

**Proudly hosted by Bangkok Patana School** 

#### Overview

The Bangkok Eco-Innovators: The Sustainable Solutions Challenge is an exciting, hands-on science and design competition for school aged students, inspiring them to create real-world solutions to environmental challenges. Participants will explore science, engineering, and design thinking to develop innovative ideas that support the United Nations Sustainable Development Goals (SDGs).

This year's **special guest judge** is **Sri Hollema**, BPS Alumni, **Founder of Mat Zero**, and **2025 UK Women in Innovation Awardee**, who will provide expert feedback and inspire the next generation of changemakers.

#### **Focus SDGs**

Participants will design a solution addressing one of the following sustainability challenges:

- SDG 7: Affordable & Clean Energy How can we develop innovative solutions that promote renewable energy, improve energy efficiency, or provide clean energy access for all?
- **SDG 11**: **Sustainable Cities and Communities** How can we ensure our cities and communities can live together in harmony over the long term and be resilient?
- SDG 12: Responsible Consumption & Production How can we reduce waste and create sustainable products?
- **SDG 13: Climate Action** How can we design a solution to lower carbon emissions or help communities adapt to climate change?
- SDG 14: Life Below Water How can we protect marine life or reduce ocean pollution?
- **SDG 15: Life on Land** How can we safeguard biodiversity and restore natural ecosystems?

# **Challenge Statement**

"How can we design a product, system, or solution that protects our planet and makes a real impact in our community?"

#### Who Can Participate?

- Open to individual students in Years 5 13 (Grades 4 12)
- Students will work independently but can receive guidance from teachers and mentors.
- The age categories will be:
  - Eco Sprouts (Year 5 & 6/Grade 4 & 5) Budding innovators taking their first steps in sustainability.
  - o **Green Pioneers** (Year 7,8 and 9/Grade 6,7 and 8) − Bold thinkers exploring creative solutions for the planet.
  - Future Guardians (Year 10+/Grade 9+) Young changemakers leading the way toward a sustainable future.

## **Competition Structure**

## 1. Research & Exploration

- o Learn about sustainability challenges related to SDG 7, 11, 12, 13, 14, or 15.
- o Explore real-world eco-innovations for inspiration.

#### 2. Design & Prototype

- o Develop a **creative solution** to an SDG challenge.
- Use recycled, repurposed, reusable or sustainable materials to build a prototype
- o Document the process through sketches, journals, or photos.

## 3. Showcase at the Eco-Innovators Expo

- Present prototypes to a panel of teachers, peers, and our guest judge, Sri Hollema.
- o Explain how their innovation promotes a sustainable future.
- Each participant will be provided with one table to display their creation which is 1.8m x 0.6m and one display board which is 2m x 1m. All other materials must be supplied by the student.

## **Judging Criteria**

A panel of **expert judges**, including Sri Hollema, will evaluate entries based on:

- ✓ Innovation & Creativity How original and inventive is the idea?
- Sustainability Impact How effectively does it address an SDG?
- Functionality & Feasibility Could it work in real life?
- ✓ Presentation & Communication How well does the student explain their idea?



# In each age group we will award:

- **Eco-Innovator of the Year** Grand Prize Winner
- **Best Innovation** Most creative and unique idea
- **Best Sustainability Impact** Solution with the biggest potential to help the planet
- **Best Engineering & Design** Most well-built and functional prototype
- **Best Communicator** Best presentation and ability to explain the idea

# All participants will receive a participation medal

The Big Finale: Eco-Innovators Expo 🐥

All students will showcase their projects at the **Eco-Innovators Expo**, where they will present their solutions and receive **expert feedback from Sri Hollema**.