

Responsible Tourism Policy

Introduction

Nikoi Island is a 15ha island in the South China Sea just 8km off the east coast of Bintan, Indonesia. Two thirds of the island is covered in virgin rainforest and the coral reef surrounding the island is rich in marine life.

The present owners acquired a leasehold title to the island in 2004. Whilst there were no inhabitants on the island when it was acquired, there were signs that at some stage it had been inhabited and farmed for coconuts. The current owners are a small group of friends who were disenchanted with the standard of holiday accommodation on offer within close range of Singapore. Cultural sensitivity, vernacular design, privacy and simple luxuries seemed unheard of. After obtaining the necessary government approvals, building began in earnest in 2005 and the first 6 houses were opened on the northern beach in May 2007 with the remaining 9 on the southern beach in May 2009. An additional 3 beach houses were added in 2020.

The success of Nikoi is evidenced by the fact that it has operated at over 90% occupancy for seven years with guests booking on average more than 4 months in advance in order to secure a room. The island is marketed without any advertising or the use of any intermediaries. Instead of advertising the approach has been to donate what might have otherwise been spent on advertising to The Island Foundation ("TIF"), a registered charity in Singapore and Indonesia that was established by the owners of Nikoi in 2009. Encouraged by the interest in Nikoi the owners opened a sister property called Cempedak Island In 2017.



A family enjoying one of the Two bedroom beach houses on Nikoi Island

The focus of the TIF has been on education. Eight learning centres have been established on Bintan Island and 2,700 students taught and more than 1,435 teachers have attended TIF's training programs.

Cempedak and Nikoi are both located within a Marine Protected Area (MPA) of 1.2mn ha that was gazetted by the Indonesian Government in 2007. The owners of Nikoi and Cempedak have put in an enormous effort into surveying the area and developing a management plan to see this important maritime area is better protected.

Philosophy and Approach to Responsible Tourism

Nikoi Island is quite unique in many respects. The concept has challenged, at all levels, the preconceived norms of what guests and stakeholders expect from a hotel or resort. From an environmentally friendly design that avoids the use of air-conditioning, to the use of fixed menus in the restaurant, to the establishment of two foundations, to the minimal use of energy and the recycling of water and waste; Nikoi has pushed the boundaries beyond which no other hotel in the region has gone. In the process the owners have shown that responsible tourism can not only be profitable for all stakeholders but also beneficial to the environment and without guests feeling that their comfort has been compromised.

From the outset, the owners had a strong desire to build and operate Nikoi in a sustainable and responsible manner. Nikoi is a proud and very active member of <u>The Long Run</u> and has adopted their objective of striving to achieve an optimal balance of Conservation, Community, Culture and Commerce (the "4Cs") and actively promoted the concept to other resorts in Asia encouraging them to join the organisation.

Conservation

Nikoi's commitment to conservation is to ensure that not only is the environment protected but where it has been damaged efforts are made to restore it. An important task in protecting the environment is to educate both Nikoi's guests and the local population. There are nature walks and sustainability tours available for the guests. Coastal beach clean ups are organised in collaboration with Seven Clean Seas ("SCS") with over 40 tonnes of plastic collected in 2020. Furloughed staff who participated received a salary and bonus to help supplement their incomes during the pandemic.

So successful has this program been that it has led to a permanent program being developed in conjunction with SCS. Twice a year clean ups are organised with local school children and talks are provided by leading naturalists. Documentaries have been screened and conservation is a component of the curriculum that is taught in the learning centres run by the Foundation. Regular surveys of the flora and fauna have been undertaken and are updated by a consultant naturalist and marine biologist. These surveys have helped identify 8 possible new species of fish and a number of very rare marine animals that were not known to be resident in the area or in a couple of cases had never been photographed in the wild before.



