

ECOFRIEND AWARDS

PORTFOLIO OF RECIPIENTS

CONTENTS

- **02** INTRODUCTION
- 03 PRIVATE SECTOR CATEGORY

Mr Kelvin Ng Yu Teck

05 PUBLIC SECTOR CATEGORY

Mr Eng Boon Hwee

07 NON-GOVERNMENT ORGANISATIONS & GRASSROOTS VOLUNTEERS CATEGORY

Mr Veerappan Swaminathan Ms Wong Wei Qi

11 EDUCATIONAL INSTITUTIONS CATEGORY

Ms Azlina Ibrahim

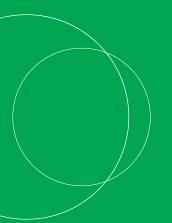
Ms Bor Bee Cheoh Eunice

15 YOUTH & STUDENTS CATEGORY

Ms Nor Lastrina Binte Hamid Ms Zheng Zhangxin Ms Oan Jia Xuan

21 SPECIAL THANKS

INTRODUCTION



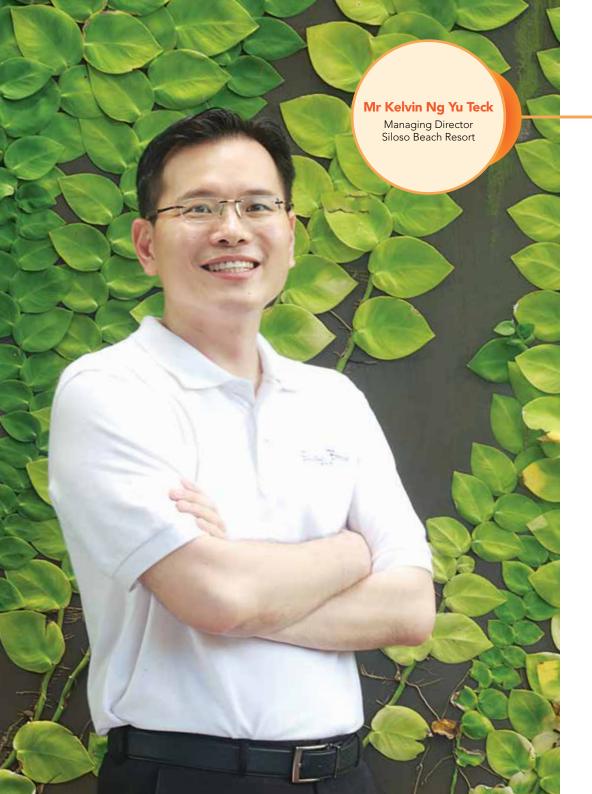
The **National Environment Agency (NEA)** is pleased to note that a growing number of individuals – such as school teachers, students, youth and community volunteers, as well as those from the non-government, private, people and public sector organisations – have contributed selflessly to our Clean & Green environment.

The EcoFriend Awards was developed by NEA to recognise and acknowledge the efforts of these individuals.

There are five categories in the EcoFriend Awards – Private Sector, Public Sector, Non-Government Organisations and Grassroots Volunteers, Educational Institutions, and Youth and Students.

The EcoFriend Awards 2016 recognises nine outstanding individuals for their environmental achievements.

For more information, please visit the EcoFriend website at **www.nea.gov.sg/ecofriend**.



PRIVATE SECTOR

CATEGORY

44 It is not impossible to do business while caring for the environment at the same time. It requires the organisation to come together as one to make a change.

Mr Ng helms the sustainability committee at the Siloso Beach Resort and integrates eco-friendly initiatives as part of the organisation's core business and corporate social responsibility. Under his charge, community engagement programmes sprouted and measures were put in place to ensure that the resort would be eco-conscious from development to operations.

Achievements

Creating an Eco-resort to be Proud Of

During construction, Mr Ng ensured the resort's natural terrain of 200 trees was preserved and 450 more were planted for a lush and green environment. In addition, 70% of the premises were kept open-air and a rooftop garden was built to reduce the reliance on air-conditioning.

