



National Junior College
SH2 Preliminary Examinations for General Certificate of Education
Advanced Level
Higher 1

GEOGRAPHY

8834/01

Paper 1

29 August 2025

INSERT

3 hours

READ THESE INSTRUCTIONS FIRST

This Insert contains all the Resources referred to in the questions.

Resource 1A for Question 1

Map showing locations of study sites and food waste reduction efforts in the Bishan neighbourhood



**Bishan
Community
Centre:**

Periodic food
rescue and
redistribution
events

Block 112 Bishan Street 11:

Food Recycling locker

Block 112 Bishan Street 11:

24-hr Community Fridge that provides free food
items rescued from local businesses and retailers

Resource 1B for Question 1
Photographs of food waste reduction efforts at Bishan Neighbourhood

(i) Food Recycling Locker at Block 112



(ii) 24-hour Community Fridge at Block 112



(iii) Food Rescue and Redistribution at Bishan Community Centre



Resource 2 for Question 1

Selected Interview Responses

2A: List of Volunteer Roles
by Interviewees

1. **Collection Volunteers:**
Pick up unsold food from nearby wet markets or retailers.
2. **Distribution Volunteers:**
Sort and distribute food at Bishan CC or nearby void decks.
3. **Digital App Volunteers:**
List surplus food on apps like GoodHood.sg and coordinate pickups.
4. **Social Media Ambassadors:**
Promote efforts via Facebook or other platforms using #BishanCC.
5. **Community Fridge Stewards:**
Restock, clean and maintain fridges at community locations.
6. **Drivers:**
Transport bulk food items to Bishan CC or community fridges.
7. **Outreach Volunteers:**
Engage residents and share food safety tips

2B: Quotes from Interviewees

Elderly resident (age 67):

"I walk to the fridge every Saturday – my church group even helps to restock it!"

Younger resident (age 25):

"I know about the fridge but honestly I'd feel embarrassed taking food from there."

Middle-aged resident (age 54):

"I prefer to compost at home. Those events are too public."

2C: Digital Screenshots shared by Interviewees

RECRUITING FOOD RESCUE WARRIORS!
招募食物救援战士!

MERKURUT PAHLAWAN PENYELAMAT MAKANAN
உணவு மீட்டி வீரர்களுக்கு ஆள் சேர்ப்பு!

DO YOU CARE ABOUT REDUCING FOOD WASTE AND SUPPORTING SUSTAINABILITY IN OUR COMMUNITY?
Join our Food Rescue Warrior team!

WE ARE RECRUITING BESM (BISHAN EAST-SIN MING) RESIDENT VOLUNTEERS TO RESCUE FOOD AROUND OUR NEIGHBOURHOOD AND DISTRIBUTE THEM TO OUR COMMUNITY

Register Now!

- ✓ Time slots available daily (collection time 4-5pm & 12-1am)
- ✓ Travel at your own convenience (by car or public transport)
- ✓ new friendships and community bonding

FOOD YOU MAY BE RESCUING:

DAIRY FOOD CHILLED FOOD SNACKS
DRIED FOOD READY FOOD AND MORE

For more information, please call Bishan CC at 62594720

Food Rescue!
食物拯救计划 | MENYELAMAT MAKANAN
உணவு மீட்டி

Every 4th & 5th Wednesday of the Month

27 NOVEMBER 2024, WEDNESDAY
4:00PM To 5:00PM
Bishan CC

We are giving out rescued vegetables, fruits & items!

BRING YOUR BAG.

LET US DO OUR PART TO REDUCE FOOD WASTE & EAT SUSTAINABLY. PLEASE NOTE QUALITY & QUANTITY VARIES. WHILE STOCKS LAST!