One of the beach clean ups organised in collaboration with Seven Clean Seas

In 2011 a marine conservation officer was employed to help survey the reefs and marine habitat around Nikoi. The goal has been to establish a proper management plan for the Marine Protected Area that was gazetted by the Government in 2007. In 2018 a MOU was signed with Conservation International (CI) to help develop a management plan for the existing MPA. Nikoi together with external donors has funded a detailed survey of the MPA that was led by Dr Mark Erdmann and Dr Gerry Allen from CI. This effort has led to the establishment of financing of a second foundation called Yayasan Ecology that is focussed on marine conservation. An expert on MPAs has been engaged to help the local government develop a plan that will benefit all stakeholders. A 3 year work plan has been agreed with the Fisheries Ministry and other stakeholders to help implement a management plan for the MPA.



The area outlined in red marks the Bintan's MPA and covers an area of 12,100sq km, an area which is more than 16x the size of Singapore.

The conservation team on Nikoi supports the work of the local fisheries department and the local marine biology university with students allowed access to the island and the use of equipment for research purposes. Furthermore students and professors joined the survey work led by CI.

Nikoi's staff regularly patrol the beaches to look for sea turtle nests fencing them to protect them from predators. This effort has resulted in thousands of hatchlings making it safely to the sea. So successful have our conservation efforts been that the island has recently seen the

critically endangered short clawed sea otters return to the island to nest.

As a concept Nikoi has demonstrated that luxury does not need to be a room full of electronic gadgetry and fancy fittings but rather simplicity, privacy, space, unique experiences and honest and friendly service can be more valued.

Nikoi's commitment to minimizing energy consumption is unsurpassed. Total energy and water consumption levels are well beyond best practice. The whole island runs on an average energy consumption of 13kW (approx 300kWhr/day) with approximately ⅓ of the energy being used in the production of water - something that most hotels would not have to take into account. Water consumption levels are similarly impressive with less than 20m3 used daily for 50+guests and 75+ staff resident on the island. The commitment to minimizing energy consumption went even further with the installation in 2013 of a 27kWp solar PV array and battery bank. The PV system was upgraded to 53kWp in 2019 allowing the island's generator to be switched off for up to 20 hours a day. During the pandemic when we had no guests renewal energy went to nearly 100% with the generators only run to keep them maintained.

Energy collected from solar PV arrays now provides more than half of the electricity for the island when the guest is fully occupied. The generator is run at its optimum efficiency with the excess energy being stored in the battery bank or used to run a small salt water desalination unit that helps take pressure off our water sources.

Nikoi goes to huge lengths to reduce, recycle, reuse or upcycle any waste and as a result is "zero-waste" (ie less than 10% of waste goes to landfill). No single use plastic bottles are shipped to the island (a policy that has been in place since opening in 2007). Nikoi avoids buying processed food and makes a lot of their own drinks, syrups and soda water. Suppliers are asked to only ship in reusable containers. All recyclable waste (steel and aluminium is returned to Bintan where it is sold/given to local collectors. To provide an incentive for staff to collect and sort the waste any money collected from waste goes to a staff fund. Waste is sorted into 17 different waste streams. Food waste is composted using an integrated system of biopods containing Black Soldier Fly larvae. Paper waste is used for bedding in the composting system as well as on permaculture gardens on the island and mainland. A glass pulveriser has been installed to process glass bottles. The glass sand that it produces is used in cement. There is no glass recycling program on Bintan. Sewerage waste is treated in aerobic and anaerobic septic systems. Many of the goods and souvenirs sold on the island are made from recycled products. This includes flip flops made from car tyres and bags made from recycled rice bags. Nikoi has purchased two "Precious Plastic" designed machines that allow plastic waste to be recycled into merchandise and art. The business now buys plastic waste to upcycle.

Nikoi has established a kitchen garden on Nikoi and a farm on Bintan. Both have been established using permaculture principles and only natural and organic fertilisers and pesticides. The aim is to provide fresher and better quality organic produce to our kitchen and better improve our knowledge of our food chain. The farm produces enough eggs, chicken, quail eggs for the islands to be self-sufficient. In addition a wide range of fruit and vegetables are grown organically with an emphasis on heirloom and local varieties.



