

Environmental Education Programme 2022/23

# GREEN PREFECT (GP) PROGRAMME

## Online Briefing Session (Secondary)



Sponsor



Organisers



教育局  
Education Bureau



# Rundown

Duration	Content
10 mins	<b>【GP Programme】</b> Introduction Background, Objectives, Framework and Timeline GP Duties
20 mins	<b>【GP Handbook】</b> Review the Checklist Items and Usage Suggested Methods for Inspection Recommendations for Organising Activities Reflection and Planning
5 mins	<b>【GP Programme】</b> Expected Outcome
5 mins	<b>【Sharing of Past Participating School】</b> SKH Tang Shiu Kin Secondary School
5 mins	Conclusion and Q&A





Sponsor



Organisers



教育局  
Education Bureau

Commenced in 2020, **5 086** Green Prefects were nurtured in the 2021/22 school year





# Programme Objectives

- To enhance **environmental performance** of the participating schools
- To develop a group of energetic and resourceful GPs with deeper understanding of environmental issues and **acts as models** for their peers
- To enhance students' **environmental awareness** and build up **green habits** on campus





# Why join the GP Programme?

Love?

Responsibility?



# NEWS

[Home](#)[Video](#)[World](#)[Asia](#)[UK](#)[Business](#)[Tech](#)[Science](#)[Stories](#)[Entertainment](#)

Science & Environment

## Final call to save the world from 'climate catastrophe'

By Matt McGrath  
Environment correspondent, Incheon, South Korea

🕒 8 October 2018



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**News**

**Opinion**

**Sport**

**Culture**

**Lifestyle**

More ▾

## We have 12 years to limit climate change catastrophe, warns UN

**Urgent changes needed to cut risk of extreme heat, drought, floods and poverty, says IPCC**

## NEWS

- Intergovernmental Panel on Climate Change (IPCC) :

Science & Environment

氣候災難的最後通牒

Final call to save the world from 'climate

To limit the temperature rise to 1.5°C, **swift and bold actions** are needed for a Social Change

Opinion

Sport

Culture

Lifestyle

More

have 12 years to limit climate change

astrophe, warns UN

聯合國警告：只有12年時間限制氣候改變危機

ent changes needed to cut risk of extreme heat, drought, floods

poverty, says IPCC



# Long-term Decarbonisation Strategy

Public Engagement



Let's all support  
low-carbon transformation



可持續發展委員會  
Council for Sustainable Development

JUNE 2019

Council for Sustainable  
Development:

June 2019 launched

“Report on Hong  
Kong's Long-term  
Decarbonisation  
Strategy”

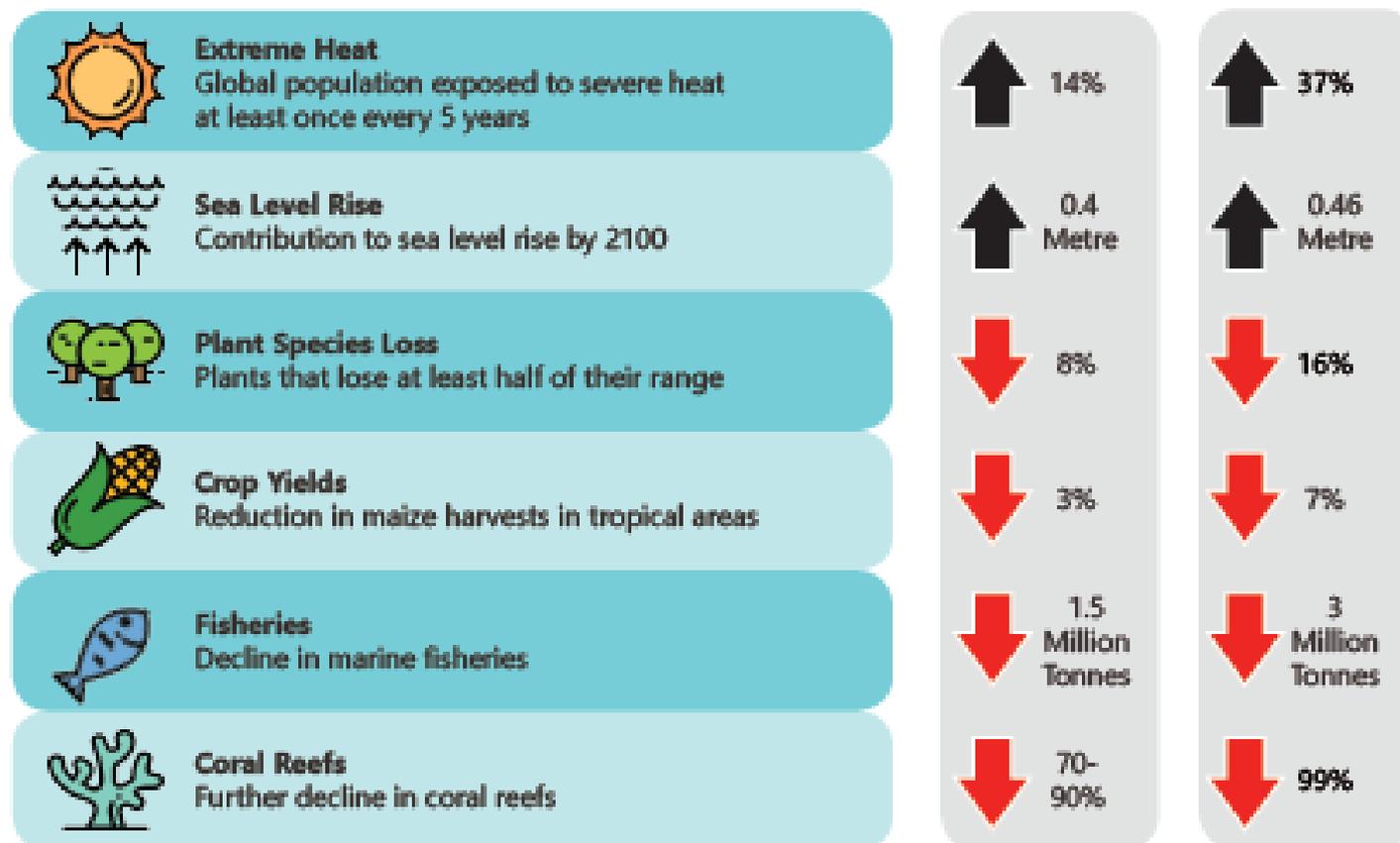
# We Simply Don't Have Time

1.4 Scientists have warned that we have some 10 years left to limit climate change catastrophe. According to the special report published by the IPCC in October 2018, the projected climate change impacts are substantially worse at 2°C compared with 1.5°C. Meanwhile, it is necessary to acknowledge that achieving the 2°C target of the Paris Agreement is indeed challenging. The key issue will be on the discussion of how to meet the target through the more aggressive proposals and its feasibility. <sup>4</sup>

1.5 Like other coastal cities, Hong Kong faces multiple climate-related threats, including rising temperatures and more extreme weather phenomena such as violent storms and flooding rains. Unless the world takes bolder and swift actions to reduce GHG emissions, these intensifying impacts are expected to take place at an even more rapid pace in the coming decades. Hong Kong, as a responsible member of the global community, is taking proactive steps to combat climate change.

