



# Low Carbon PLS Day

Teaching Resources for Kindergarten



Package-free



Eat Local



Eat Seasonal



# Low Carbon PLS Day

## Content

“Low Carbon PLS” Day Background Information	P.2
Introduction of Toolkit	P.2
Introduction of KG “Low Carbon PLS” Day Suggested Activities	P.3
Suggested Teaching Materials	P.3
Objective of Suggested Classroom Activities	P.4
Suggested Classroom Activities	P.5 – 8
Suggested Extended Activities	P.9 – 12

## “Low Carbon PLS” Day Background Information



In everyday life, every process from the production to the consumption of food ingredients generates greenhouse gases. Whether it's transporting non-local ingredients, excessive packaging, or choosing out-of-season ingredients, all of these increase energy consumption and result in higher carbon emissions. Excessive carbon emissions can lead to a series of environmental problems, impacting ecosystems and animal habitats.

Practicing a low carbon diet is an effective way to address climate change. The three major principles of low carbon diet include shopping Package-free, eating Locally and eating Seasonally, thereby reduce the environmental impact of food production.

The Hong Kong Ocean Park Conservation Alliance aims to promote the concept of a low carbon diet through the "Low Carbon, PLS" Day campaign, encouraging students to develop low carbon eating habits in their campus life.

At the student level, students can learn about the impact of food ingredients on carbon emissions through the "Low Carbon, PLS" Day campaign, and encourage classmates and teachers to practice low carbon eating habits at school.



## Introduction of “Low Carbon PLS” Day Toolkit

This set of toolkit is designed to support teachers in organizing educational activities and promoting the concept of low carbon eating within the school. Through various teaching activities and school-wide extension activities, the toolkit aims to enhance students' understanding of shopping package free foods, consuming local and seasonal foods, and cultivate their habits of low carbon eating.



## Introduction of KG “Low Carbon PLS” Day Suggested Activities



The “Low Carbon PLS” Day activities span across the entire school year. Schools can use theme activities to teach and cultivate children’s habit of low carbon diet in school life. Through activities, students can eventually bring the practice of low carbon diet into their daily lives.

Seahorse Rangers are suggested to assist in organizing the activities and promote the “Low Carbon PLS” Day to the school for participation.

### Main Learning Objective

- Understand the concepts of low carbon diet

### Low Carbon Diet (PLS)



**Package-free**



**Eat Local**



**Eat Seasonal**

### Suggested Teaching Materials

- Suggested Classroom Activities: Seasonal Picture, Seasonal Food Chart
- Suggest Extended Activities: Worksheet, Recipe



# Objective of Suggested Classroom Activities



Relevant concepts	Build interest in English
	Be aware of the relationship between mathematics and life
	Appreciate, respect and care for nature
	Live an environmentally-friendly life



## Goals

Through different activities, students should be able to:

- Understand the three concepts of “Low Carbon Diet” (Shop Package-free Food, Eat Local and Eat Seasonal)
- Distinguish different seasons and their corresponding seasonal food correctly
- Develop a habit of practising a low carbon diet

\*Teacher can adjust the content based on the students’ abilities and prior knowledge.

## Preparation

- Develop a basic concept of global warming through school life

## Introduction

1. Introduce the concept of global warming using the kid song “WeWaWeWeWa 救救地球！” or other stories related to global warming.
2. Explain to students that adopting a low carbon diet can help reduce global warming by sharing the “Low Carbon Diet Story” with them.

# Suggested Classroom Activities



## Part 1: Understand Low Carbon Diet (PLS)

1. Introduce global warming through the kid song or stories.
2. Introduce the three concepts of the “Low Carbon PLS” (Package-free Food, Eat Local and Eat Seasonal) through our “Low Carbon Diet Story”.
3. Introduce the basic concept of different seasons and seasonal food through a mini-game.

### Example

1. Play the kid song “WeWaWeWeWa救救地球！” (<https://www.youtube.com/watch?v=LWsYCI2uUkM>) or tell a story related to global warming to introduce the problem and impact of global warming.
2. Ask students how to limit global warming using multiple-choice questions, and lead up to the low carbon story.
  - Suggested questions:
    - Should we turn off the light when we leave the classroom?
    - What should we turn on when the weather is hot, a fan or an air-conditioner?
3. Introduce the three concepts of low carbon diet: Package-free Food, Eat Local and Eat Seasonal, and explain how these practices can limit the impact of global warming by telling the “Low Carbon Diet Story” (Content of the story can be found in Teaching Materials P.3–5).

# Suggested Classroom Activities



## Example (cont.)

4. Use the mini-games “Seasonal Multiple-choices Questions” and “Guessing Seasonal Food” to introduce the basic concept of different seasons and seasonal food (Teachers can adjust the content based on the students’ abilities and prior knowledge.).
- K1: “Guessing Seasonal Food”
  - K2: “Seasonal Multiple-choices Questions” (Winter & Summer), “Guessing Seasonal Food”
  - K3: “Seasonal Multiple-choices Questions” (Four Seasons), “Guessing Seasonal Food”
5. Use “Seasonal Multiple-choices Questions” to build the basic knowledge of seasons. Teachers can display a seasonal pictures as a reference (Seasonal Picture can be found in the Teaching Materials P.6).
- Suggested questions:  
(The format of the question can be open-ended or multiple-choice, depending on the children’s abilities and prior knowledge)

Question	Answer/Explanation
How many seasons do we have in a year?	Four
What seasons do we have in a year?	Spring, Summer, Autumn, Winter

