

TARIKH	KHAMIS, 25 APRIL 2024
AKHBAR	THE STAR
TAJUK ARTIKEL	CHEMICAL RECYCLING TO REDUCE PLASTIC WASTE
M/S	10
BIDANG	ENVIRONMENT
KATA KUNCI	PLASTIC WASTE

Chemical recycling to reduce plastic waste

BEIJING: A recent report has called for intensified efforts to tap chemical recycling as a key solution to addressing plastic pollution, considering its potential to dispose of low-value plastic waste that is difficult to recycle.

By 2035, the oil output from chemical recycling could potentially be double that of China's largest oil production base, said the report, which was unveiled by the Academy of Macroeconomic Research in conjunction with World Earth Day on Monday.

Chemical recycling is one of two major ways to recycle waste plastic. It splits polymer chains and creates products such as oil. The other way is mechanical recycling, which crushes waste to make new plastic products.

Mechanical recycling is a good way to recycle engineering plastics, plastic bottles and rigid plastic packages, said Zhang Deyuan, a researcher with the academy.

However, it is not economically or technologically viable for recycling flexible plastic packaging and films, which account for about 46% of the plastic produced in China, he said, adding that incineration and dumping in landfills are currently the main approaches used to dispose of such waste.

Citing statistics from the Plastic Recycling Association, an affiliate of the China National Resources Recycling Association, a news release from the academy said about 62 million tonnes of waste plastic was generated across the country last year, with about 19 million tonnes recycled.

It said that placed China at an internationally advanced level in waste-plastic recycling.

"However, like other countries and regions, China also faces the development bottleneck in further increasing the rate," it said. "There is an urgent need to tap chemical recycling."

About 43 million tonnes of waste plastic was incinerated or dumped in landfills in China last year, the academy said.

It said China is expected to produce 155 million tonnes of plastic a year by 2035. If chemical recycling is applied on a large scale, the country will be able to see remarkable drops in plastic waste and emissions of carbon dioxide, and a significant increase in oil production.

If 30% of the country's plastic waste is chemically recycled in 2035, the country will manage to reduce plastic waste by almost 36 million tonnes a year, the academy said.

Compared with incineration, chemical recycling can reduce carbon dioxide emissions by 22.3 million tonnes and also save 108 million tonnes of oil.

"This is roughly equivalent to building two Daqing oilfields," it said.

From 2003 to 2023, the annual oil and gas production at Daqing oilfield, China's largest, exceeded 40 million tonnes.

The report listed a series of proposals to increase the chemical recycling of plastic waste.

It proposed incorporating chemical recycling as a key part of the country's governance system for controlling plastic pollution and guaranteeing energy security, as well as the country's policy and regulation system for managing plastic pollution.

It should be made a core solution to tackle plastic pollution, the academy said in its report.

The report also suggested establishing a recycling system that furthers the development of chemical recycling, and rolling out demonstration projects that apply the approach. — China Daily/ANN

DISEDIAKAN OLEH	PN NOR SURIANI BINTI MOHD ZIN (S44), BPM
-----------------	--