## Projections for 2100

## Global Average Temperature Rise



Source: IPCC



## More very hot days and hot nights

Over the past hundred years, the annual number of very hot days and hot nights in Hong Kong has increased from 2.2 to 15.7 and from 0.6 to 21.8 respectively. Under the high GHG concentration scenario, it is expected that the number of hot nights will add up to nearly 3 months by the middle of this century, and increase to about 5 months by the end of this century. <sup>5</sup>



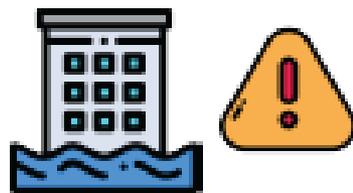
## Annual number of heavy rain days increases

Days with hourly rainfall more than 30 mm increased at an average rate of 0.2 days per decade from 1947 to 2018 in Hong Kong. Under the high GHG concentration scenario, the projected annual maximum 3-day rainfall will increase by about 40% at the end of this century. <sup>6</sup>



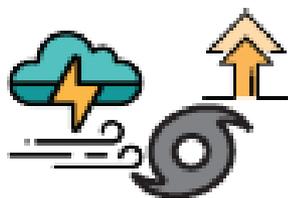
## Fewer rain days but average rainfall intensity increases

Extreme precipitation events have become more frequent. The hourly rainfall record at the Hong Kong Observatory headquarters was broken several times in the past decades. The current hourly rainfall record was 145.5 mm in 2018 at the Hong Kong Observatory headquarters. <sup>7</sup>



## Rise in sea level

On average, the mean sea level in Victoria Harbour went up 31 mm per decade during 1954-2018. It is expected that extreme sea level events that are rare today will become more frequent at the end of this century. <sup>8</sup>



## Increase in storm surge threat

Only between 2017 and 2018, there were two super typhoons necessitating the issuance of the Hurricane Signal No. 10, both with significant storm surges. <sup>9</sup>

【歷來九月最熱🔥】截至下午2點半，今日天文台總部錄得35.3度高溫，係1884年有記錄以來九月最高🔥，打破1963年嘅舊紀錄！受乾燥大陸氣流影響，預料聽日大致天晴，日間酷熱同乾燥，大家要繼續注意防暑防曬呀👍！

九天天氣預測：<https://url.hko.hk/fnd> ✓  
9-day Weather Forecast: <https://url.hko.hk/fnde> ✓

#破紀錄 #熱 #酷熱 #乾燥 #防曬 #消暑

# 天文台總部 35.3度 歷來九月最熱

今日 The hottest September ever!

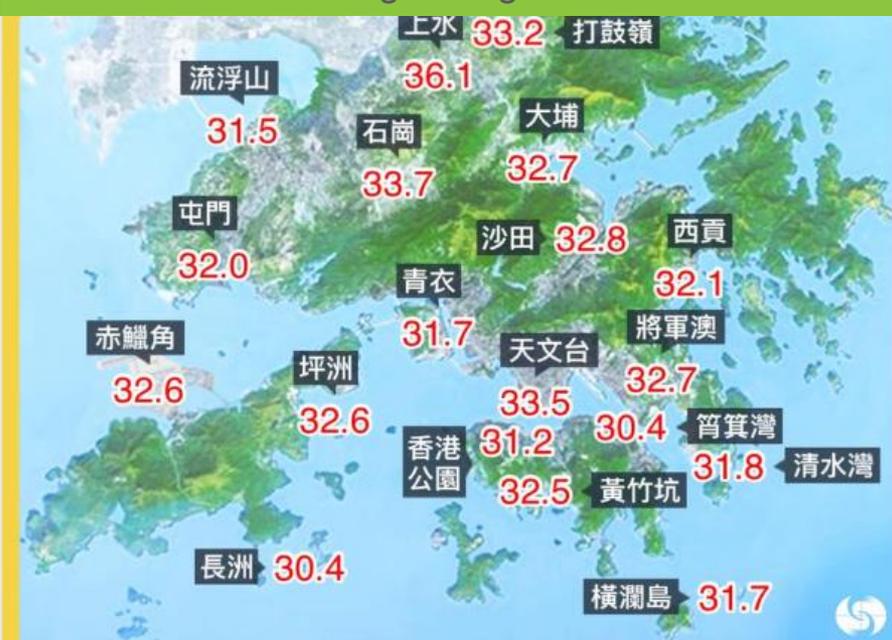


【#最熱重陽🔥】今日下午天文台總部錄得最高氣溫33.5度！打破1959年32.5度嘅紀錄，成為自1884年有記錄以來最熱嘅重陽節。

重陽節的氣候資料：<https://url.hko.hk/ql72V3t4>  
Climatological Information for Chung Yeung Festival: <https://url.hko.hk/xl3splq5>..... 查看更多

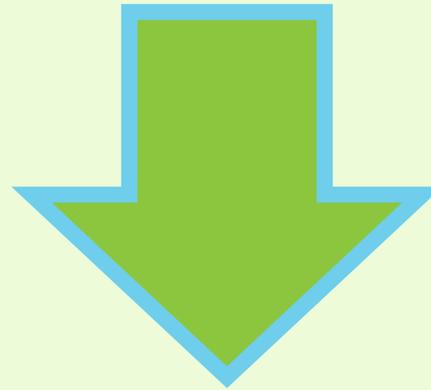
# 重陽登高熱熱熱 天文台總部 33.5度破最熱紀錄

The hottest Chung Yeung Festival recorded!





Environmental Issues  
are imminent!



Bold and Swift Solutions

**Holistic Environmental Education**



# Global Goals (United Nations)



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD





# Which of the following are related to the environment?

**SUSTAINABLE DEVELOPMENT GOALS**  
17 GOALS TO TRANSFORM OUR WORLD

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

**SUSTAINABLE DEVELOPMENT GOALS**

Tell us your thoughts!



# Which of the following are related to the environment?



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD





# Which of the following are related to the environment?



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



They are all inter-connected!

9 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



SUSTAINABLE DEVELOPMENT GOALS



# Directions of Environmental Education

- “Life-wide Learning” in Secondary School Curriculum
- “Model of Responsible Environmental Behaviour” (Hungerford & Folk, 1990)



- ❑ Learn about the local and global environmental issues
- ❑ Understand the causes of these environmental problems



# Directions of Environmental Education

- “Life-wide Learning” in Secondary School Curriculum
- “Model of Responsible Environmental Behaviour” (Hungerford & Folk, 1990)



- Aware of the close-connectedness between environmental problems and individuals
- Care about the nature and environmental issues



# Directions of Environmental Education

- “Life-wide Learning” in Secondary School Curriculum
- “Model of Responsible Environmental Behaviour” (Hungerford & Folk, 1990)



- Take actual actions
- Make changes to resolve environmental problems



# GP Group Recommended Structure



Teacher  
Advisor



Head GPs  
1-2 nos.