An aerial picture of a portion of Nikoi's permaculture farm on Binan

Staff are encouraged to help develop ideas to make Nikoi more sustainable and a better place to work through a "Green Leaders" program. Staff from each department are invited to volunteer to participate in this program. Through this program staff have developed some great initiatives that have saved the company money, reduced the impact on the environment and made it a better place to work and learnt to be more sustainable in their own homes.

Community

Not only was Nikoi built and is operated using local and salvaged materials, labour and services but the owners have taken this one step further and taught many of their contractors and staff new trades and techniques. This has not only made operational sense but it has also meant that in the long run there is a mutual respect with the local community, staff and tradesmen all taking pride in the project.

Nearly 100% of the produce not grown on the farm is purchased from local markets or from small traders. Wherever possible middlemen are avoided and locals are actively helped to establish businesses that supply fresh, sustainable and organic produce. Nikoi has helped to establish many local businesses. Notably a car rental business that the company helped support from the beginning has grown 12 fold. The supplier of the 'alang alang' for the grass roofs was provided with training on the techniques which resulted in a 3 fold increase in the price of their product and at the same time decreased the frequency that the roofs have to be replaced and at the same time made the material entirely from natural materials. In helping these businesses set up and develop Nikoi has helped to improve these businesses significantly and had a much larger positive impact on the local community than other resorts. Nikoi has actively helped a number of staff establish micro enterprises supplying the business with goods and services such as bamboo straws, bamboo luggage tags, fruit and vegetables, yoga and cooking classes.

All of the staff working for Nikoi except for one staff member are Indonesian including our GM. The only full time expatriate staff member is employed as a Guest Relations Manager. Many of the staff started working for Nikoi during the construction phase and have gone on to learn new

skills that have allowed them to work in front of house roles. In 2017 Nikoi celebrated its 10 year anniversary with 15 staff who have been employed since 2007. Staff work a 5 day week whereas the standard working week in Indonesia is 6 days. A savings and loans scheme was established that has seen average savings rates increase to 20% of their salary and at the same time helped staff lower their borrowing costs significantly. Both formal and informal training is offered as well as helping find mentors for a number of staff. As a result of this Nikoi has tremendous staff loyalty and a very high staff retention (annual staff turnover over the last three years has averaged less than 10%).

Another contribution to the local community is the organizing of a twice yearly Coastal Clean Up event. This is organised together with the Ministry of Education and includes more than 120 children from 3 schools. The event is held not only to educate and increase the awareness regarding plastic and ocean pollution but also to help revive the traditional culture by showcasing dance, music and the racing of jongs (model sailing boats). Other coastal clean ups have been organised in conjunction with groups such a Seven Clean Seas. Many of our staff have volunteered to help and organise these activities. During the pandemic when staff were furloughed Seven Clean Seas paid our staff a daily wage for these clean ups.

The most significant impact that Nikoi has had on the local has been through the establishment of The Island Foundation to work with the local community on Bintan and neighbouring islands to help them to help themselves. The focus of the Foundation's effort has been to establish a network of learning centres so that the local children can be taught a curriculum that helps them to embrace the 4Cs (Confidence, Creativity, Collaboration, Critical Thinking). Education was identified by the village leaders as their most pressing need. In addition to education TIF has helped to develop programs to teach adults English and IT, health, nutrition, football, sanitation and arts and crafts. As these programs have been developed TIF has sought to hand them back to the villagers. Education remains the core focus of the efforts of the Foundation.

2,700 local children have been taught at the 8 learning centres that have been established to date. These children are gaining access to a whole new world of learning and education through the bilingual content based curriculum that has been developed by TIF together with some world leading educators. In addition to educating children the Foundation also provides teacher training workshops for local school teachers. These workshops are recognized by the Ministry of Education and provide the teachers with credit points for their own education that in turn allows them to obtain higher salaries. The impact of the programs run by TIF reaches over 15,000 villagers.

