



NANYANG JUNIOR COLLEGE

Year 1 Common Test

H1 GEOGRAPHY

8834/01

27 Jun 2023

1 hour 10 mins

Additional Materials:

Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your class, index number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

Answer Question 1.

Section B

Answer one question.

You are advised to spend not more than 40 minutes for Section A.

You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the questions.
Diagrams and sketch maps should be drawn whenever they serve to illustrate an answer.
You are reminded of the need for good English and clear presentation in your answers.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

Section A

Answer the question in this section.

Cluster 1 Sustainable Future and Climate Change

- 1** Resource 1 shows the breakdown of Thailand's plastics end use industries. Resource 2 shows Bangkok's plastics waste management hierarchy (left) and ideal waste management hierarchy (right). Resource 3 is an extract taken from an article about plastic waste pollution in Thailand. Resource 4 shows Thailand's roadmap to plastic waste management 2018 – 2030.
- (a)** Cite data from Resource 1 to describe the usage of plastic in Thailand. [3]
- (b)** Using **two** examples, describe how single-use plastic is part of everyday urban life. [4]
- (c)** Explain whether Bangkok's plastic waste management hierarchy is sustainable in nature as shown in Resource 2. [5]
- (d)** With reference to Resource 3, explain the demand placed on the natural environment due to plastic waste. [4]
- (e)** With reference to Resource 3 and 4, explain the possible challenges faced by Thailand in meeting her vision of sustainable plastic management by circular economy. [6]

Resource 1

Breakdown of Thailand's plastics end use industries

END USE INDUSTRY	TONS	% OF TOTAL
Packaging	2,323,000	42%
Electricals and Electronics	870,000	16%
Construction	791,000	14%
Automotive	391,000	7%
Filament	365,000	7%
Housewares	216,000	4%
Safety & Security	153,000	3%
Agriculture	114,000	2%
Footwear	101,000	2%
Recreation	98,000	2%
Others	60,000	1%
Medical Devices	54,000	1%
TOTAL	5,536,000	100%