School GPs  
1-2 nos.  
each class



# GP Group Structure

- Can **modify and revise** the structure according to the school's needs
- Examples :
  - ❑ Adjust the no. of appointed Head GPs and GPs
  - ❑ Only appoint S1-S5 students as GPs





# Responsibilities



## Head GP

- To assist Teacher Advisor to **manage the group** and **organise environmental activities**
- To be the **spokesperson** of the group

## School GPs

- To **monitor peers' environmental behaviour** as well as school's environmental performance with the aid of environmental checklists in [GP Programme Handbook](#)
- To act as **models** for their peers in practising green living
- To encourage peers to build up green habits on campus



環保風紀  
(每班 1 - 2名)



# Appointed GPs will be given...



GP Handbook  
(e-version)



“Big Waster” Badge



# Appointed GPs will be given...



## Outstanding Award

- For GPs with **excellent performance** while undertaking their duties and bringing **positive influence** to their peers' green behaviour



## Certificate of Appreciation

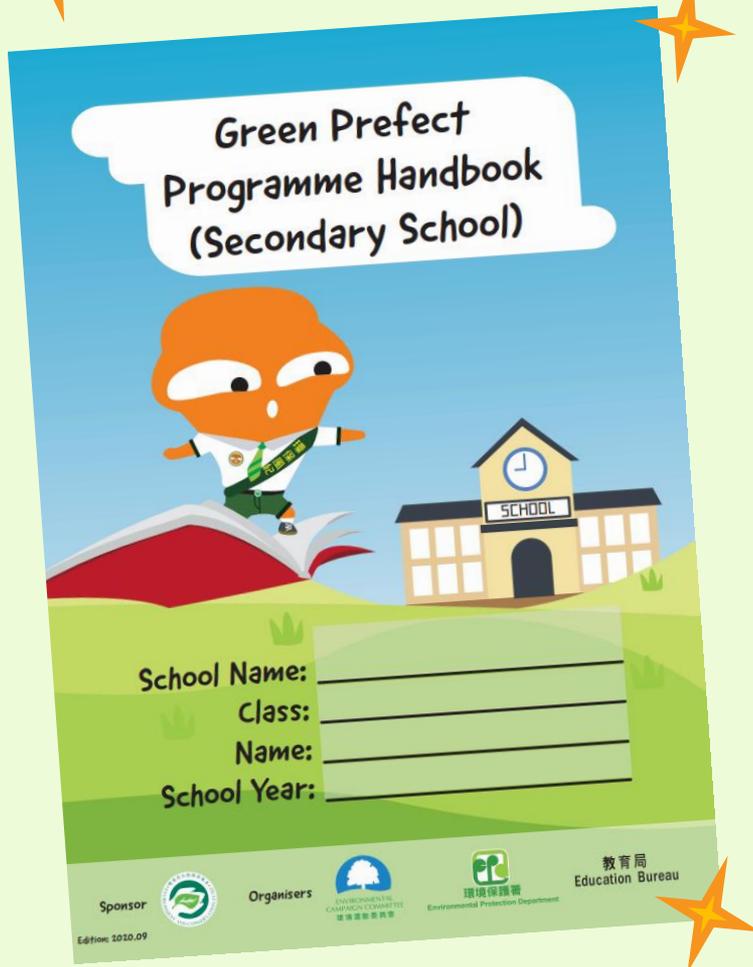
- For GPs with **satisfactory performance** and in appreciation of their dedication



# Programme Timeline

Time Period	Programme Details
27 <sup>th</sup> October, 2022	Online Briefing Session
November 2022 – May 2023	<ul style="list-style-type: none"><li>• GPs carry out monitoring and evaluation duties (at least once a month)</li><li>• Launch other environmental activities</li></ul>
June 2023	Send e-certificates to schools via email for issuing to the GPs by the school
July 2023	Feedback survey and programme evaluation





# Green Prefect Programme Handbook

- ✓ Environmental Checklist
  - ✓ Best practices and environmental tips
  - ✓ Promotion activities examples and template
- Assist GPs to conduct their duties



# GP Programme Handbook

## Contents



Chapter 1 – Introduction

Chapter 2 – Roles & Responsibilities

Chapter 3 – Greening Your School

Chapter 4 – Best Practices & Checklists

Chapter 5 – More Information

- Learn about the Programme background and objectives
- Understand personal responsibilities



# GP Programme Handbook

## Contents



Chapter 1 – Introduction

Chapter 2 – Roles & Responsibilities

Chapter 3 – Greening Your School

Chapter 4 – Best Practices & Checklists

Chapter 5 – More Information

- Suggestions and examples on organising environmental activities
- Learn about the **Environmental Aspects**



# GP Programme Handbook

## Contents



Chapter 1 – Introduction

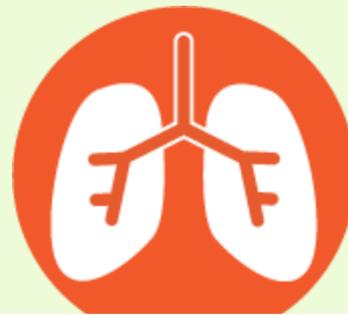
Chapter 2 – Roles & Responsibilities

Chapter 3 – Greening Your School

Chapter 4 – Best Practices & Checklists

Chapter 5 – More Information

- Monitoring and evaluation methods
- Environmental tips
- Reflection and planning
- Useful references



Clean Indoor Air



Waste  
Avoidance &  
Reduction

# Five Environmental Aspects



Energy  
Conservation



Water  
Conservation



Greening, Nature Conservation  
& Biodiversity



# Understanding to the Environmental Aspects





Observation

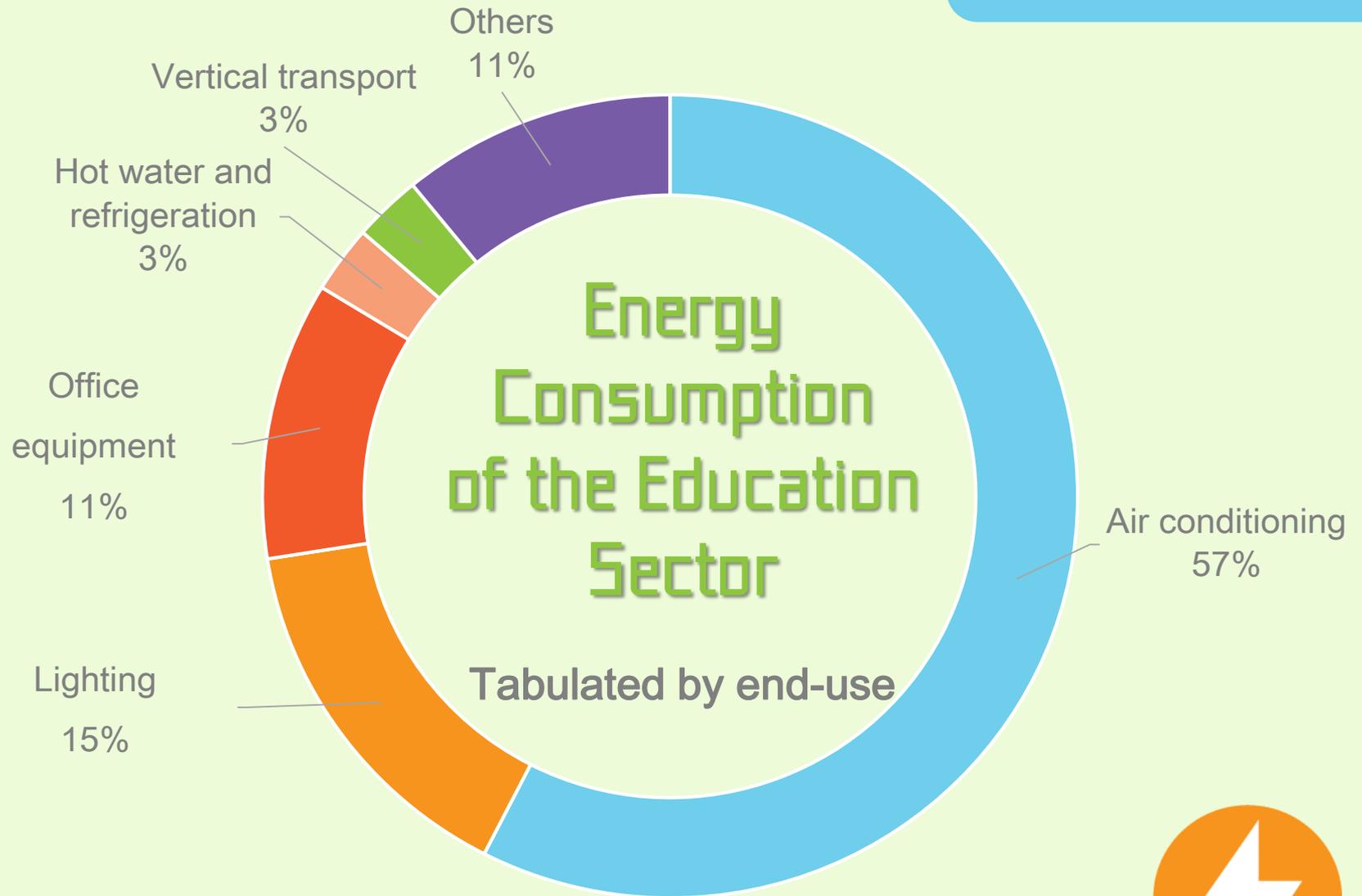
Please name the **MOST**  
energy-consuming  
facility/appliance in the  
classroom.