For operations, its landscape pool uses underground spring water instead of potable water. Also, the resort utilises excess heat waste as an energy source to heat up water for showers and a hot water spa pool. This efficient heat-exchange chiller system consumes 25% less energy than conventional systems, and has helped the resort save an estimated \$180,000 per year over the past 10 years.

Sowing the Seeds of Sustainable Farming

Mr Ng initiated the resort's **Sustainable Farming Programme** growing organic

vegetables without pesticides, chemical fertilisers or growth accelerators. He also implemented vermicomposting and now has nearly one million earthworms that can convert 700kg of fruit and vegetable waste into 500kg of earthworm castings per month. The programme also included outreach to schools and the community through training sessions and donation of castings for their gardening projects. Since 2013, four schools have been inspired to set up their own wormery.

Sharing the Environmental Message

Messages on the resort's natural environment and rich biodiversity are conveyed via various platforms such as eco-tours, in-room television channels, and guest room booklets. Since 2007, more than 13,000 participants from schools, companies, organisations and community groups have learnt from these eco-tours.



PUBLIC SECTOR

CATEGORY

44 We cannot afford to waste any more time in saving our planet. Educating our younger generation on the risks of climate change and inculcating good recycling habits need to start now. 17

As advisor to the **School of Life Sciences and Chemical Technology's Green Volunteers Club (LSCT-GV)** in Ngee Ann Polytechnic, Mr Eng developed student programmes and activities to inspire students to care for the environment. He also collaborated with various organisations to work with his students on recycling projects, environmental research and outreach initiatives.

Achievements

Grooming Green Volunteers in LSCT-GV

Mr Eng not only mentors his Green Volunteers in developing green projects, he also grooms them to become NEA's Youth Environment Envoys (YEE) where some of them subsequently joined the Youth Planning Team in NEA's Youth for the Environment Day (YED). In addition, he implemented the "Return Your Tray" campaign in the school where students volunteer their time to remind canteen patrons to return their trays after meals.

Mr Eng and his students also initiated the Food Waste Reduction Programme, where participating stall owners proactively inform patrons on the ingredients served in their dishes. To prevent food wastage, patrons are able to tell stall owners upfront to omit any ingredients they do not wish to consume.

Partnering Eco-friendly Organisations

Led by Mr Eng, the school collaborated

with Keppel Club to organise the latter's annual **Earth Week** event by setting up exhibits and conducting environmental talks for visitors from 2012 to 2014. The school also worked with other partners such as Sembwaste Pte Ltd on recycling projects in the community, and St. John's Home for Elderly Persons, where students organised learning trails to Marina Barrage to educate the elderly on environmental topics.

Participating in Environmental Competitions

Under Mr Eng's mentorship, his students obtained the Bayer Young Environmental Envoy Award in 2012 and the HSBC Youth Environmental Award from 2013 to 2015. In 2015, he also co-supervised a student project which won the Environment Envoy award in the Greenwave Environmental Care Competition.



NON-GOVERNMENT ORGANISATIONS & GRASSROOTS VOLUNTEERS

CATEGORY

The act of making things useful again helps people gain respect for the environment. Once you understand the work that goes into making an item and that everything comes from the Earth, you will feel compelled to discard the "buy-and-throw-away" culture.

A strong believer in making things useful again, Mr Veerappan was inspired to do more than just recycling. His passion for sustainability propelled him to encourage Singaporeans to upcycle through dialogue sessions, workshops and other interactive programmes.

Achievements

From Recycling to Upcycling

Mr Veerappan started by conducting upcycling and environmental education workshops on converting bulk waste material into useful products. Most of these workshops were organised in partnership with schools, Community Development Councils and the National Library Board, and have reached out to about 25,000 people.

Repairing the "Buy-and-Throw-Away" Culture

Mr Veerappan started the **Repair Kopitiam** workshop series that supports the vision of a zero waste society by promoting a repair culture, thereby engaging the public on waste minimisation and the principles of 3Rs. More than 35,000 people have attended over 26 sessions since 2014, with an average of 32 items repaired per session.