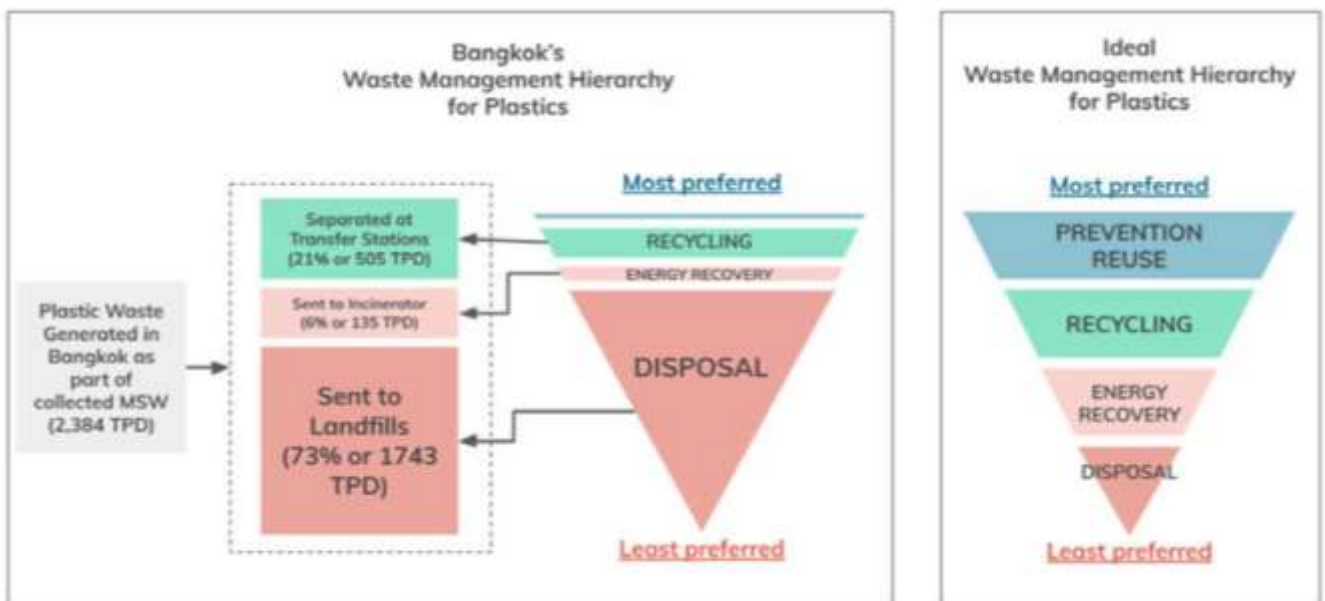
86% of
consumption

Source: Plastics Institute of Thailand

Source: <https://openknowledge.worldbank.org/entities/publication/1b89de3d-97ed-5ad8-9cd4-3002169951d5>

Resource 2

Bangkok's plastics waste management hierarchy (left) and ideal waste management hierarchy (right)



Note: MSW – Municipal Solid Waste; TPD – Tonnes Per Day

Source: <https://openknowledge.worldbank.org/entities/publication/1b89de3d-97ed-5ad8-9cd4-3002169951d5>

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Resource 3

An extract taken from an article about plastic waste pollution in Thailand

Rubber farmer Tieb Samarnmit in Rayong province has seen this with his own eyes. His trees have died in recent years, and the alleged culprit is a nearby waste processing factory operated by a company called Win Process.

According to the villagers of Nong Phawa, the company had dumped hazardous waste, including scrap plastic and used oil, illegally for years. They called on the authorities to investigate in 2013, and the factory was ordered to stop operating and remove the waste.

Yet, in 2017, Win Process obtained permits to operate. By 2020, many of his trees died. "Plants are usually able to grow in such land, but no matter what we tried, they wouldn't grow," he lamented, pointing to "yellow liquid" coming out of the ground. With help from non-governmental group Ecological Alert and Recovery – Thailand, the villagers sued Win Process last year. The lawsuit is ongoing.

This case shows weaknesses in enforcement and the granting of permits, say observers. When they find violations of the law, government agencies tend to suspend companies' licences, said Naresuan University law lecturer Ashijya Otwong.

Factories are allowed to reopen after they fix the problem, even if they repeat the offence "more than 20 times", she said. "We have to think about the permission process, monitoring process and also how to enforce the law." The lack of a central agency with oversight could be a factor.

Like Ashijya, non-governmental organisation worker Sumniang Boonlue believes it is up to the government to better address the problem of waste dumping. He does not blame the consumers whose rubbish he fishes out of a waterway. "The state didn't provide enough facilities," he said.

The Lat Phrao canal happens to be his home. His family have lived along the tributary of the Chao Phraya River for generations. The freshwater snails and small prawns that residents used to find have all gone. Trees along the canal cannot be watered using the canal's polluted water or they would die.