All of the Foundation's programs are run along secular lines. One of the villages that TIF works very closely with are the indigenous Orang Suka Laut or sea nomads. TIF has been working with them to develop an arts and crafts business, improved education and through Nikoi's contacts with the government opened up a dialogue with the government for them to address the issues that face this marginalized community. They were introduced to the idea of jewellery and in turn to designers from Swarovski Jewellery who helped them improve their techniques. This culminated in the exhibition of a fishing net sown with Swarovski crystals that was displayed at the National Museum of Singapore in January 2015. It was auctioned off to raise

money for a water treatment system that was installed for the village in 2016.



TIF students showing their home learning study materials during the pandemic. For many this was their only form of education during this period.

TIF is registered as a charity in both Singapore and Indonesia which has made it more attractive to external donors and the day-to-day functioning of the Foundation more transparent. The majority of the board of directors of TIF are independent. In this way the Foundation is growing to be a bigger and stronger entity than it would if the funding and management only came from Nikoi.

As a result of this the Foundation is now working with several institutions that support it through the provision of resources and donations (2 of which have committed S\$1mn to date). The Foundation has an excellent relationship with several schools in Singapore, notably United World College who have helped develop the curriculum, run teacher training workshops for local teachers, the provision of books and other teaching materials.

Culture

Bintan has always been relatively sparsely populated with a lot of migration into the area from a myriad of ethnic backgrounds and therefore lacked the strong cultural identity that you find in other parts of Indonesia. There are very few culturally significant sites on the island and none on Nikoi itself. Nevertheless Nikoi has worked with TIF to help document and salvage what remains.

The Foundation has helped document and promote local culture through several programs. Cultural exchange programs have been funded and a number of local cultural events sponsored. The arts and crafts program that the Foundation has helped set up has helped revitalize a number of dying art forms. In addition the Foundation has been helping the villagers document their history, stories and traditions. In the Orang Laut village in the North East of

Bintan the Foundation has helped the village petition to save two old charcoal kilns.

Twice a year Nikoi sponsors a local jong race (model sailing boats). These events have helped revive the racing of jongs on this coastline and helped create greater interest for the younger generation in this fascinating cultural tradition. Up to 250 competitors participate in these events helping bring together the community and take pride in their culture. Nikoi and its sister property Cempedak have jointly sponsored a race of manned traditional sailing boats (keloks) helping to revive interest in these sailing boats.

An artist residency program has been established together with a leading group of artists based in Singapore and artists coming from all over SE Asia.

Commerce

Nikoi operates on the overriding principle that a profitable business is the most sustainable one. A significant portion of the company's profits are reinvested each year to continue to grow the business and develop further opportunities. The company has several other projects in the pipeline as a result. Expansion of the business will allow the company to further build on their efforts in respect of Conservation, Culture and Community.

The company takes a long term and holistic approach to commerce and by being seen as a valuable resource both in terms of employment and business opportunities for the community this will benefit all stakeholders in the long run. The most visible aspect of this has been the commitment to The Island Foundation.

All of Nikoi's permanent staff earn above market rates, have employment contracts and are provided accommodation, uniforms, laundry, meals and medical cover free of charge. When medical treatment has not been available locally, staff and their family members have been sent to Singapore for treatment. In one instance Nikoi covered the cost of a six month treatment for Leukaemia for one staff member's child in Singapore.

The company has helped a number of start up businesses develop or expand. Nikoi has a preference for using local suppliers and service providers owned by local individuals.

Recognition - Responsible Tourism Awards

WTM 2019 - World Responsible Tourism Awards (Finalist)

WTTC 2019 Tourism for Tomorrow Awards (Finalist - Social Impact)

HICAP Sustainable Hotel Awards (Winner 2016 – Sustainable Communities)

Wild Asia Responsible Tourism Awards (Finalist 2009 and 2012, Winner 2015)

Green Hotelier (Winner 2015)

Global Initiatives - Sustainable Business Award Indonesia 2015

National Geographic World Legacy Awards, Earth Changes Finalist 2014

<u>Travel + Leisure – Global Vision Award (Sustainability) Finalist 2013</u>

<u>Treehugger – Best Resort 2012</u>

Conde Naste Gold Standard Award 2014

The Long Run Alliance Member

As a member of The Long Run Nikoi has been subjected to a detailed review in 2015 and an external audit in 2018 and is in the process of applying for GER status. GER status is recognized by the Global Sustainable Tourism Council. Only 12 hotels in the world have GER status.