Repair Coach Trainings are held on Sundays to train people to become repair coaches. To-date, 74 repair training sessions have been conducted to train some 90 regular repair coaches. For his contributions, Sustainable Living Lab Pte Ltd was awarded the President's Challenge Youth Social Enterprise Award in 2015.

Fostering a Green Future

In 2015, Mr Veerappan piloted **Future Fridays**, a platform that inspires new ideas for environmental sustainability through exhibitions and has attracted about 180 participants. He is currently organising the **Zero Waste Hackathon**, an initiative held across 10 South East Asian cities to bring people together to brainstorm and build prototypes for innovative solutions that focus on topics such as food waste, packaging waste and e-waste.



NON-GOVERNMENT ORGANISATIONS & GRASSROOTS VOLUNTEERS

CATEGORY

Leave on, everything else comes naturally. The control of the cont

As an Environmental Ambassador, Ms Wong initiated several projects to educate residents on how they can protect the environment by practising eco-friendly habits on saving energy, recycling and preventing pollution. The Youth Executive Committee (YEC) chaired by Ms Wong spearheaded several anti-littering and water conservation campaigns involving schools and the community.

Achievements

Bringing Eco Initiatives to the Heartlands

To raise awareness among residents on environmental issues, Ms Wong organised a series of environmental outreach programmes for the community. These included **Project Switch**, which educated 3,000 households on energy-saving measures, and **Project Earth**, a bi-monthly recycling initiative that has collected 15,000kg of recyclable materials since 2010. She also organised "Smashing the Records" in 2011, where 300 youths participated in an event to smash cans for recycling, setting a new record in the Singapore Book of Records.

In addition, Ms Wong organised HOPE Garden @ Indus Moral Care, a project which engages and keeps the elderly active through gardening activities. Since 2010, Ms Wong has engaged over

400 senior citizens on the use of natural composting. Ms Wong's efforts have helped the community centre achieve three awards, namely the NEA Clean and Green Singapore Best Constituency (Ownership) Awards, NParks Community in Bloom Silver Award (2010) and People's Association Youth Movement Special Award (2010).

Reaching Out through Various Campaigns

Ms Wong spearheaded campaigns such as **Artspiration**, a bi-monthly event that promotes environmental values to residents via exhibitions, game booths and performing arts, and the **Children's Litter Bug Campaign** where Hwa Chong Institution students educate young children on the value of keeping the environment clean through story telling.



EDUCATIONAL INSTITUTIONS

CATEGORY

44 I believe that children must learn how to be aware and get involved in conserving and protecting our environment. Efforts must start from home and the school, and we work collectively. Our small steps towards sustainability can make a huge impact. ??

Ms Azlina strongly believes that students should begin their Environmental Education (EE) journey from young. This belief prompted her to advocate EE as part of the school's core curriculum. As adviser to the school's Applied Learning Programme, she provides platforms for environmental training and leadership opportunities for students.

Achievements

Developing Environmental Education (EE)

Ms Azlina played a pivotal role in the development of EE in the school's core curriculum, for which the school was awarded the Niche School status in 2013. The curriculum expanded to include EE in the **Applied Learning Programme** in 2014, which includes a 3-tier student leadership development structure that trains student leaders on environmental issues through learning journeys and projects.

Grooming Youth Leaders in the Green Movement

Ms Azlina also encouraged her students to participate in NEA's training for **Environment Champions**, who have gone on to represent the school in environmental-related competitions such as Sembawang Wave Competition, Shell STEM – Science, Technology, Engineering

and Maths – Youth Innovation Challenge and Eco-Challenge.

Creating a Green Environment

Under Ms Azlina's mentorship, students developed a mobile application for the school's **eco-garden** and its six habitat-zones. The application enabled visitors to learn about biodiversity, water conservation and renewal energy through smart devices. The garden was conferred the Gold Award in NParks' Community in Bloom Awards from 2014 to 2016.

