

Company Registration Number: 196300098Z

Sembcorp Marine Marks 20 Years of Advancing Sustainability through Green Wave Environmental Care Programme

- Some 850 students submitted 216 projects in the 2022 year-long competition, with 76 awards, including cash prizes of up to \$10,000, presented at the awards ceremony yesterday
- Green Wave Competition is a key platform for schools to raise environmental awareness and promote development of innovative sustainable solutions in Southeast Asia
- 2023 Green Wave Competition is now open for registration

Singapore, 17 February 2023: Imagine having a meal and after consuming the food, you proceed to complete the gastronomic experience... by eating the cutlery!

To reduce the use of disposable cutlery and the impact of non-recyclable waste on the environment, a student from Huamin Primary School mooted the novel concept of edible spoons.

Entitled "Crunch Cutlery!", this creative green project of edible spoons to cut down the use of plastic won the first prize in the Primary School category of the Green Wave Environmental Care Competition 2022.

The year-long competition saw active participation with 216 project submissions from some 850 students from primary and secondary schools, junior colleges, institutes of technical education and tertiary institutions, with a total of 76 awards, including cash prizes of up to \$10,000. The awards were presented to the winners by Guest-of-Honour Mr Chan Chun Sing, Minister for Education, at the Green Wave awards ceremony held yesterday on 16 February 2023 (please click here for details of his speech).

Among the entries included a project which won first prize in the Secondary School category by students from Dunman High School which explored distilling herbal extracts from medicinal waste for use as a safe and effective solution with minimum environmental impact on aquatic ecosystems for controlling algae and bacterial in water bodies.

Another award-winning project which won top prize in the Junior College (JC)/Institute of Technical Education (ITE)/Centralised Institutes (CI) category was the creative idea by a team from ITE College West to mount Electric Vehicle (EV) chargers on lamp posts as a space-saving, cost-efficient installation alternative to the erection of standalone EV charging stations which takes up precious real estate.

A team of students from Temasek Polytechnic took home the first prize in the Tertiary category for creating an innovative solar-powered sustainable automated carbon capture device that aims to improve air quality and reduce carbon emissions.

Other entries comprise a wide spectrum of projects that offer innovative solutions for a plethora of environmental issues – ranging from natural fly repellents for use in East Java chicken farms to recycled eco-friendly marker ink, as well as sustainable and biodegradable food packaging to reduce plastic use.

Fostering Young Eco-champions of Tomorrow

Since its inception in 2003, the annual Green Wave competition has established its standing as a key environmental competition platform for schools and tertiary institutions in the region. The competition aims to foster in the young an appreciation of global environmental challenges.

Through a hands-on project-based competition, students are offered the unique opportunities of identifying environmental problems, conceptualising the solutions and developing the most viable options. Such an 'engineering approach' is the perfect way for students to develop their own abilities and expand their horizons beyond the classroom.

Over the last 20 years, more than 18,000 students have participated in the Green Wave Competitions.

The COVID-19 pandemic did not put a stop to this annual competition. The advent of technology allowed online interactions and virtual presentations, as well as the strong support from tertiary institutions in Southeast Asia contributed much to the success of this regional competition.

Mr Wong Weng Sun, Sembcorp Marine President and CEO, said: "We are pleased to mark 20 years of advancing sustainability through our Green Wave Environmental Care Competition. This long-standing competition reflects our steadfast commitment towards environmental protection and our firm belief in fostering young eco-champions of tomorrow to make a difference in Singapore and globally."

Launch of 2023 Green Wave Environmental Care Competition

The 2023 Green Wave Environmental Care Competition is now open for registration. Entry forms are available at https://www.sembmarine.com/greenwave.

Winning teams stand to win:

Primary School category

1st Prize \$4,000 2nd Prize \$2,000 3rd Prize \$1,000

Secondary School category

1st Prize \$6,000 2nd Prize \$4,000 3rd Prize \$2,000

JC / ITE / CI category

1st Prize \$10,000 2nd Prize \$6,000 3rd Prize \$4,000

Tertiary Institution category

1st Prize \$15,000 2nd Prize \$8,000 3rd Prize \$6,000 The first prize for the tertiary institution category is jointly sponsored by Sembcorp Marine and Shell International Eastern Trading Company. It also includes a one-month attachment with Shell International Eastern Trading Company and Sembcorp Marine.

The first prize for the JC/ITE/CI category is jointly sponsored by Sembcorp Marine and BP Shipping, and comes with a one-month attachment at BP Shipping and Sembcorp Marine as well.

At the discretion of the judging panel, additional prizes may be awarded including Team Awards (\$500), Good Presenter Awards (\$200) and Good Report Award (\$500 and applicable for JC/ITE/CI and Tertiary Levels only).

Winning Projects

Winners of the 2022 Green Wave Environmental Care 20th Anniversary Competition are as follows:

(A) Primary Level

| Prizes | School | Title of Project | Participants |
|---|----------------------------|---|---|
| 1st Prize \$4,000 | Huamin Primary School | Crunch Cutlery! | Marcus Teo Shao Lun |
| 2nd Prize \$2,000 | Westwood Primary School | Project DIY Upcycled Creative Kokedama | Azarie Bin Azahar, Shannon Lim Sze Yan, Joellyn Sim Yi Lin, Tee Jing Lun, Rainier Tan Zhen Xi, Ravier Tan Zhen Yang, Lee En Tong, Ainsley Chen Yu Han, Emily Han Hnin Soe, Grace Tan Xuan Ying, Avery Tan Mei Lin |
| 2nd Prize \$2,000 + Team Award \$500 | Dazhong Primary School | Let's Do The "Light" Thing! | Lo Shuk En, Sherlyn Haw Pei Ting, Juang Sophia Min Xuan |
| 3rd Prize \$1,000 + Team Award \$500 | Yishun Primary School | Tras D'Band | Rauzah Shafiah Binte Muhammad Sah, Princeton Hu, Nayli Athea Binte Mohammad Shari, Dhia Afiq Bin Anis |