Achievements to date

Below is a list of the achievements of The Island Foundation:

- 1. Established 8 learning centres with plans to open more
- 2. Developed a Content Based Language Learning (CBLL) curriculum that helps children with their 4Cs (confidence, creativity, collaboration, critical thinking) and sets them on a path of learning for sustainability
- 3. Over 2500 children educated and 1100 teachers
- 4. All children are assessed for their knowledge
- 5. Running bilingual daily classes that are free to attend
- 6. Provided employment and training for the locals staffing the learning centres
- 7. Developed a strong link with UWCSEA with both teachers and students collaborating time and resources
- 8. Developed an impact assessment so the impact of the teaching can be assessed
- 9. Registered the Foundation as a charity in both Singapore and Indonesia
- 10. Hosted batik workshops for 40 locals by Singapore's leading batik artist Said Sakarsi
- 11. Hosted teacher training workshops in conjunction with UWC one of Singapore's leading international schools
- 12. Established a retail brand (Kura Kura) to sell local arts and crafts
- 13. Helped villagers develop artisanal products to be sold under the Kura Kura brand
- 14. Planted mangroves and mahogany trees
- 15. Arranged for school students from Singapore to teach at the learning centres
- 16. Organized for Singapore based musicians and creative arts groups to perform at local schools and the Foundation's learning centres
- 17. Organized for Nikoi's naturalist to talk to the local children about the environment
- 18. Established a program for guests visiting Nikoi to donate books to the learning centres
- 19. Raised hundreds of thousands of dollars from external donors to help fund the Foundation
- 20. In conjunction with the National University of Singapore designed and installed a PV system to power laptops for the learning centres
- 21. Filmed and documented local cultural events
- 22. Helped locate patients for a Cleft Palate program run by Smile
- 23. Organized a group of village leaders to visit the PDA programs in Cambodia and Thailand
- 24. Helped organize and sponsor annual jong (traditional model sailing boat) races
- 25. Worked closely with Orang Laut village in Berakit to protect 2 kilns to be used for alternative uses (the government was going to tear them down)

- 26. Trained villagers on how to control mosquito populations using ovitraps
- 27. Developed a bilingual curriculum for learning centres
- 28. In conjunction with Swarovski helped the villages make a fishing net that was exhibited in the National Museum of Singapore. It was subsequently auctioned off to raise money to build a fresh water treatment system for the village that was built in 2015
- 29. Established a learning farm for growing organic products and to learn about composting
- 30. Established a weekly football program
- 31. Organised a medical screening for more than 100 villagers
- 32. "Plastic Ocean" movie screening in two learning centres attracting more than 200 viewers
- 33. Established drinking water system and bottling plant to be managed by Panglong villagers
- 34. Organised regular creative arts workshops for the children
- 35. Organised football training workshops for coaches in Singapore and Bintan

Below is a list of Nikoi's achievements to date:

- 1. A vernacular building design which has minimal visual impact
- 2. Siting of all buildings and infrastructure to avoid cutting down trees and major earthworks
- 3. All natural materials and some recycled materials (ie driftwood), sand floors, sand paths
- 4. Furniture built on site using driftwood or recycled timber
- 5. Natural ventilation instead of air-conditioning
- 6. Solar hot water systems installed throughout the property
- 7. Recycling of water for toilet flush and gardening
- 8. 53kWp solar PV array installed with accompanying battery bank installed (first installed in 2013 and upgraded in 2019)
- 9. Minimal landscape lighting so as not to disorientate nightlife (particularly nesting turtles)
- 10. Low voltage LED and CFL lighting used exclusively
- 11. No tvs, dvds, phones or mini-bar fridges helping to reduce overall consumption of manmade materials and overall energy consumption
- 12. Planting of indigenous trees and shrubs
- 13. Local building materials were used almost exclusively
- 14. Local tradesman (training many in the process)
- 15. Local produce is used almost exclusively and almost no processed food is purchased
- 16. Established the Island Foundation to improve education standards and helped to establish sustainable community development programs
- 17. Fairtrade Indonesian coffee used, decaf coffee is produced using Swiss Water method (ie no chemicals)
- 18. Boats were constructed and are maintained by local shipyards
- 19. If available, second hand machinery has been used rather than new
- 20. Recycling of waste (aluminum, glass, paper, cardboard and kitchen waste)
- 21. Banning of single use plastic drinking water bottles
- 22. No imported or local mineral waters are sold on the island
- 23. Carbonation of Nikoi's own water for soft drinks and mineral water
- 24. Homemade syrups for soft drinks using locally grown ingredients (ginger, lemongrass, hibiscus, tamarind and nutmeg fruit)
- 25. Banning of plastic straws (handmade bamboo ones are used) helped establish micro

- business as a result
- 26. Drinking water is provided in reusable glass bottles
- 27. No printed brochures
- 28. Minimal use of plastic both in operations and in construction
- 29. Almost no painted surfaces
- 30. No fogging for mosquito or insects
- 31. Natural mosquito control using an automated ovitrap
- 32. Lemon grass planted around houses to repel mosquitoes
- 33. Toiletries made from natural ingredients are supplied in reusable containers
- 34. Biodegradable takeaway packaging and bags used
- 35. Sunscreen sold on island is reef friendly
- 36. Naturally dried laundry
- 37. Implemented a fixed menu to reduce food waste
- 38. Homemade muesli, juices, jams, bread, sambal, bar snacks, coconut milk, ice creams, yoghurt, cookies and pasta
- 39. Herbs, spices and some fruits are grown on the island
- 40. Established 7ha permaculture farm to grow eggs, fruit and vegetables
- 41. Minimal processed food used
- 42. Compliant with WWF sustainable seafood guide
- 43. Daily cleaning of beaches and removal of garbage
- 44. Organised regular cleans up of neighbouring islands
- 45. Established a micro enterprise for villagers to collect polystyrene foam on nearby beaches and recycle it for fill in bean bags. Bean bags made from recycled sails.
- 46. Swimming pools use salt water chlorination
- 47. The reject water from the desalination unit can be reused to top up salt water pool ie no salt or chlorine is added
- 48. Petitioning of Singapore port authorities to stop dumping at sea
- 49. Established a coastal surveillance system to monitor and report on illegal dumping
- 50. Ensured an undisturbed intertidal zone
- 51. Two thirds of the island has been preserved as a sanctuary
- 52. Environmental impact survey undertaken prior to construction
- 53. Regular surveys of the island's flora and fauna (land and marine) by external consultants
- 54. Flora and fauna information guides in each guest room
- 55. Detailed description on environmental policy and CSR policies provided in room info
- 56. Program to protect nesting turtles and monitor their nests.
- 57. Helped researchers with their WW2 research
- 58. Provided access to the island for researchers studying sea levels
- 59. Program to eradicate rats that were resident on the island when it was acquired
- 60. Zoning of Nikoi as a conservation area
- 61. No trees removed and many new trees planted
- 62. Two natural grass tennis courts have been built
- 63. Developed a natural paint for marking lines on the tennis courts
- 64. English lessons (weekly) and first aid training programs have been offered to all staff
- 65. Opportunities provided for all staff to learn new skill sets using external trainers (barista training, rock climbing, mixology, scuba, nature, sailing, windsurfing, tennis, cooking, first aid,