In collaboration with Micron Technology Inc., the school also initiated composting and alternative energy projects to support its Humanities and Science, Technology, Engineering and Mathematics (STEM) Programme. Through these projects, students learn to identify and analyse alternative views on environmental issues and evaluate possible solutions.



EDUCATIONAL INSTITUTIONS

CATEGORY

44 Environment conservation evolves from a small act and builds on the values of being considerate and innovative. If we inculcate such values in our children now, we can ensure a brighter future, and a cleaner and greener environment for everyone to live in.

Ms Bor heads the Environment Education in her school where she inspires students to "think green, act green and build green". Aside from developing sustainable green programmes for the students, Ms Bor also initiates collaborations with the community for her students to spread the word on green issues.

Achievements

Infusing Environmental Education in the Classroom

As Subject Head, Ms Bor developed a structured programme for staff and students to be actively involved in the green movement, comprising a Green Corner in all classrooms, the Environment Club, and Green Captains who were introduced as school-level leadership positions for students.

Learning beyond the Classroom

In 2009, Ms Bor introduced the **Monthly Recycling Day** for her students and has recycled about 29,000kg of recyclables in the last three years alone. She also implemented the "No Food Wastage" Week and "Save That Pen" Programmes to educate students on waste minimisation in 2014.

In collaboration with Applied Materials South East Asia Pte Ltd, Ms Bor helped to set up the **Solar eHaven** in the school, a self-sustainable rooftop garden which harnesses solar energy and harvests rainwater for plant irrigation. The garden won the MOE Innergy Commendation Award 2014 for experiential learning in environment studies.

Engaging the Community

With Ms Bor's guidance, the school has taken part in the annual **HDB Good Neighbours Project** since 2013, where student leaders visited residents in the neighbourhood to share topics on environmental conservation and good neighbourliness. Thus far, they have reached out to more than 300 residents.

Ms Bor also initiated a partnership with PCF Kindergartens in 2009 and has since educated about 400 kindergarten children on green issues and biodiversity through school visits and other activities.



YOUTH & STUDENTS

CATEGORY

Let's build a stronger climate movement in Singapore. "

Founder of **Singapore Youth for Climate Action (SYCA)**, Ms Lastrina dedicates her time to environmental activism. Besides participating in volunteering events, she also organises programmes to educate and empower local youth on the importance of sustainability and its positive impact on the environment.

Achievements

Inspiring Young Green Ambassadors

Ms Lastrina created **SYCA** as a platform for youths to join hands and take action in response to climate change. Their activities include a Learning and Leadership Programme (LLP) to groom future leaders who will continue to put climate change issues at the forefront of the sustainability agenda.

In 2016, Ms Lastrina co-founded **#LepakInSG** with some friends. The group put together a one-stop calendar listing of environmental events in Singapore, and organises discussion sessions and events that bring together like-minded individuals to exchange views on sustainability issues.

Speaking for Climate Action

Not only is Ms Lastrina a guest speaker under NEA's **Youth Environment Envoy (YEE) Programme**, she has also represented youths to speak on climate issues, for example at the United Nation's Paris COP 21 in 2015. She was

also a panellist at the NUS Masters of Environmental Management (MEM) Alumni's "Climate Change Negotiation Landscape" seminar.

Volunteering in the Community

Ms Lastrina's work in SYCA and #LepakInSG uplifts other green groups such as People's Movement to Stop Haze (PM.Haze) by providing them with a channel to tap on volunteers and publicise events. In addition, she actively supports PM.Haze by volunteering as an exhibition guide as well as providing advice on organisational development and campaigning. Previously a Team Manager with 350 Singapore, she took up key leadership roles and was the Chairperson of the ASEAN Power Shift 2015, which involved 200 participants from 10 ASEAN countries to build up knowledge and skills that help scale up the climate movement.