Co-Organised By:

More Information: 62594720

Resource 3 for Question 1

Survey Form Used by Students to Collect Responses

Section A: Demographics		
Age ☐ Under 20 years ☐ 21-40 ☐ 42-60 ☐ Above 60	How long have you lived in Bishan? ☐ Less than 1 year ☐ 1-5 years ☐ More than 5 years ☐ I do not live in Bishan	Which block or street within Bishan do you live on? (If applicable, please state)
Section B: Awareness and Participation		
1. Are you aware of any of the following food waste reduction initiatives in Bishan (Select all that apply).		
☐ 24/7 Community fridge at Block 112 ☐ Food Rescue Events at Bishan Community Club ☐ Food Recycling Locker at Block 112 ☐ None of the above ☐ Other food waste reduction initiatives in Bishan _____		
2. How did you first hear about these initiatives?		
☐ Posters or notices ☐ Social media / Messaging platforms (e.g., Telegram, WhatsApp) ☐ Community events ☐ Word of mouth ☐ I have not heard of them ☐ Other _____		
3. Have you ever used or participated in any of the above initiatives?		
☐ Yes (go to Question 4) ☐ No (skip to Question 6)		
4. If yes, which of the following best describes your participation (Select all that apply).		
☐ Donated food to community fridge ☐ Collected food from community fridge ☐ Attended redistribution events ☐ Other _____		
5. How often do you participate?		
☐ Weekly ☐ Monthly ☐ Occasionally (a few times a year) ☐ Rarely		
Section C: Attitudes and Motivation		
6. What are the main reasons for participating (or not participating) in food waste reduction efforts? Select up to top 2 reasons		
☐ Environmental concern ☐ Cost savings ☐ Convenient location ☐ Lack of time ☐ Not interested ☐ Not aware of how to participate ☐ Prefer donating to other causes		
7. Would you be willing to participate in future food waste reduction efforts in Bishan?		
☐ Yes ☐ Maybe ☐ No		

