







Perhentian Eco Education Project, under the umbrella of Fuze Ecoteer, officially started in 2012.

Perhentian Eco Education Project primarily aimed to spread environmental awareness focusing on the younger generations of Perhentian Island as well as the villagers and tourists. Acting as the middle project, PEEP is vital in communicating the research outcome from PTP and PMRS to the villagers in educational and awareness platform.











PEEP is an important project to spread the findings and knowledge from the research conducted by PTP & PMRS to kick start the conservation effort of the beautiful island for the long term benefit of human and nature.

Starting our efforts with the young generation, eco education provides opportunities for them to understand and engaged in environmental issues that is happening around them and acquire problem solving skills and ultimately to be a powerful advocates.

Through education and awareness platform, conservation effort can be done effectively by having all stakeholders to be on the same page and help them making informed resource decisions.







OVERVIEW Aims and Objectives





Aim: Marine conservation in Perhentian Island lead by a joint effort from the local villagers and stakeholders for the long term benefits of human and nature.

Objectives: By 2027, at least 20% of eco club students are involved in conservation project / programme in Perhentian Island.





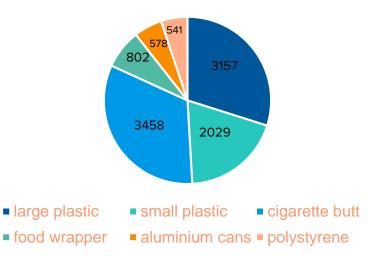
Sustainability Impact Environmental





- -We do joined beach cleanup with PTP & PMRS every Saturday and the data collection are shared in pie chart below.
- -Eco snorkeling briefing done every Saturday morning with a total of 727 tourist impacted from the briefing.

Beach Clean 2019







Sustainability Impact Social

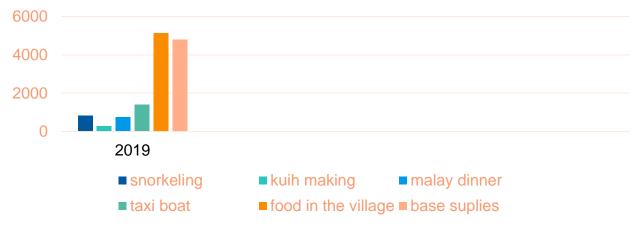




PEEP make sure that money spent will impact local community thus we only hire local boatmen for our boat taxi & snorkeling trip and spent locally on our food and base suplies. We involve local lady of Perhentian in community tourism such as kuih making & malay dinner activity.



Total amount spent locally



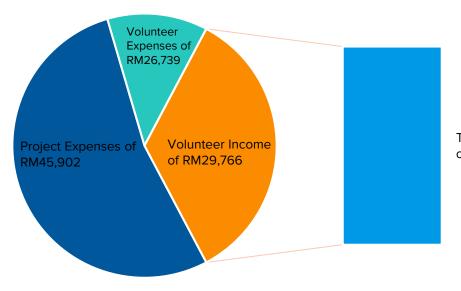


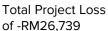
Sustainability Impact Financial





Summary of Financial state of PEEP in 2019









Project Activities Education





Focusing on education, PEEP conducted 3 classes every week with these objectives:

English Class: To see 50% improvement and confidence in English communication amongst SKPP student by being proficient in communicating what they've learnt about marine conservation to public/tourist/customers by 2025.

Junior Eco Club: As mean of introduction platform to students below 10 years old to eco education by aiming 80% students come back as active members in the senior club with 80% understanding of basic marine conservation by 2021.

Senior Eco Club: To see 30% of students actively involve in marine conservation in Perhentian Island by 2025

Classes run by PEEP in 2019	Total hours	Total Attendance
English Class (Tuesday & Saturday)	69hrs	310 students
Junior Eco Club (Friday)	20hrs	178 students
Senior Eco Club (Thursday)	20hrs	211 students





Project Activities

Citizen Science Programme





Extended from the Senior Eco Club, PEEP has introduced a citizen science programme to further deepen the interest & understanding of marine conservation amongst SKPP student.

Active members of Senior Eco Club will be able to involve in 3 key activities weekly and collect points to achieve the biggest reward: Diving license sponsorship to get them highly involved in marine research & conservation with PMRS.



Coral watch & fish ID

Coral watch programmes provides student with accessible information about coral reefs & climate change, and hands on experience collecting scientific data on coral bleaching using coral health chart

Kayak patrol

Students are on schedule doing kayak patrol, giving advice to tourist about corals & marine park rules while cleaning up debris floating around

Recycling machine

Students operates recycling machine by collecting plastic waste, sorting and recycling it to produce new product. A very important educational tools in understanding the concept of recycling and the reality of waste issues in the world



On October 2019, 3 eco club students have been selected to receive a junior open water scuba diving liscene sponsored by Panorama Diver. Students are committed to 3 scientific dive a year with PMRS, 1 turtle patrol with PTP and leading eco club classes in 2020.