# Answer : Air-conditioning

*What a huge burden it is  
to switch on air-cons daily!*







## Maths

During the pandemic, teachers and students wash their hands 4 times a day.

Assume that they normally use **1L of water** each time, under supervision of GPs, they use **only 0.5L**.

If the school has 720 students and 40 teachers, how many litres of water can be saved in a single day?



Answer :  
1520 L



*If everyone saves a little,  
it would be a lot as a whole!*





## Brain teaser

Follow up : According to the suggestions on  
“GP Handbook”,  
if there are **720 students and 40 teachers** at  
school,  
how many pieces of paper towel will be  
used in 1 day?



Answer :  
0



I've prepared my own  
handkerchief for sure!





General

Which of the following is a native plant in Hong Kong?

- A. Chinese Fan Palm
- B. Miniature Umbrella Plant
- C. Ivy Tree
- D. Chinese Privet



A. Chinese Fan Palm



B. Miniature Umbrella Plant



C. Ivy Tree



D. Chinese Privet



A. Chinese Fan Palm



B. Miniature Umbrella Plant



C. Ivy Tree



D. Chinese Privet



# Native and Exotic Plants

- ❑ Among the 3000 local species of vascular plants, about 1/3 are exotic species
- ❑ Provide oxygen, shades, regulate microclimate and has aesthetic appeal
- ❑ Ecological Values?
  - ❑ Provision of pollens and nectars
  - ❑ Provision of fruits and food





## Ivy Tree

- Common native plant in Hong Kong
- Host plant to Pale Green Awlet
- Flowering in winter, provides nectar for insects and birds





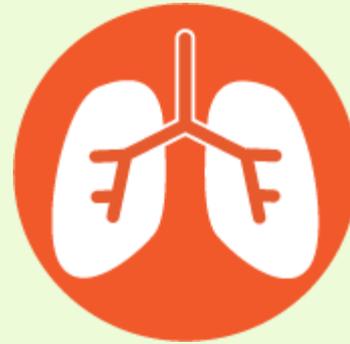
## Chinese Fan Palm

- Short-nosed Fruit Bats reside under leaves
- Birds eat fruits



## Chinese Privet

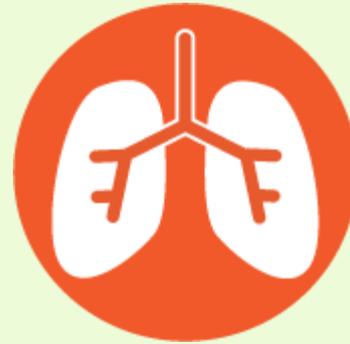
- Great fragrance when flowering
- Attract many butterflies for nectar



## Health

How does exposure to high level of indoor air pollutants affect students and teachers' health in short term?

- A. Sore throat
- B. Headache
- C. Fatigue
- D. Asthma



## Health

How does exposure to high level of indoor air pollutants affect students and teachers' health in short term?

- A. Sore throat
- B. Headache
- C. Fatigue
- D. Asthma



We are spending **>70%**  
of time indoors

- Maintain indoor air quality
- Enhance students' concentration and learning effectiveness





# Environmental Checklist





# Usage

- Evaluate the school's environmental performance based on the Environmental Checklist:
  - ❑ Regular Checks
  - ❑ Surprise Checks
- Environmental Checklist can be revised according to the school's situations
  - ❑ e.g. environmental facilities, pandemic arrangements, no. of GPs and rosters





# Usage

- Ways for inspection are **flexible!**
  - ❑ Frequency : at least once a month
  - ❑ Format : Floor/Class/Environmental Aspect as a monitoring unit
  - ❑ Division : Individual or in groups





# Usage

- Use the e-checklist at [Appendix 1](#)
- Record the **status of achievement**:

- ✓ = Achieved
- / = Partially achieved
- ✗ = Not yet achieved
- NA = Not applicable

## Appendix 1 Environmental Checklist

Achieved: "Y", Partly achieved: "/", Not yet achieved: "N", Not applicable: "NA"

Monitoring and Evaluation		1	2	3	4	5	6	7
Date		2021/11/26						
Energy Conservation	E1. Make use of the natural light as far as practicable and only switch on the necessary lightings on sunny days.	Y	✓	✓	✓	✓	✓	✓
	E2. Turn off lights, computers and other electrical equipment when not in use.	Y	✓	✓	✓	✓	✓	✓
	E3. Adopt natural ventilation (i.e. open windows and doors) and use fans when the outdoor air temperature is below 25°C and the outdoor air quality is good.	/	✓	✓	✓	✓	✓	✓
	E4. Maintain the temperature of air-conditioners in your classroom within the temperature range set under the school policy.	Y	✓	✓	✓	✓	✓	✓
	E5. Use the "Low Carbon Living Calculator".	/	✓	✓	✓	✓	✓	✓
	E6.		✓	✓	✓	✓	✓	✓
Date								
Water Conservation	W1. Turn off the tap and/or drinking fountain after use.	Y	✓	✓	✓	✓	✓	✓
	W2. Turn off the tap while soaping hands.	Y	✓	✓	✓	✓	✓	✓
	W3. Do not over water the plants.	Y	✓	✓	✓	✓	✓	✓
	W4. Check the taps, water fountains and/or toilets regularly and report any leakages immediately, if any.	/	✓	✓	✓	✓	✓	✓
Date								



# Usage

- Set **objective** monitoring methods
  - ❑ School-based: regular checks
  - ❑ One-off: surprise checks
- Can refer to examples in **Appendix 2**