Resource 4 for Question 1

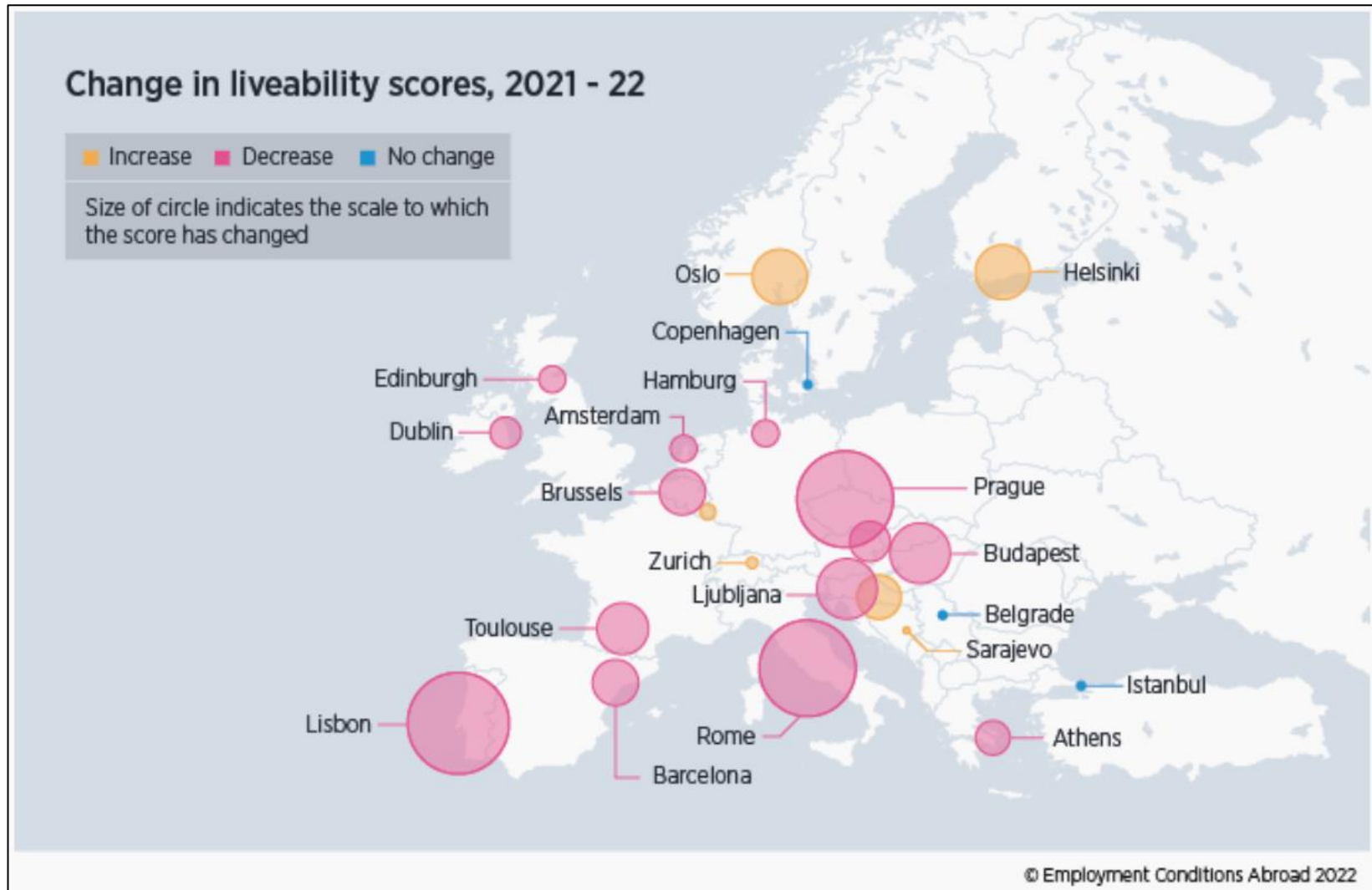
Summary of Selected Survey Results

Item	Category	Percentage of respondents (%)
Age group	Under 20	17.5
	21–40	27.5
	42–60	30.0
	Above 60	25.0
Years lived in Bishan	Less than 1 year	15.0
	1–5 years	27.5
	More than 5 years	47.5
	Do not live in Bishan	10.0
Awareness of initiatives (multiple responses possible)	24/7 Community Fridge	65.0
	Food Rescue Events	52.5
	Food Recycling Locker	37.5
	None	20.0
	Other	5.0
How respondents first heard about initiatives	Posters	22.5
	Social media	37.5
	Community events	15.0
	Word of mouth	12.5
	Not heard	10.0
	Other	2.5
Participation in initiatives	Yes	72.5
	No	27.5