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Citizen Science Programme	Total hours	Total Attdnce	
Coral Watch & Fish Id	33 hours	90	
Kayak Patrol	29 hours	52	
Recycling Machine	15 hours	40	

Project Activities Awareness Programme





Eco snorkeling Briefing

Eco snorkelling briefing were given to tourists on every Saturday at 9am at MJ Kampung Perhentian Kecil educating tourists about their environment and encouraging them to follow Marine Park rules while snorkelling.

Duration	Total pax
February - October	727 pax

Ecoteer Turtle Camp

In collaboration with Perhentian Turtle Project, 3 Ecoteer Turtle Camp was held to increase awareness on turtle conservation by offering first-hand experience in turtle nesting watching and releasing hatchlings to instil love and care about the endangered species. Students were selected from a list of active eco club members.

Junior Turtle Camp (1/2 day)	April	SKPP	50 students
Senior Turtle Camp 1 (2D1N)	June	Tiga Ruang	16 students
Senior Turtle Camp 2 (2D1N)	August	Tiga Ruang	15 students





Project Activities Waste & Recycling





Recycling system progress & recycling machine

A recycling system of wire mesh bin and jumbo bag were continued from 2018. A set of wire mesh bin (consist of 3 bins – plastic, cans, general) were placed at SKPP to inculcate the recycling habit amongst the student.

Once full, the recyclable waste will be transferred to a jumbo bag, also placed at the school before transported to the recycling centre in Besut. Same process applied to the waste collected from the beach clean activities done weekly.

Duration jumbo bag system	Total kg sent to Recycling Centre	
February - October	1158.24kg	

Plastic waste number 2 & 5 were separated, clean and stored at the recycling machine room located at the school to be recycled into a turtle pendant that were sold to resorts and tourists. Money collected were used to support the continuos beach clean activities and eco club programme & activities.





Project Activities Waste & Recycling





Annual SKPP Recycling Competition

Annual SKPP Recycling Competition was held on the whole month of August 2019 as a continuation of success from the 2018 competition.

The event was organised and executed by a joined effort of PEEP and PMRS, and SK Pulau Perhentian with the support from various stakeholder in Perhentian.

In total, 7 junior teams (7-9 years), 6 children each, and 13 senior teams (10-11 years), 3 children each participated.

Material	Total kg collected 2019 (1month collection)	In comparison collected in 2018
plastic	247.39kg	82.2kg
paper	768.41kg	225.8kg
aluminium	123.80kg	68.8kg
Plastic drinking cup	18.64kg	-

In comparison to 2018, the total collection of recyclable waste were triple in 2019. We hope the awareness starts to spread from the school to the whole village.

Thank you to all sponsors in support of this programme:

UMW Malaysia, Alunan Resort, Seavoice Diver, Safepark, Quiver Diver, Spice Diver, Seahorse Diver, Abang Sabri & Wok Li.





What we learnt





Education

- -Point system with rewards works really well in attracting regular attendance & commitment. We understand learning theory is important before getting them involve in the citizen science activities thus the focus next season is to build a strong yearly eco education module.
- -Free English tuition doesn't work as student lack of commitment. Receive some new suggestion by the headmaster.
- -Dikir Barat is a good try but hard to keep up at the middle of the season. We found one committed school staff that is keen to work on it next season.

Citizen Science Programme

-We observed student understand better and build attachments with the marine environment through citizen science activity thus a continuation of the activity with better strategy for research purposes is vital next season.





What we learnt





Waste & Recycling

- -The recycling wire mesh bin set (3wire mesh bin) works well as we see SKPP students pickup the habit of separating waste instantly when we create the recycling corner at the school.
- -We need good strategy & communication with the cleaner, waste barge & MDB in order to introduce the wire mesh bin system in the village as it needs commitment from them.
- -The jumbo bag system works well in making sure the waste are recycled but it consume too much energy and space thus hard to be introduced as a system that can be adopted by the villagers. We are still experimenting with simpler method of transporting the recyclable waste to mainland.
- -Septic tank and desludging issues becomes a highlight this season thus a proper strategy needs to be planned for next year on that matters.
- -Continuation of the recycling machine programme.





Next year and beyond





Education

- -Continuation of point system and rewards system
- -Designing eco education module to cover a whole season lesson plan.
- -A deposit system for English tuition. English Club focusing on reading, pronouniation and communication lead by volunteer to be introduced aside from the English tuition.
- -Introducing a survey system to measure student's understanding.

Citizen Science Programme

- -Working closely with Research Coordinator to fully utilized the data taken by the students.
- -We are also guarding Teluk Keke next season aside from our current house reef at the village beach.
- -Introducing water quality test & micro plastic data collection in the module.
- -Focusing on our first batch of junior diver to be involved in scientific dive!





Next year and beyond





Waste & Recycling

- -Strategizing a good communication plan with the cleaner, waste barge & MDB to introduce the recycling wire mesh bin system.
- -Strategizing a color coded plastic bag as a recycling system to replace the jumbo bag system.
- -Plan and strategy for a septic tank desludging happening in 2020.
- -Continuous communication with all stakeholder on waste & recycling issues.









THANK YOU

FUZE ECOTEER