**Appendix 2 Recommended Monitoring Methods**

	Best Practice	Monitoring Method (Example)
Energy Conservation	E3. Adopt natural ventilation (i.e. open windows and doors) and use fans when the outdoor air temperature is below 25°C and the outdoor air quality is good.	<ul style="list-style-type: none"> <li>• According to the school location, check the forecast of maximum temperature (from Hong Kong Observatory) and Air Quality Health Index (AQHI) (from Environmental Protection Department) in the morning</li> <li>• If the forecasted maximum temperature is below 25°C and AQHI is low, observe whether natural ventilation is adopted and/or fans are used</li> </ul>
	E5. Use the "Low Carbon Living Calculator".	<ul style="list-style-type: none"> <li>• Randomly select 5 classmates and check if they have used the "Low Carbon Living Calculator" within a month</li> </ul>
Water Conservation	W1. Turn off the tap and/or drinking fountain after use.	<ul style="list-style-type: none"> <li>• Observe classmates' behaviour for 10 minutes during recess/lunch break</li> </ul>
	W2. Turn off the tap while soaping hands.	
	W3. Do not over water the plants.	<ul style="list-style-type: none"> <li>• Observe classmates' behaviour when they water the plants</li> </ul>
Paper	R3. Use less paper towel and use handkerchief/towel instead.	<ul style="list-style-type: none"> <li>• Observe classmates' behaviour for 10 minutes during recess/lunch break</li> </ul>
	R4. Use both sides of paper.	<ul style="list-style-type: none"> <li>• Observe classmates' behaviour for 10 minutes during recess/lesson and check the waste paper recycling bin</li> </ul>
	R5. Bring your own water bottle.	<ul style="list-style-type: none"> <li>• Observe classmates' behaviour for 10 minutes during recess/lunch break</li> </ul>
	R6. Stop buying bottled water and drinks.	



# Environmental Checklist



## Energy Conservation (E)



# Energy Conservation Best Practices

- E1. Make use of the natural light as far as practicable and only switch on the necessary lightings on sunny days.
- E2. Turn off lights, computers and other electrical equipment when not in use.
- E3. Adopt natural ventilation (i.e. open windows and doors) and use fans when the outdoor air temperature is below 25°C and the outdoor air quality is good.
- E4. Maintain the temperature of air-conditioners in your classroom within the temperature range set under the school policy.
- E5. Use the “Low Carbon Living Calculator”.





# Energy Conservation Best Practices

- E1-E4 :  
Lighting, classroom and office equipment (e.g. computer, projector, smart blackboard) and air-conditioning consumes about 80% of energy
  - ❑ Make sure they are switched off when leaving the classroom / not in use
  - ❑ Make use of the natural resources (natural lighting or ventilation)





# Energy Conservation

## Best Practices

- E5: Encourage students to **reflect on their daily habits**
  - Checking: randomly pick 5 students from the class to see if they have done the calculation in the previous 1 month or school term



<https://www.carboncalculator.gov.hk/en>





# Overall Grade A "Hanson"

Your annual carbon emissions

2.6 tonnes CO<sub>2</sub> equivalent

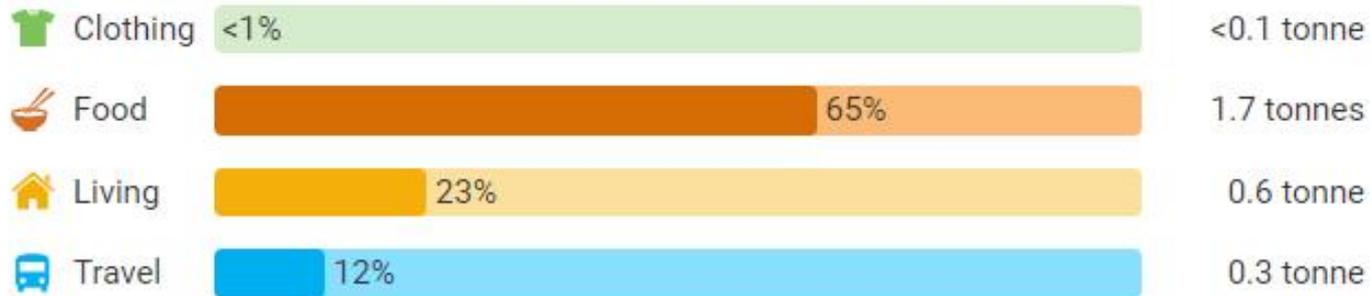


← Share  

Save report

Try to estimate your carbon emissions!

## Carbon Emissions by Category



Total emissions: 2.6 tonnes





Clothing



Food



Living



Travel

- Bring your own shopping bags.
- Avoid purchasing unnecessary items and choose more durable products.
- Adopt simple packaging and avoid gift wrapping.



Refer to the tips of low-carbon living, change your behaviour!

- Turn off lights and electrical appliances when they are not in use.
- Avoid leaving electrical appliances on standby mode.
- Choose electrical appliances with Grade 1 energy label.
- Choose gas appliances with "Voluntary Energy Efficiency Label".
- Install solar panels on roof and join the Feed-in-Tariff Scheme.
- Use energy saving LED lighting.





# Environmental Checklist



## Water Conservation (W)



# Water Conservation Best Practices

- W1. Turn off the tap and/or drinking fountain after use.
- W2. Turn off the tap while soaping hands
- W3. Do not over water the plants.
- W4. Check the taps, water fountains and/or toilets regularly and report any leakages immediately, if any.





# Environmental Checklist



Waste Avoidance &  
Reduction ( R )



# Waste Reduction & Avoidance

## Best Practices

Food Waste:

R1. Do not produce leftovers.

R2. Separate the food waste from lunchboxes, cutlery and/or containers to facilitate food waste recycling.



Paper:

R3. Use less paper towel and use handkerchief/towel instead.

R4. Use both sides of paper.

R5. Use collection boxes for collecting the one-side-used paper.





# Waste Reduction & Avoidance

## Best Practices

Plastics:

R6. Bring your own water bottle.

R7. Stop buying bottled water and drinks.

R8. Drink without straw or use reusable straws when necessary.

R9. Use reusable meal boxes, cups, bowls and cutlery (such as spoons, forks, etc.) at school.





# Waste Reduction & Avoidance

## Best Practices

Reuse & Recycle:

R10. Reuse folders.

R11. Use recyclables to make decorative items at school events (such as party, sports day, picnic, outing, fun fair, etc.).

R12. Put waste paper, metal cans and plastics into appropriate recycling bins.

R13. Collect printer cartridges for recycling.

R14. Practise clean recycling.





# Waste Reduction & Avoidance

## Best Practices

Remember the Principle!

REDUCE

REPLACE

REUSE

RECYCLE

- R1-14: Cherish resources, reduce waste, reuse and recycle
- Promote and remind schoolmates to practise collectively





- Local recyclables have broadened the scope to:
  - Glasses
  - Regulated Electrical Equipments (REE)
  - Rechargeable Batteries
  - Small Electrical Appliances
  - Fluorescent Lamps and Tubes

## What is REE?



- Air-con, Refrigerator, Washing Machine, TV
- Computer, Printer, Scanner and Visualiser





# Community Recycling Facilities



## Recycling Stations

Proactively connect with housing estates and property management companies in the respective districts to establish a service network through different recycling programmes and educational activities.