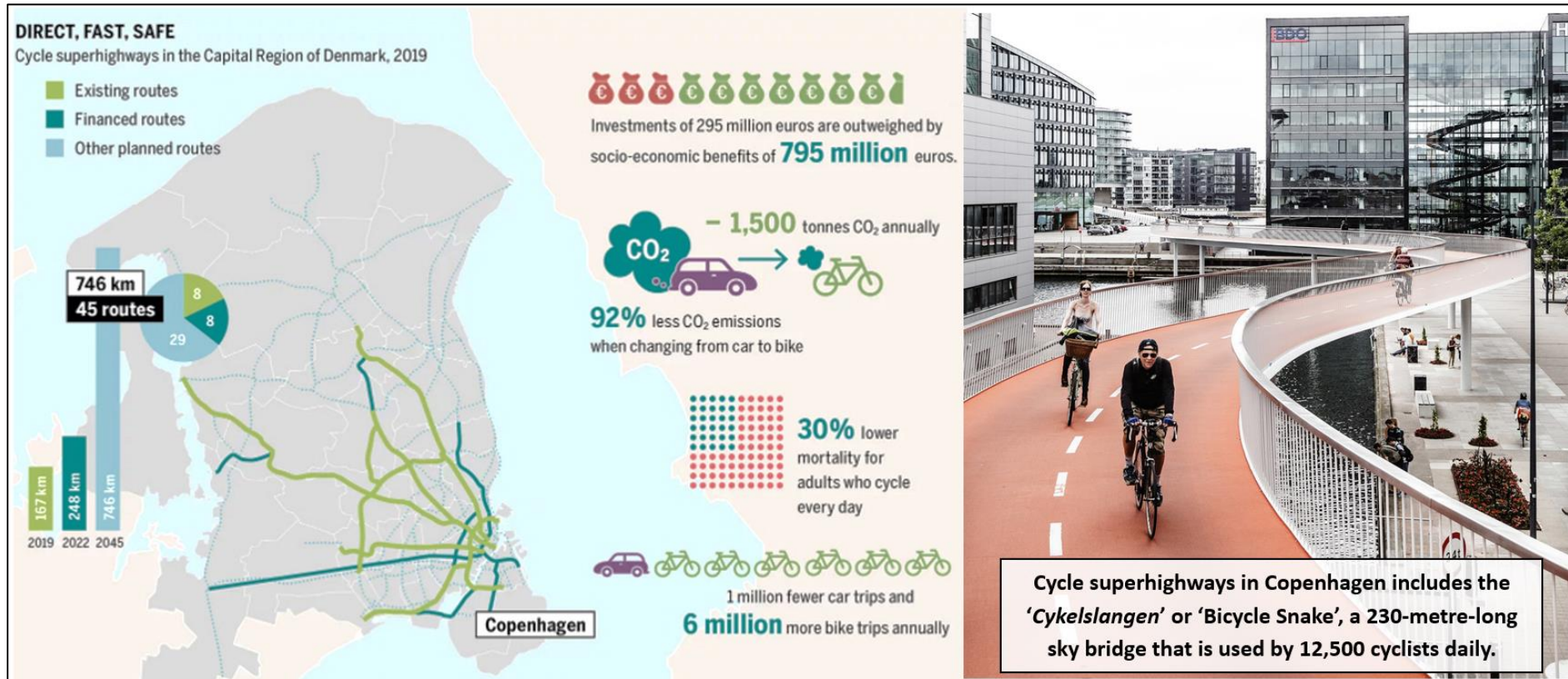
Item	Category	Percentage of respondents (%)
Type of participation (among those who participated)	Donated food	30.0
	Collected food	27.5
	Attended events	25.0
	Other	10.0
Participation frequency	Weekly	10.0
	Monthly	32.5
	Occasionally	37.5
	Rarely	20.0
Top reasons for participation (29 participants)	Environmental concern	62.1
	Cost savings	48.3
	Convenient location	37.9
Top barriers among non-participants (11 participants)	Lack of time	54.5
	Not interested	45.5
	Not aware how	36.4
Willingness to participate in future	Yes	50.0
	Maybe	30.0
	No	20.0
Average distance from residence to Block 112	Among participants	655.7 metres
	Among non-participants	607.0 metres
Average distance from residence to Bishan Community Centre	Among participants	546.9 metres
	Among non- participants	427.6 metres

Resource 5 for Question 2

Change in Liveability Scores, 2021-2022



Resource 6 for Question
Infographic of Copenhagen, Denmark, as a Bike-Friendly City

