

Pick Up Plastic : Solar Powered Pick-up

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Solar Powered Vessels

Recognising the need for more efficient trash-collecting boats in Hong Kong, we have designed vessels that can efficiently collect, sort and unload trash from our waterways. Our boats are 100% solar powered with zero emission outputs.

Solar Panels

Providing enough power to maintain the on-board battery bank during operation.

Twin Electric Outboards

Allowing the boat to spin on the spot and manoeuvre easily in tight spaces.

On-Board Sorting

Sorting deck allowing for rubbish to be divided for recycling and landfill.

Two-Stage Filtration System

A primary rake collects large pieces and a secondary net catches smaller particles.

100%

Green Powered

2565 litres

Capacity Per Load

GPS

Remote Monitoring

The development and operation of the boats are part of a partnership with the HSBC Clean Waterways Programme, which includes a series of community education and volunteer programs to help address and raise awareness of the plastic waste issue.

The objectives of the Clean Waterways Initiative align closely with the Clubs program of "Picking Up Plastic". Our target is for water sports people to be aware of the need to remove plastic from the water and to provide the means for doing it.

The SWG have identified with Clean Waterways Initiative how the Club could support their activities which fully align with the Clubs sustainability objectives. General Committee has endorsed a 5 year agreement for the Club to provide technical assistance and support. For example, there may be periods of limited sun when the solar power is not adequate to power the vessels. The Club has agreed to provide free of charge an electrical supply to the pontoon at Kellett Island. So you may see the vessels moored alongside, especially overnight, or in times when the pontoons are only lightly used.

The support of the Club will be acknowledged by Clean Waterways Initiative, while they will also provide advice to the Club regarding the future introduction of solar powered vessels. The Club will collaborate with Clean Waterways on programs of outreach, education and communication. ☸

You may have seen two unusual looking vessels in the Causeway Bay Typhoon Shelter cruising around and picking up plastic waste. These are operated by the *Clean Waterways Initiative* a non-profit organisation which was started by Ellen Ogren and Angus Harris in 2019.

Clean Waterways Initiative has a mission to clean up Hong Kong's heavily polluted waterways and raise awareness of the need to fight plastic pollution. They have a fleet of four purpose – designed solar powered vessels and their main goal is to prevent rubbish and plastic debris from making its way from the densely populated waterways of Hong Kong into the open ocean where it will have a harmful effect on the marine ecosystems. Aberdeen Harbour and Victoria Harbour are two of the most polluted waterways in Hong Kong and they have two vessels operating in each harbour.

The vessels are 6.5m long and 5.5m wide and have a top speed of around 5 knots. There is a scoop in the front which collects the larger pieces of waste with a net which collects the

smaller pieces of plastic and brings them out of the water. The twin outboard motors are powered by 8 solar panels on the roof. The vessel is designed with space for manual sorting of the waste into material suitable for re-cycling and material which goes to landfill.



For more on these organisations see <https://www.cleanwaterwaysinitiative.com/> and <https://www.business.hsbc.com.hk/en-gb/clean-waterways>
If you have a comment or suggestion to make to the SWG please email sustainability@rhkyc.org.hk