YOUTH & STUDENTS

CATEGORY

44 3Ps - Persistence, Passion and People - are the key to encouraging 3Rs practices and working towards a zero waste nation.

As the Environmental Secretary at Ci Yuan Community Centre Youth Club, Ms Zheng takes charge of fuelling the youths' interest and raising awareness on green efforts by organising several events. Ms Zheng's efforts have led to more youths jumping on the environmental bandwagon.

Achievements

Organising Competitions for Young Environmentalists

Ms Zheng led a team of 30 youths to organise several environment-related activities, such as the National Youth EnvirOlympics Challenge 2014 and 2016, and the Envir-O-Nation Forum in 2016. The former is a competition where ideas on reducing food waste were developed and evaluated on how they could be implemented, while the latter engaged and empowered more than 200 youths to take the lead and champion green efforts. Ms Zheng also collaborated with NEA in organising the ASEAN Plus Three Youth Environment Forum (AYEF) in 2016, which saw the participation of approximately 180 youths from ASEAN member states and China.

Promoting Recycling in the Community

In 2014, Ms Zheng introduced the **Recycling Arts Festival** to educate residents on waste management and recycling. In the following year,

Ci Yuan Community Centre Youth Club collaborated with students from Hougang Secondary School to produce 18 exhibition booths, which reached out to approximately 2,500 residents, an 800% increase from its inaugural launch.

Ms Zheng also organised and ran activities for pre-schoolers in support of the Clean and Green Schools' Carnival in 2014, which achieved an outreach of more than 100 pre-schoolers. Prior to that, she had already been an active member of the carnival since 2009 with her environmental outreach efforts that reached out to more than 1,200 students.

Breaking Recycling Records

Ms Zheng played a key role in leading youths in a record-breaking effort to create the world's largest sculpture made of 60,000 used beverage cartons – collected over two months by 70 participating local schools. This event was officiated by the Guinness World Records in 2014 and witnessed by over 2,000 youths at *SCAPE.



YOUTH & STUDENTS

CATEGORY

We have only one planet Earth which our children will inherit. Their future is in our hands, and we have to start caring a lot more. "

As President of her school's Green Council, Ms Oan has inspired her schoolmates and teachers to care for the environment. The young student leader has implemented several environmentally-friendly initiatives that have benefitted the school and the environment.

Achievements

Pushing for Eco-friendly Practices in the School

To reduce waste, Ms Oan convinced her school canteen vendors to replace disposable drinking cups with reusable ones. At a cross-country run, she led her team of Green Councillors to collect more than 500 used paper cups and plastic bottles for recycling. She also initiated the "Pass-It-On" initiative, where students could donate their used uniforms and textbooks for sale, and funds were raised for the needy.

Ms Oan introduced a policy which required classes to turn off the air-conditioner for four hours each week, saving 403 hours of air-con use from January to May 2016. Her Green Council also actively shares environmental messages by designing posters and stickers for their school.

Conducting Green Initiatives for the Community

In 2015 and 2016, Ms Oan organised **Primary School Green Camps** for 460 students to learn about environmental issues, and how they can reduce waste and initiate change in their homes and schools.

Ms Oan also led a team of four students on a project to reduce plastic waste in Singapore. Under **Project bECOme**, she conducted the **Lunchbox Experiment** with 25 participants at Raffles Place to understand how feasible it was for working adults to use lunchboxes to buy meals for 2 weeks. The experiment yielded positive results — more than half of the respondents had given feedback that they would continue doing so.

SPECIAL THANKS

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Mr Low Beng Huat

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Mr James Soh PBM, MBE

Executive Director
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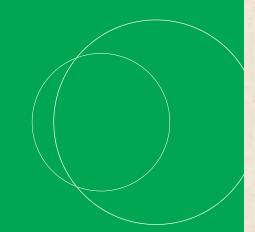
For enquiries, please contact:

Ms Phua Xin Yan

Executive
Corporate, NGO and Marketing Department
3P Network Division

DID: 6731 9863

Email: phua_xin_yan@nea.gov.sg





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