(B) Secondary Level

| Prizes | School | Title of Project | Participants |
|---|--|--|---|
| 1st Prize \$6,000 + Team Award \$500 | Dunman High School (Secondary) | Inhibition of Marine Biofilm and Algae Bloom Wing Non-Toxic Herbal Extracts Encapsulated in Different Matrixes | Valerie Chan Wen Yun, Tan Ern Min, Travis Goh Zent Hng |
| 2nd Prize \$4,000 + Team Award \$500 | Catholic High School (Secondary) | Evaluating Calcium Lactate and Sodium Alginate Packaging by Frozen Reverse Spherification as a Potential Way to Replace Liquid Packaging in Sauces | Tangwanchai Takdanai. Ong Lun Kiat, Yip Chee Hoi, Goh Yeow Kun |
| 3rd Prize \$2,000 | Ngee Ann Secondary School | Fruit Peel Paper for Sustainable Packaging | Chua Ling Ying, Tan Lok Suan |

(C) Junior College/Institute of Technical Education Level/Centralised Institutes Level

| Prizes | School | Title of Project | Participants |
|---|---------------------|--|--|
| 1st Prize \$8,000 | ITE College West | Street Lamp Electric Vehicle (EV) Charger | Nathan Soh Jia Wei, Aprinno Chua Raka, Lee Guan Xian, Lieu Jia Le |
| 2nd Prize \$5,000 + Team Award \$500 | ITE College East | Recycled Eco-Friendly Marker Ink (REFMI) | Raden Alisyah Binte Raden Azmi, Nurul Fazeera Binte Mohamad Asri, Hannah Reanne De Leon Cruz, Derrius Cheng Wai Weng |
| 3rd Prize \$3,000 | ITE College East | Reuse Clean Plastic Bag Bin | Kriston Koh Kai York, Sun Kah Wai, Kyan Chong Jun Xiang |

(D) Tertiary Level

| Prizes | School | Title of Project | Participants |
|--|---------------------------------|--|---|
| 1st Prize \$10,000 + Team Award \$500 | Temasek Polytechnic | Project Breathe Easy (Sustainable Clean Living) | Vanessa Aislinn D/O Andy Philip, Dina Bte Mohd Nazirin, Justin Wong Guang Wei, Muhammad Aqil Bin Mohd Azhar, Muhammad Elias Bin Faizal, Jaedon Low Jing Kai |
| 2nd Prize \$6,000 | Universitas Negeri Malang | Essil: A Natural Fly Repellent and Disinfectant to Control Fly Population Boom in the Chicken Farm Area in Trenggalek Regency, East Java | Christian Hadinata, Viska Rinata, Ananta Ardyansyah, Noviachri Imroatul Sadiyah, Jasmine Nurul Izza |
| 3rd Prize \$4,000 + Team Award \$500 | Republic Polytechnic | Sustainable Packaging Material with Potential Antimicrobial Activity | Yu Wen Qian, C Devya Darshini, Nicole Lim Xin Yue, Toh Zhen How |

(The above are the main prize winners. List is not exhaustive. Please see <u>Appendix 1</u> for full list of winners and winning projects)

Photos



Guest-of-Honour Mr Chan Chun Sing, Minister for Education, speaking at the Green Wave awards presentation ceremony



Launch of the Green Wave 2023 Environmental Care Competition by Guest-of-Honour Mr Chan Chun Sing, Minister for Education, together with Sembcorp Marine's Representative of Management and former Chairman of Green Wave Committee Ms Wong Lee Lin, and Vice President and Head of Research & Development Mr Simon Kuik



Winner of the Primary-Level category from Huamin Primary School with Guest-of-Honour Mr Chan Chun Sing, Minister for Education



Winners of the Secondary-Level category from Dunman High School with Guest-of-Honour Mr Chan Chun Sing, Minister for Education



Winners of the JC/ITE-Level category from ITE College West with Guest-of-Honour Mr Chan Chun Sing, Minister for Education



Winners of the Tertiary-Level category from Temasek Polytechnic with Guest-of-Honour Mr Chan Chun Sing, Minister for Education



Guest-of-Honour Mr Chan Chun Sing, Minister for Education, being briefed by young participants on their green innovations



Guest-of-Honour Mr Chan Chun Sing, Minister of Education, engaging students at the Green Wave event



Green Wave participants from Indonesia marking the occasion with Guest-of-Honour Mr Chan Chun Sing, Minister of Education

Notes to Editor

Kindly download high-resolution images of the event here.

About Sembcorp Marine

Sembcorp Marine Ltd provides innovative engineering solutions to the global offshore, marine and energy industries. Headquartered in Singapore, the Group has close to 60 years of track record in the design and construction of rigs, floaters, offshore platforms and specialised vessels, as well as in the repair, upgrading and conversion of different ship types. Sembcorp Marine's solutions focus on the following areas: Renewables, Process, Gas, Ocean Living and Advanced Drilling Rigs.

Sembcorp Marine's customers include major energy companies, owners of floating production units, shipping companies and cruise and ferry operators. They are supported by four commercial units: Rigs & Floaters; Repairs & Upgrades; Offshore Platforms and Specialised Shipbuilding.

Sembcorp Marine operates shipyards and other facilities in Singapore, Indonesia, the United Kingdom, Norway and Brazil.

Discover more at www.sembmarine.com.

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