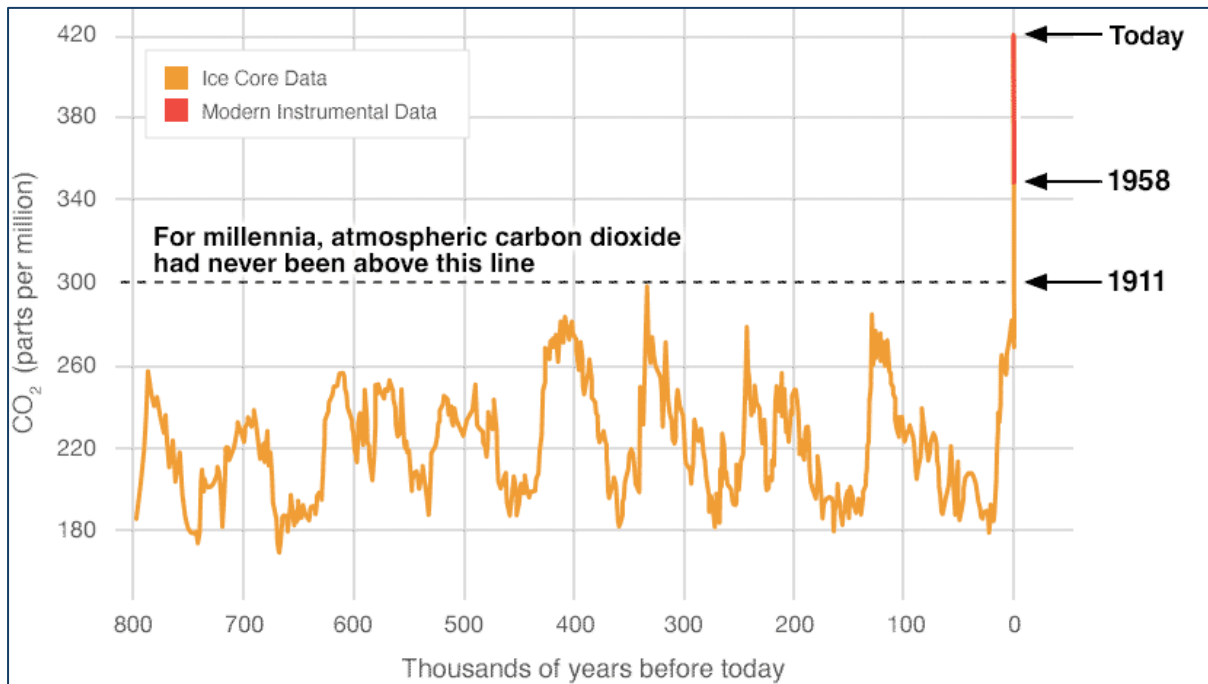


Resource 7 for Question 2
OECD'S Localised framework of Sustainable Development Goals