## Recycling Stores

With a view to enhancing the community recycling network, the Recycling Stores are set up at convenient locations to facilitate public participation in recycling.



## Recycling Spots

To facilitate and encourage the public to practice source separation of waste and clean recycling, Recycling Spots are progressively set up at regular location and weekly time schedule.



# Environmental Checklist



Greening,  
Nature Conservation  
& Biodiversity ( G )



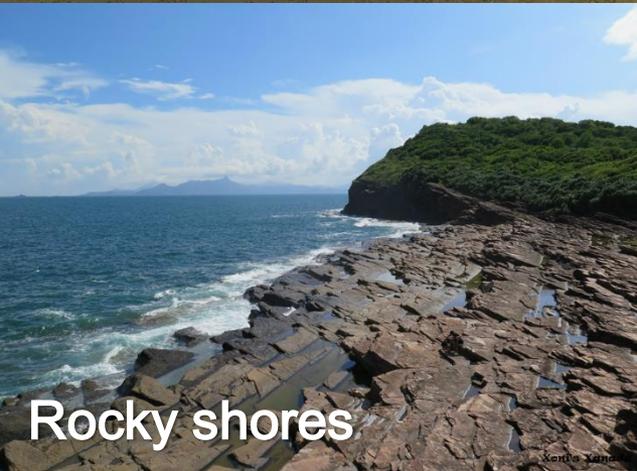
Sandy beach



Mangroves



Forest

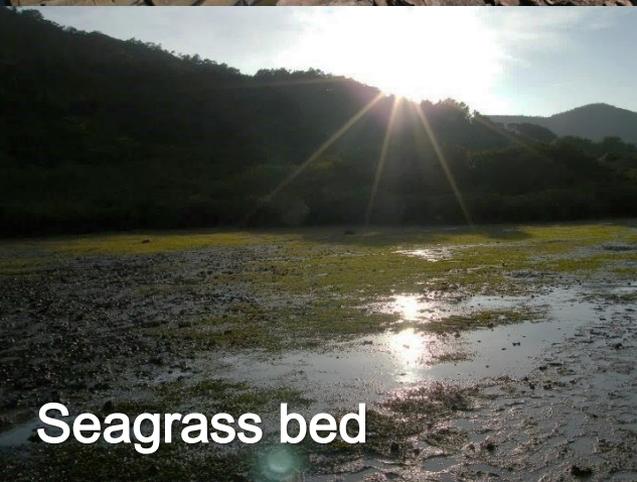


Rocky shores

**HK has rich  
habitat  
diversity!**



Mudflats



Seagrass bed



Freshwater streams



Coral communities



Sandy beach



Mangroves



Forest



Rocky shores

HK's rich  
biodiversity



Mudflats



Seagrass bed

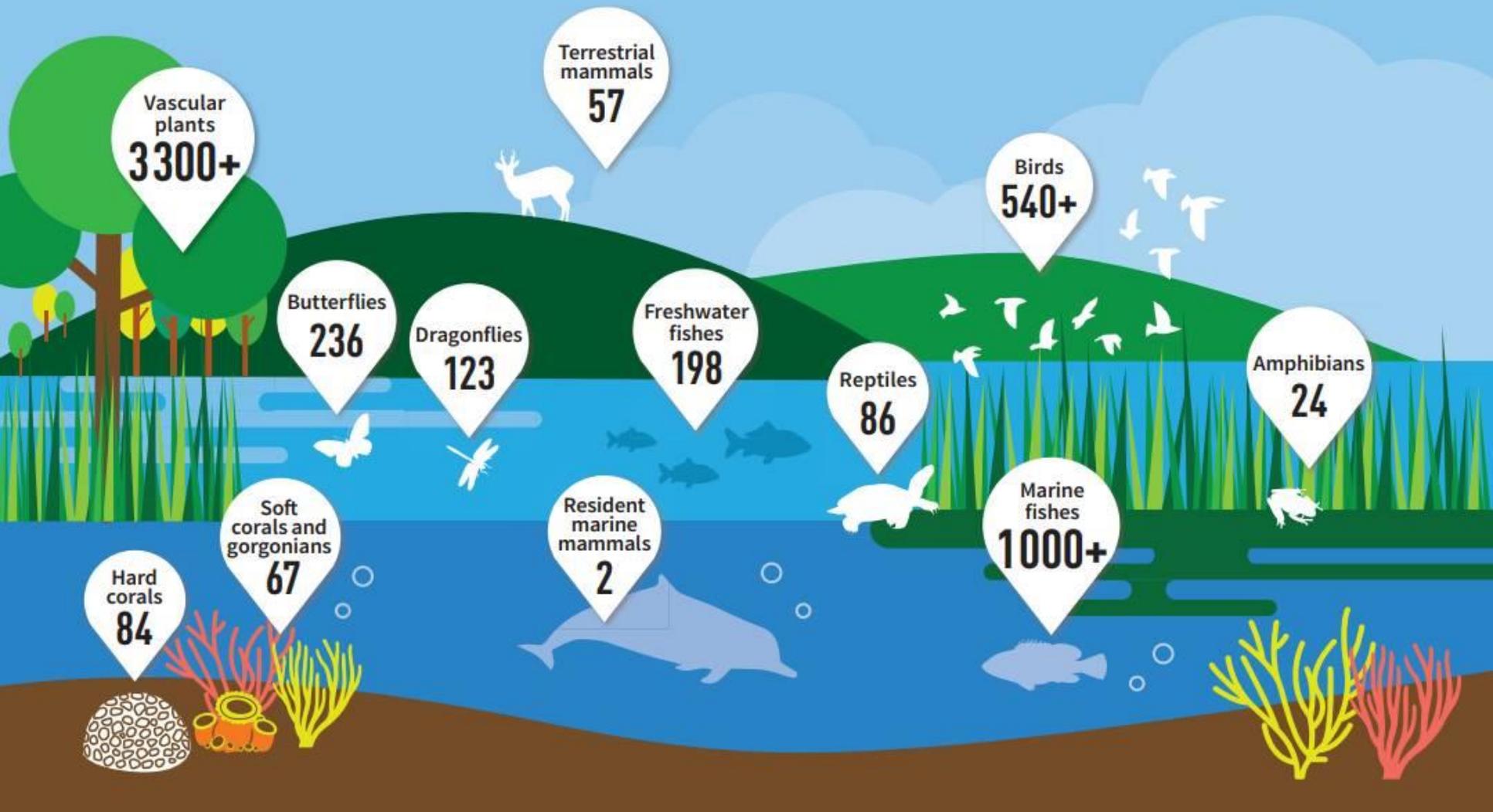


Freshwater streams



Coral communities

# Overview of Hong Kong's biodiversity



Feature of Hong Kong:  
Close Proximity between  
Urban and Rural Areas



*Physopelta gutta*  
Gutta Bug



*Obeidia tigrata*  
Orange Magpie Moth



*Lyssa zampa*  
Tropical Swallowtail Moth



# Household Biodiversity

*Pieris canidia*  
Indian Cabbage White



*Chremistica ochracea* Cicada



*Vespula flaviceps* Wasp



Green Lacewing



*Nyctemera adversata*  
Marbled White Moth





# Greening, Nature Conservation & Biodiversity

## Best Practices

- G1. Grow and look after plants in classroom, if any.
- G2. Grow and look after plants in green area/organic farm, if any.
- G3. Use organic fertilisers (such as compost) as appropriate.
- G4. Monitor the number of birds, butterflies and dragonflies at school regularly.
- G5. Practise “**Leave No Trace**” during school outings (e.g. school picnic, visits to country parks/geoparks, etc.).