# Suggested Classroom Activities



## Example (cont.)

Question	Answer/Explanation
What season is it now?	Spring: March, April and May Summer: June, July and August Autumn: September, October and November Winter: December, January and February
<ul style="list-style-type: none"><li>• Which season is the hottest/ coldest?</li><li>• What comes to your mind when you think about winter/ other seasons?</li><li>• What will you do in the summer/ other seasons?</li></ul>	Spring: Rainy/ Blooming flowers/ Easter Summer: Hot/Enjoying the beach/ Eating ice cream Autumn: Leaves turning to yellow, Mid-Autumn Festival/Having barbecue Winter: Cold/Christmas/Eating Hot Pot

### 6. Leading up to “Guessing Seasonal Food”:

- Ask: ‘We do different things in different seasons and we may also eat different food in different seasons. In what season will we usually eat watermelon?’
- In the “Guessing Seasonal Food” game, there will be silhouettes of different food on the seasonal food chart where students need to match the food to its corresponding shape. (Seasonal Food Chart can be found in the Teaching Materials P.7–10)
  - Teachers can briefly introduce the name of each food.

# Suggested Classroom Activities



## Part 2: Practice Low Carbon Diet (PLS)

- Practice a low carbon diet by eating local and seasonal food during snack time

### Example

1. Review the classroom activities by briefly introducing the seasonal food of the current season and the reasons for adopting a low carbon diet during snack time.
2. Provide locally produced or locally available fruits that are in season for students to eat during snack time.
  - Enhance students' understanding of low carbon diet and encourage them to practice low carbon diet in daily lives
  - Seahorse Rangers can assist teachers in distributing the fruits

## The Role of Seahorse Rangers

### Assist

- Assist teachers in setting up the story screen
- Assist teachers in preparing the fruit

# Suggested Extended Activities



Relevant concepts	Appreciate, respect and care for nature
	Live an environmentally–friendly life
	Use senses to explore the surroundings



Through different activities, students should be able to:

- Enhance their knowledge of low carbon diets
- Practise a low carbon diet daily

## Example

### Local Farm Visit

- Enhance students' knowledge of low carbon diets through the experience of picking local and seasonal vegetables at a local farm
- Promote the concept of low carbon diets to parents, and help students to develop a low carbon diet habit

#### Preparation

- Arrange a classroom activity to help students develop a basic knowledge of low carbon diets before the extended activities
- Prepare a parent notice and the activity worksheet
- Remind parents to reduce packaging by bringing their own containers in the parent notice



# Suggested Extended Activities

## Example (cont.)

1. Invite parents to attend the briefing session for the local farm visit and introduce the following:

a. What is a low carbon diet and how should we execute it?

- Package-free: Bring your own containers when purchasing food and daily necessities
- Eat Local: Consume food produced in Hong Kong
- Eat Seasonal: Consume suitable food according to the season

b. Objectives of the activity:

- Develop a habit of practicing a low carbon diet
- Help students to develop an interest in low carbon diets and practice it in daily lives

c. Activity Rundown: (Below is a suggested timeline, teachers can adjust accordingly)

Time	Content	Time	Content
09 : 00	Gathering	12 : 30	Lunch
09 : 10	Departure	13 : 30	Pick vegetable/ farm activity
10 : 00	Arriving at the farm	15 : 00	Sharing
10 : 30	Briefing	16 : 00	Return
11 : 00	Pick vegetable/ farm activity	16 : 10	Dismiss at school



## Suggested Extended Activities

### Example (cont.)

2. Distribute worksheets for students and parents to share their experience from today's visit. (Worksheet can be found in the Teaching Materials P.11)
  - Explain the worksheet to parents briefly (e.g. Fill in the weather and feeling emoji sections with colour to indicate the weather condition and their emotions during the visit.)

## Family Cooking Workshop

- Invite parents to participate in the family cooking workshop to enhance students' knowledge of a low carbon diet
- Promote the concept of a low carbon diet to parents, and help students to develop a low carbon diet habit

### Preparation

- Arrange a classroom activity to help students develop a basic knowledge of low carbon diets before the extended activities
- Prepare a parent notice and recipe (Recipe can be found in Teaching Materials P.12)
- Remind parents to reduce packaging by bringing their own containers for the fruit in the parent notice





# Suggested Extended Activities

## Example (cont.)

1. Invite parents to attend the “Family Cooking Workshop” briefing session and briefly introduce the concept of low carbon diet, the objectives and the run-down of the workshop.
2. Review the concept of low carbon diets with students before the workshop starts.
3. Prepare local and seasonal food options for parents and students to cook during the workshop, such as rice balls, salads, pizzas and sandwiches.
4. Share tips on practicing a low carbon diet during cooking (e.g. Excessive packaging non-seasonal ingredients found in snacks imported from other countries).

## The role of Seahorse Ranger

Encourage	<ul style="list-style-type: none"> <li>• Encourage participants to pick vegetables and cook together</li> </ul>
Assist	<ul style="list-style-type: none"> <li>• Accompany students whose parents did not attend the local farm visit with teachers (Local farm visit)</li> <li>• Assist teachers in preparing local and seasonal food (Family Cooking Workshop)</li> <li>• Assist teachers in distributing ingredients (Family Cooking Workshop)</li> </ul>
Promote	<ul style="list-style-type: none"> <li>• Form a promotion team to share the vegetables picked and share tips of adopting low carbon diet</li> </ul>



# Low Carbon PLS Day

## Toolkit for Kindergarten

1. Supplementary Powerpoint
2. Teaching Resources
3. Teaching Materials
4. Poster