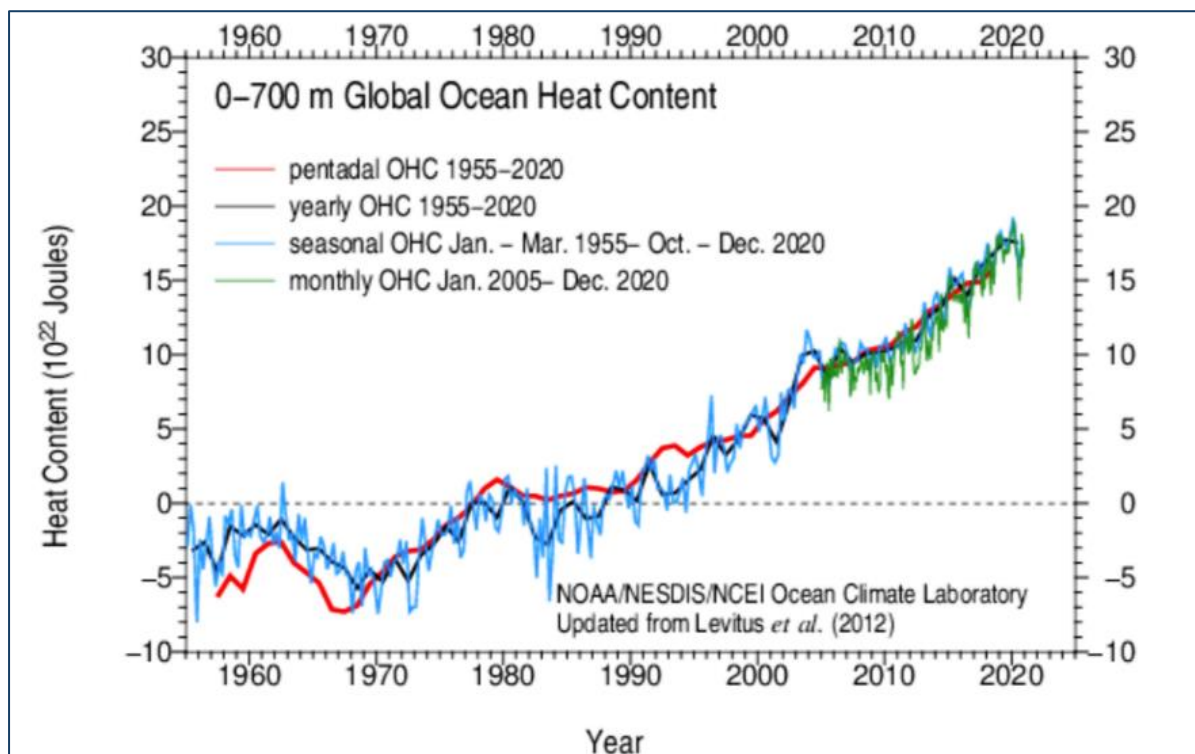
Resource 8A for Question 3

**Atmospheric carbon dioxide levels from 800,000 years ago
based on ice core data to current levels in 2025**



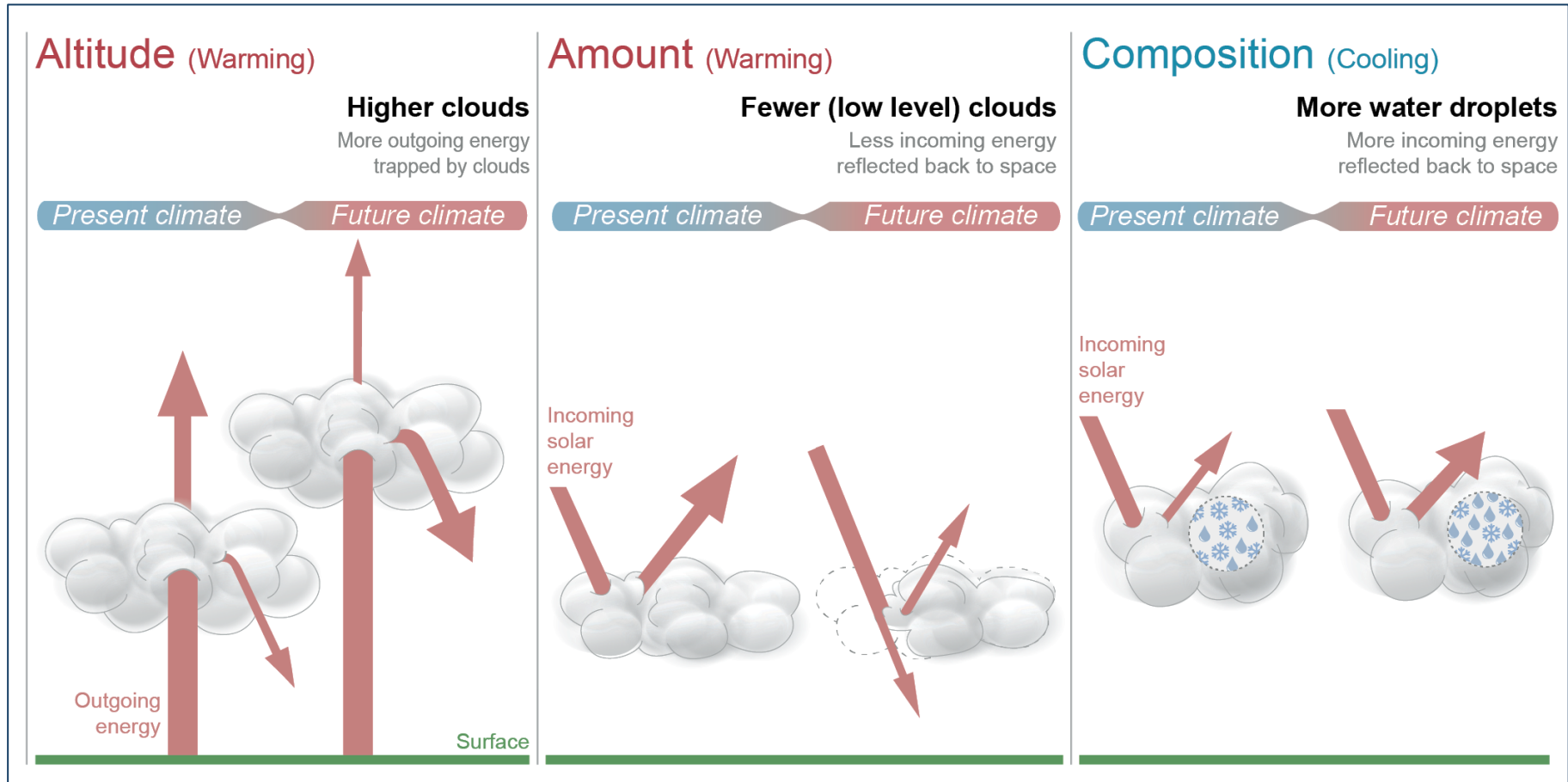
Resource 8B for Question 3

**Graph of Global Ocean Heat content changes
over a 5-year (pentadal), yearly, seasonal and monthly average by year**



Resource 9 for Question 3

Cloud Feedback mechanisms with Global Warming



COPYRIGHTS ACKNOWLEDGEMENT

Question 1 Resource 1A	Singapore Land Authority (SLA, 2025) Accessed at: Onemap.sg
Question 1 Resource 1B (i)	The Straits Times (21 Mar 2023), <i>Smart recycling boxes that reward residents for sorting waste have cut contamination rate</i> Accessed at: https://www.straitstimes.com/singapore/smart-recycling-boxes-in-bishan-rewards-residents-for-sorting-waste-slashing-contamination-rate
Question 1 Resource 1B (ii)	The Pride (9 June 2022), <i>Bishan Residents turn void deck into urban garden filled with plants, books and free food</i> Accessed at: https://pride.kindness.sg/residents-turn-void-deck-into-green-hub-filled-with-plants-books-and-free-food/
Question 1 Resource 1A(iii) and Resource 2	Yeoh BSA and Tan QT (2025) ' <i>Participating and Labouring in Circular Transitions: The Case of Community Food Rescue/Redistribution Initiatives in Singapore</i> ' Accessed at: https://doi.org/10.3390/su17083328