- life saving, wine training, spa, conservation, creative arts, tree felling, workplace harassment, sustainability). In addition all staff are provided weekly English lessons
- 66. External mentors have been introduced to staff in key roles
- 67. Guest chef visits and performing artists have helped train our staff and at the same time performances for the community have been provided by these visitors
- 68. Introduced cultural activities as part of the kids club program
- 69. Nikoi has donated numerous free stays to fundraisers held by charities in Singapore.
- 70. Established a program to allow families of staff to visit and stay on the island
- 71. Installed an aerobic wastewater treatment plant.
- 72. Linen has been replaced with organic cotton
- 73. Installed glass bottle pulveriser so glass can be recycled
- 74. State of the art shower heads were installed reducing total water consumption by 20%
- 75. Establishment of a staff savings and loan scheme. This is a separate entity managed by staff. Staff are now saving on average 20% of their salaries.
- 76. Introduction of a 5 day working week. The norm in Indonesia is a 6 day working week.
- 77. Recycling of grey water for watering gardens and toilet flush.
- 78. Installation of a drinking water treatment plant using rain water. Includes soda making facility and remineralisation of the water.
- 79. Routine quality measurement of drinking water, ground water and wastewater
- 80. Installation of 1700m2 of catchment area for rainwater harvesting
- 81. Provided equipment, boats and staff in numerous emergency or recovery situations
- 82. Provided guided nature walks and sustainability tours for guests
- 83. Empowered local business by supporting the family members of staff to supply some of our needs such as bamboo straws, bamboo luggage tags and others
- 84. Established a closed-loop system to compost food waste by using Black Soldier Fly larvae
- 85. Organized twice yearly Coastal Clean Up event for three fishing villages by working together with Bintan Education Board and some elementary schools nearby
- 86. Created Sustainable Purchasing Guidelines as a reference in supply chain management
- 87. Complimentary sustainability tours are provided to guests
- 88. Hosted the first Asian gathering of Long Run members
- 89. Established a waste water garden system at Kawal as a secondary treatment for treating wastewater
- 90. Working together with international organization Conservation International to help in conservation and establish an MPA (Marine Protected Area)
- 91. Helped establish and fund a local conservation NGO (Yayasan Ecology) to develop and implement a management plan for the MPA.
- 92. Funded a comprehensive dive survey of the area led by Dr Mark Earmann
- 93. Dive surveys have confirmed 2 new species to man and 219 new species for the area
- 94. Six species of fish are awaiting confirmation that they are new discoveries
- 95. Established monitoring program for the critically endangered Irrawaddy dolphins, Dugong, Whale Shark, Short Clawed Otter and several other rare and endangered species.
- 96. Zero waste (less than 10% of waste goes to landfill). Waste is separated into 17 different streams for recycling/upcycling.
- 97. Plastic positive (more plastic removed from the environment than used.
- 98. Established a green leaders program for every department to share best practices and ideas

- for improvement
- 99. Established a Green Leaders program so that each department can introduce new initiatives and help implement these within their departments.
- 100. Provide sustainability tours for both adults and children to showcase the initiatives.
- 101. All diesel engines using biodiesel 30
- 102. Sponsored traditional sailing boat (kelok) race

Future commitment and goals

Short term

- 1. Expand permaculture gardens to increase vegetables and fruits grown on the island and on the farm
- 2. Establish a formal training program for existing staff and external candidates
- 3. Establish a plan to help improve areas where the reef has been damaged
- 4. Continue to improve our knowledge of food sources and continue to ensure that seafood in particularly is from sustainable stocks and sources
- 5. Establish recycling/sorting centre on Bintan to further process waste from Nikoi and the local communities

Long term

- 1. Help to develop an effective management plan for the existing MPA
- 2. Employ local fisherman to help protect no fishing zones
- 3. Increase the use of renewable energy sources for power generation
- 4. Reduce carbon emissions to zero
- 5. Increase rainwater catchment and storage

This policy paper was updated by Andrew Dixon in March 2021 and is reviewed and updated annually. A copy of this paper has been translated into bahasa for staff who are not fluent in English.



One of the possible new fish species identified by Dr MV Erdmann. Bathygobius sp., Nikoi Island Credit: MV Erdmann