"We have to identify the polluter. Is it the manufacturer or consumer? A strengthened monitoring and enforcement mechanism must be in place prior to the implementation of a polluter pay regulation," she said.

Theng said the government should be transparent in highlight-

ing failed waste management projects and the reason for the failure to the public to enable more sustainable projects in the future.

Sumiani added that the likely reason for the failure of the waste treatment project was the economic feasibility of the project itself.

However, she said the failed waste management programme needed to be communicated to the relevant stakeholders and representatives from the affected community.

"Waste treatment cannot be viewed as a business venture. It is a public service, just like sewage treatment.

"The cost of operating a waste treatment facility or recycling programme has to be from public funds, not through private investments.

"To encourage recycling or waste separation, the cost of disposal at the national level needs to be increased through the mechanism of landfill tax.

"This will deter people from disposing of rubbish without giving a second thought about the environmental impact," she said, adding that national waste concessionaires should be prompted to recycle waste as part of their business key performance indicators.

"The current business model does not encourage aggressive waste reduction and recycling," she said.