Question 1 Resources 3	Author's own
Question 2 Resource 4	Author's own
Question 2 Resource 5	Employment Conditions Abroad (ECA) International (February 2022) Accessed at: https://www.mynewsdesk.com/uk/eca-international/pressreleases/end-of-pandemic-in-sight-as-liveability-increases-for-95-percent-of-uk-and-european-cities-3174850
Question 2 Resource 6	Heinrich-Böll-Stiftung, Brussels, European Union (EU, February 2021) Accessed at: https://eu.boell.org/en/cycling-copenhagen-the-making-of-a-bike-friendly-city Laud8: Landscape Architecture & Urban Design (March 2017) Accessed at: https://laud8.wordpress.com/2015/03/17/cykelslangen-the-bicycle-snake/
Question 2 Resource 7	Organisation for Economic Co-operation and Development (OECD, 2020) Accessed at: https://www.oecd.org/en/data/tools/oecd-local-sdgs.html
Question 3 Resource 8A	National Aeronautics and Space Administration (NASA, May 2025) Accessed at: https://climate.nasa.gov/vital-signs/carbon-dioxide/?intent=121
Question 3 Resource 8B	National Oceanic and Atmospheric Administration (NOAA, September 2021) National Centres for Environmental Information (NCEI) Accessed at: https://storymaps.arcgis.com/stories/51c41fd3f78c4939a28b016e0ddb5109
Question 3 Resource 9	Intergovernmental Panel on Climate Change, United Nations (IPCC, UN) IPCC Sixth Assessment Report (2023) Accessed at: https://www.ipcc.ch/report/ar6/wg1/figures/chapter-7/faq-7-2-figure-1