# Greening, Nature Conservation & Biodiversity Best Practices

- G1-G3: Greening and plantations
- G4: Learn about biodiversity
  - Participate in **City Nature Challenge**
- G5: Remind students the principles of “**Leave No Trace**”





# HK Spider Survey: Example of Citizen Science



iNaturalist: @chiyi



iNaturalist: @ivanhsiu



# Environmental Checklist



Clean Indoor Air ( A )



# Clean Indoor Air

## Best Practices

- A1. Keep the rubbish bin in your classroom and/or food waste composter(s) on campus clean.
- A2. Keep your classroom clean and free of dust.
- A3. Clean up food or drink spills immediately to prevent mould or bacterial growth, if any.
- A4. Do not use stationeries containing high volatile organic compounds (VOCs) at classroom such as marker pens.





# Reflection and Planning

At the end of each **school term/school year**:

- Collect and compile the Environmental Checklist Record Sheet
- Evaluate the performance trends of different items
- Figure out the **highest/lowest** rated aspects
- Look for the reasons, make improvements!





# Reflection and Planning

## Appendix 1 Environmental Checklist

Achieved: "Y", Partly achieved: "/", Not yet achieved: "N", Not applicable: "NA"

Monitoring and Evaluation		1	2	3	4	5	6	7
Date		2021/11/26						
Energy Conservation	E1. Make use of the natural light as far as practicable and only switch on the necessary lightings on sunny days.	Y						
	E2. Turn off lights, computers and other electrical equipment when not in use.	Y						
	E3. Adopt natural ventilation (i.e. open windows and doors) and use fans when the outdoor air temperature is below 25°C and the outdoor air quality is good.	/						
	E4. Maintain the temperature of air-conditioners in your classroom within the temperature range set under the school policy.	Y						
	E5. Use the "Low Carbon Living Calculator".	/						
	E6.							
Date								
Water Conservation	W1. Turn off the tap and/or drinking fountain after use.	Y						
	W2. Turn off the tap while soaping hands.	Y						
	W3. Do not over water the plants.	Y						
	W4. Check the taps, water fountains and/or toilets regularly and report any leakages immediately, if any.	/						
	W5.							

- Conduct **objective evaluation**:
  - ❑ Total no. of elements: 5
  - ❑ No. of achieved elements: 3
  - ❑ Aspects' performance:  $3/5 \times 100\% = 60\%$
- Review **overall performance** of all grades and environmental aspects



# Reflection and Planning

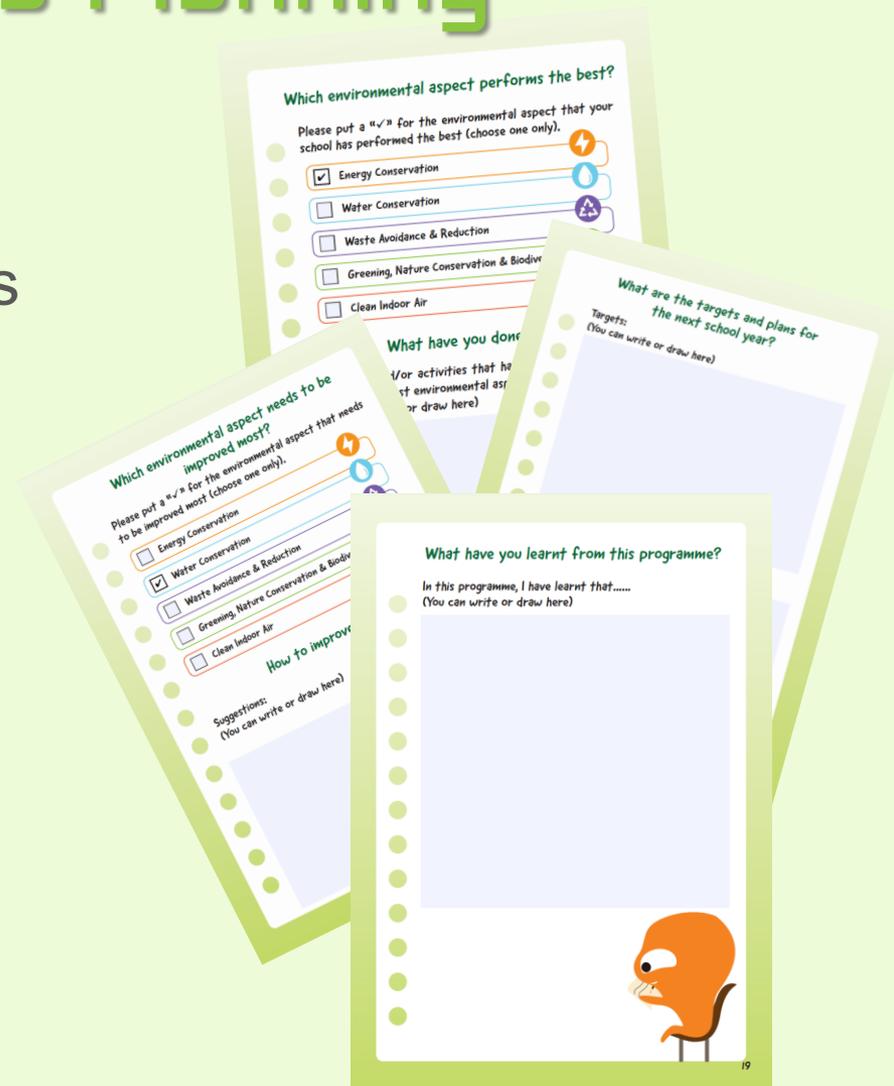
	S1	S2	S3	S4	S5	S6	Average Score (%)
Energy conservation	60%	80%	60%	80%	80%	70%	71.7%
Water conservation	33%	33%	66%	66%	66%	100%	60.7%
Waste Reduction	72.7%	63.3%	81.1%	63.3%	54.4%	81.1%	69.3%
Greening	50%	50%	75%	75%	75%	100%	70.8%
Clean Air	50%	50%	100%	50%	100%	50%	66.7%



# Reflection and Planning

At the end of each **school term/school year**:

- Propose feasible suggestions
- Set goals and plans for the coming school year
- Share your experience



## Which environmental aspect performs the best?

Please put a "✓" for the environmental aspect that your school has performed the best (choose one only).

<input checked="" type="checkbox"/>	Energy Conservation	
<input type="checkbox"/>	Water Conservation	
<input type="checkbox"/>	Waste Avoidance & Reduction	
<input type="checkbox"/>	Greening, Nature Conservation & Biodiversity	
<input type="checkbox"/>	Clean Indoor Air	

## What have you done?

Measures and/or activities that have helped my school to achieve the best environmental aspect:  
(You can write or draw here)

- Required the last student leaving the classroom to switch off all electrical appliances
- Organised inter-class competition for energy conservation
- Students' awareness for energy saving has enhanced significantly

## Which environmental aspect needs to be improved most?

Please put a "✓" for the environmental aspect that needs to be improved most (choose one only).