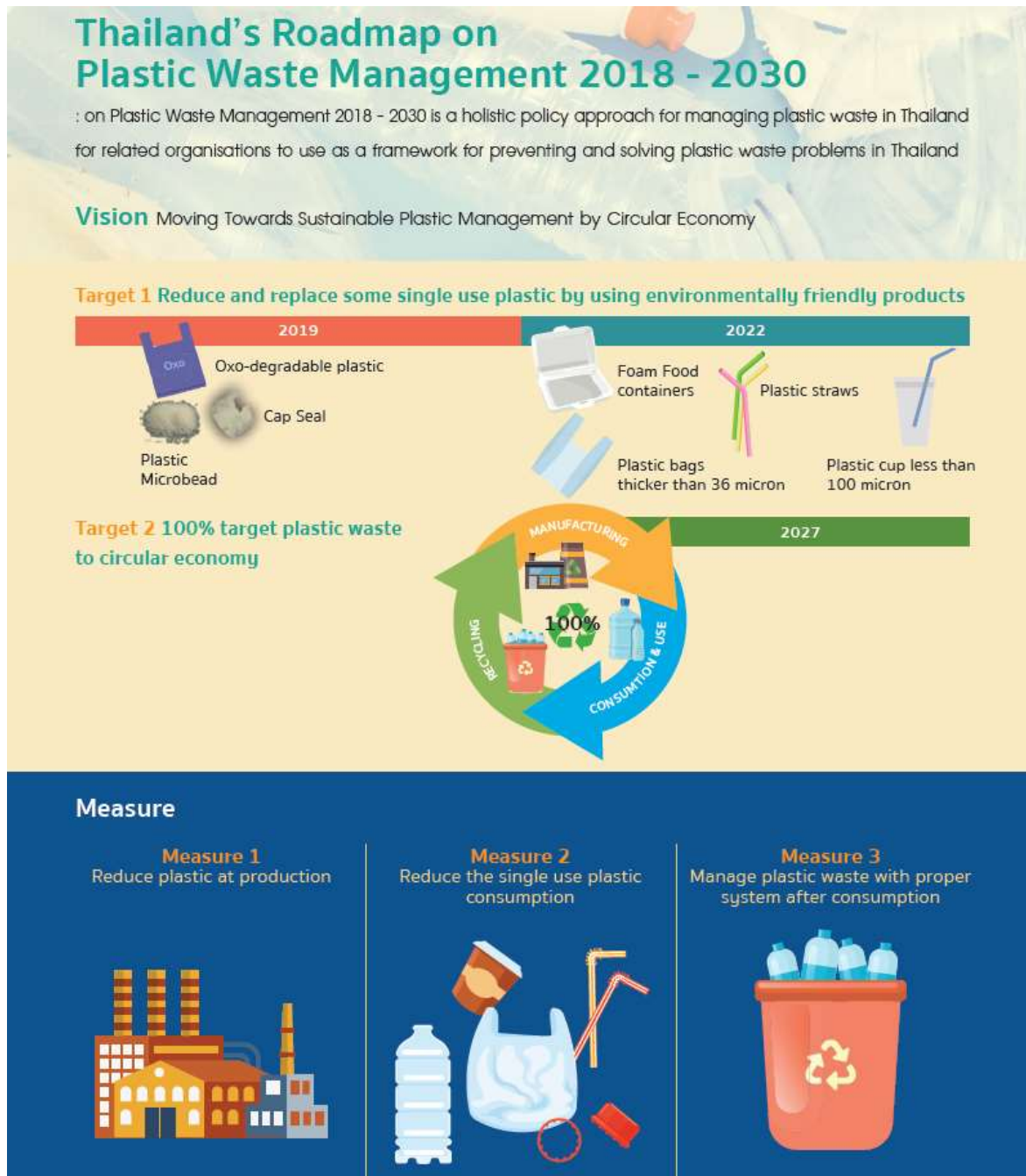
Since the pandemic, he has had to remove more rubbish from the canal. From a tonne a day, his team from the TerraCycle Thai Foundation are hauling an extra 400 to 500 kilogrammes. "Because of the lockdown, people couldn't go out, so they spent all their time eating at home." And they dumped more food and beverage containers in the canal.

Cleaner waterways also help to mitigate floods. Waste in canals traps other debris and more sediment. This reduces the capacity of canals and increases the risk of flooding, he noted.

Source: <https://www.channelnewsasia.com/cna-insider/thailand-plastic-waste-import-problem-ocean-waterways-3132251>

Resource 4

Thailand's roadmap to plastic waste management 2018 – 2030



Source: https://www.pcd.go.th/wp-content/uploads/2021/10/pcdnew-2021-10-19_08-59-54_995414.pdf

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Section B

Answer **one** question from this section.

- 2 'The impacts of urban reimagining are rarely positive.' Evaluate this statement.
[13]
- 3 Evaluate the success of slum management strategies in achieving sustainable urban development.
[13]

End of Paper