<input type="checkbox"/>	Energy Conservation	
<input checked="" type="checkbox"/>	Water Conservation	
<input type="checkbox"/>	Waste Avoidance & Reduction	
<input type="checkbox"/>	Greening, Nature Conservation & Biodiversity	
<input type="checkbox"/>	Clean Indoor Air	

## How to improve?

Suggestions:  
(You can write or draw here)

- In order to enhance students' knowledge of water conservation, we suggest to arrange:
  - Relevant talks
  - Exhibition on water conservation
  - Display of water conservation labels



# Green Activity Promotion

- Examples of promotion activity for various aspects
- Template for promotion activity



**Promotion Activity**

Name / Topic: \_\_\_\_\_

Activity: \_\_\_\_\_

Date, Time and Venue: \_\_\_\_\_

Aim: \_\_\_\_\_

Responsibility: \_\_\_\_\_

Participant: \_\_\_\_\_

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**Example of Promotion Activity for Energy Conservation**

**Part A**

**Activity** · Join the guided tour to Education Path of the Electrical & Mechanical Services Department (EMSD)

**Date, Time and Venue** · Date: 3 Jan  
· Time: 14:00 – 16:00  
· Venue: EMSD Headquarters (Kowloon Bay)

**Aim** · To enhance the knowledge of energy efficiency & renewable energy technologies  
· To understand the work of EMSD in electrical, mechanical & gas safety and its initiatives on sustainable development

**Responsibility** · Contact EMSD by Teacher Advisor (EMSD: 3757 6162)  
· Promote by School GPs

**Participant** · 30 teachers & students (including GP Group members & other schoolmates)

**Part B**

**Activity** · Sharing at school after the visit

**Date, Time and Venue** · Date: 9 Jan  
· Time: 8:30 – 9:00  
· Venue: School Hall

· Share by Head GP

· All school teachers & students

EMSD Lectures

Shading device

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# Promotion Activity

- Organise promotion activity for different aspects based on the school's situation
  - ❑ Aspects to be improved
  - ❑ Students' interested aspects
  - ❑ Subject-related aspects
- Plan for activity date, time and venue
- Consider activity's objectives and participants recruitment
- Join or communicate with external organisations for activity collaboration





# Promotion Activity (Example)

- Aspect chosen: Greening, Nature Conservation & Biodiversity
- Date: February 2023 (After exams)
- Time: Saturday AM
- Format: Eco-tour
- Target: All students (Open Recruitment)
- Objectives: Enhance students' understandings on ecological resources and geography





# Promotion Activity (Example)

- AFCD School Education Programme 2022/23  
[https://www.afcd.gov.hk/english/country/cou\\_vis/cou\\_vis\\_mar/cou\\_vis\\_mar\\_edu/cou\\_vis\\_mar\\_edu\\_sep.html](https://www.afcd.gov.hk/english/country/cou_vis/cou_vis_mar/cou_vis_mar_edu/cou_vis_mar_edu_sep.html)
- Refer to application form for activity date and time

Content	Target	Location	Date	Time
<p>A guided tour at the Hoi Ha Wan Marine Park.</p> <p>Observing coral community at the pier; understanding the functions and facilities of Marine Park; visiting a historical heritage, the lime kiln, which closely correlated to the marine ecological system; and mangrove ecology, etc.</p> <p>※ For better illustration and safety concerns, group size is limited to 30.</p> <p>※ Download worksheet (<a href="#">Primary school</a> / <a href="#">Secondary school</a>)</p>	Primary and Secondary students	Hoi Ha Wan Marine Park	Please refer to the dates in the Online Application Form	10:30am to 12:30pm OR 1:30pm - 3:30pm



# Promotion Activity (Example)

- Recruitment Quota : 30 ppx
- Green Prefect's duties :
  - Recruitment, screening and notify selected participants
  - On-day logistics and discipline
  - Post-event activity review
  - Reflect and evaluate, plan for the next activity!





# Expected Outcome



1. School and students **collaborative participation**
2. **Raise awareness** on environmental issues and green practices
3. Establish the **atmosphere** of a green campus



Knowledge

Owner-  
ship

Empower-  
ment



## Extend the effectiveness - Knowledge



- Carbon Neutral @ HK by Environment and Ecology Bureau  
<https://www.climateready.gov.hk/?lang=1>
- Energyland by Electrical and Mechanical Services Department  
<https://www.emsd.gov.hk/energyland/en/home/index.html>
- Hong Kong Renewable Energy Net by Electrical and Mechanical Services Department  
<https://re.emsd.gov.hk/english/index.html>
- Low Carbon Living Calculator by Environment and Ecology Bureau  
<https://www.carboncalculator.gov.hk/en>



- Water Conservation by Water Supplies Department  
<https://www.waterconservation.gov.hk/en/home/index.html>



- Indoor Air Quality Information Centre by Environmental Protection Department  
<https://www.iaq.gov.hk/en/home/>



# Extend the effectiveness - Knowledge



- Food Wise Hong Kong by Environmental Protection Department  
<https://www.foodwisehk.gov.hk/en/index.php>
- Hong Kong Waste Reduction Website by Environmental Protection Department  
<https://www.wastereduction.gov.hk/en/index.htm>
- A Waste Reduction Guidebook for Large Scale Event Organisers. Environmental Protection Department, 2018.  
[https://www.wastereduction.gov.hk/en/green\\_event\\_guide.htm](https://www.wastereduction.gov.hk/en/green_event_guide.htm)



- Country Parks by Agriculture, Fisheries and Conservation Department  
[https://www.afcd.gov.hk/english/country/cou\\_vis/cou\\_vis\\_cou\\_vis\\_cou.html](https://www.afcd.gov.hk/english/country/cou_vis/cou_vis_cou_vis_cou.html)
- Hong Kong Biodiversity Information Hub  
<https://bih.gov.hk/en/home/index.html>
- Hong Kong Geopark by Agriculture, Fisheries and Conservation Department  
<https://www.geopark.gov.hk/en>



# Extend the effectiveness - Connect

- EcoPark  
<https://www.ecopark.com.hk/en/index.aspx>
- EMSD Education Path  
[https://www.emsd.gov.hk/en/about\\_us/public\\_education/guided\\_tour\\_on\\_education\\_path/index.html](https://www.emsd.gov.hk/en/about_us/public_education/guided_tour_on_education_path/index.html)
- Lai Chi Wo  
<https://www.geopark.gov.hk/en/discover/attractions/lai-chi-wo>
- O • PARK  
<https://www.opark.gov.hk/en/index.php>
- T • PARK  
<https://www.tpark.hk/en/>
- Hong Kong Biodiversity Museum  
<https://hkbiodiversitymuseum.org/visits>





# Past Participating School Experience Sharing (Cantonese version with English subtitles) SKH Tang Shiu Kin Secondary School



贊助機構  
Sponsor



主辦機構  
Organisers



環境保護署  
Environmental Protection Department

教育局  
Education Bureau



# Programme Website and Support

- GP Programme Official Website  
<https://school.ecc.org.hk/en/programmes/gpp.html>
- Online Briefing Session Recording and PowerPoint  
<https://school.ecc.org.hk/en/resources/forms.html#gpp>
- Telephone hotline: 2835 2379





Thank you for  
your support!

